University of Michigan

Report on Federal Awards in Accordance with the Uniform Guidance For the Year Ended June 30, 2019 EIN 38-6006309

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Report of Independent Auditors

To the Regents of the University of Michigan

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of the University of Michigan and its subsidiaries (the "University"), which comprise the consolidated statement of net position as of June 30, 2019 and 2018, and the related consolidated statements of revenues, expenses and changes in net position and of cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the University of Michigan and its subsidiaries as of June 30, 2019 and 2018, and the changes in their financial position and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

The accompanying management's discussion and analysis on pages 4 through 28 and the supplementary information for pension and postemployment benefits on pages 78 through 81 are required by accounting principles generally accepted in the United States of America to supplement the basic consolidated financial statements. Such information, although not a part of the basic consolidated financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying schedule of expenditures of federal awards for the year ended June 30, 2019 is presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (the "Uniform Guidance") and is not a required part of the consolidated financial statements. The information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated, in all material respects, in relation to the consolidated financial statements as a whole.



Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 17, 2019 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters for the year ended June 30, 2019. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

PricewaterkouseCoopers LLP

October 17, 2019

Management's Discussion and Analysis (Unaudited)

Introduction

The following discussion and analysis provides an overview of the financial position of the University of Michigan (the "University") at June 30, 2019 and 2018 and its activities for the three fiscal years ended June 30, 2019. This discussion has been prepared by management and should be read in conjunction with the financial statements and the notes thereto, which follow this section.

The University is a comprehensive public institution of higher learning with over 63,700 students and approximately 8,500 faculty members on three campuses in southeast Michigan. The University offers a diverse range of degree programs from baccalaureate to post-doctoral levels through 19 schools and colleges, and contributes to the state and nation through related research and public service programs. The University also has a nationally renowned health system which includes the University of Michigan Health System ("UMHS"), the University's Medical School, Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives) and UM Health (a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations, currently consisting of Metropolitan Health Corporation). The University's health system currently includes four hospitals as well as numerous health centers and outpatient clinics.

The University consistently ranks among the nation's top universities by various measures of quality, both in general academic terms and in terms of strength of offerings, in specific academic disciplines and professional subjects. Research is central to the University's mission and a key aspect of its strong reputation among educational institutions. The University is widely recognized for the breadth and excellence of its research enterprise as well as for the exceptional level of cooperation across disciplines, which allows faculty and students to address the full complexity of real-world challenges. The University's health system also has a tradition of excellence in teaching, advancement of medical science and patient care, consistently ranking among the best health care systems in the nation.

Management's Discussion and Analysis (Unaudited)--Continued

Financial Highlights

The University's financial position remains strong, with total assets and deferred outflows of \$22.9 billion and total liabilities and deferred inflows of \$8.1 billion at June 30, 2019, compared to total assets and deferred outflows of \$22.1 billion and total liabilities and deferred inflows of \$7.8 billion at June 30, 2018. Net position, which represents the residual interest in the University's total assets and deferred outflows after total liabilities and deferred inflows are deducted, totaled \$14.8 billion and \$14.3 billion at June 30, 2018, respectively. Changes in net position represent the University's results of operations and are summarized for the years ended June 30 as follows:

	2019	2018	2017
		(in millions)	
	• • • • • •	• • • • • •	• - 1 - -
Operating revenues and educational appropriations	\$ 8,411	\$ 7,879	\$ 7,480
Private gifts for operating activities	178	197	159
Operating and net interest expenses	(9,099)	(8,625)	(7,976)
	(510)	(549)	(337)
Net investment income	810	1,261	1,401
Endowment, capital gifts and grants, and other	223	208	198
Increase in net position	\$ 523	\$ 920	\$ 1,262

Management's Discussion and Analysis (Unaudited)--Continued

The results of operations reflect the University's emphasis on maintaining its national standards in academics, research and health care, within a competitive recruitment environment for faculty and health care professionals and a period of continued pressure on federal funding for research. At the same time, the University is addressing constrained state appropriations and rising health care, regulatory and facility costs with aggressive cost cutting and productivity gains to help preserve access to affordable higher education for Michigan families. To achieve aggressive and sustainable long-term goals for cost cutting and productivity gains, the University is also strategically utilizing resources to support enterprise-wide information technology projects and other initiatives.

The University's long-term investment strategy combined with its endowment spending policy serves to insulate operations from expected volatility in the capital markets and provides for a stable and predictable level of spending distributions from the endowment. Endowment spending rate distributions to University units totaled \$361 million and \$339 million in 2019 and 2018, respectively. The success of the University's long-term investment strategy is evidenced by strong returns over sustained periods of time and the ability to limit losses in the face of challenging markets.

The University invests its financial assets in pools with distinct risk and liquidity characteristics based on its needs, with a majority of its financial assets invested in two such pools. The University's working capital is primarily invested in relatively short duration, liquid assets, through its Daily and Monthly Portfolios, while the endowment is primarily invested, along with the noncurrent portion of the insurance and benefit reserves, in an equity oriented long-term strategy through its Long Term Portfolio.

Using the Financial Statements

The University's financial report includes three financial statements: the Statement of Net Position; the Statement of Revenues, Expenses and Changes in Net Position; and the Statement of Cash Flows. These financial statements are prepared in accordance with Governmental Accounting Standards Board ("GASB") principles, which establish standards for external financial reporting for public colleges and universities.

Management's Discussion and Analysis (Unaudited)--Continued

Statement of Net Position

The statement of net position presents the financial position of the University at the end of the fiscal year and includes all assets, deferred outflows, liabilities and deferred inflows of the University. The difference between total assets and deferred outflows as compared to total liabilities and deferred inflows - net position - is one indicator of the current financial condition of the University, while the change in net position is an indication of whether the overall financial condition has improved or worsened during the year. The University's assets, deferred outflows, liabilities, deferred inflows and net position at June 30 are summarized as follows:

-	2019	2018 (in millions)	2017
Current assets Noncurrent assets:	\$ 2,931	\$ 2,743	\$ 2,696
Endowment, life income and other investments	12,834	12,305	11,323
Capital assets, net	6,227	6,121	6,045
Other	500	510	439
Total assets	22,492	21,679	20,503
Deferred outflows	371	384	349
Total assets and deferred outflows	22,863	22,063	20,852
	1 754	1 775	1.002
Current liabilities	1,754	1,775	1,802
Noncurrent liabilities	5,785	5,814	5,606
Total liabilities	7,539	7,589	7,408
Deferred inflows	520	193	83
Net position	\$ 14,804	\$ 14,281	\$ 13,361

The University continues to maintain and protect its strong financial foundation. This financial health, as reflected in the University's net position, results from the prudent utilization of financial resources including careful cost controls, preservation of endowment funds, conservative utilization of debt and adherence to a long-range capital plan for the maintenance and replacement of the physical plant.

Current assets consist primarily of cash and cash equivalents, operating and capital investments and accounts receivable and totaled \$2.9 billion and \$2.7 billion at June 30, 2019 and 2018, respectively. Cash, cash equivalents and investments for operating activities totaled \$1.3 billion at June 30, 2019, which represents approximately two months of total expenses excluding depreciation.

Management's Discussion and Analysis (Unaudited)--Continued

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, debt and derivative activity, and the defined benefit pension plan for Metropolitan Health Corporation ("Metro Health"). Deferred outflows totaled \$371 million and \$384 million at June 30, 2019 and 2018, respectively.

Current liabilities consist primarily of accounts payable, accrued compensation, unearned revenue, commercial paper, the current portion of bonds payable and net long-term bonds payable subject to remarketing. Current liabilities totaled \$1.8 billion at both June 30, 2019 and 2018.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with the University's obligations for postemployment benefits, Metro Health's defined benefit pension plan and irrevocable split-interest agreements. Deferred inflows totaled \$520 million and \$193 million at June 30, 2019 and 2018, respectively.

Endowment, Life Income and Other Investments

The composition of the University's endowment, life income and other investments at June 30 is summarized as follows:

	2019	2018	2017
		(in millions)	
Endowment investments Life income investments Noncurrent portion of insurance and benefits	\$ 12,449 147	\$ 11,902 144	\$ 10,936 132
obligations investments	216	208	205
Other	22	51	50
	\$ 12,834	\$ 12,305	\$ 11,323

The University's endowment funds consist of both permanent endowments and funds functioning as endowment. Permanent endowments are those funds received from donors with the stipulation that the principal remain intact and be invested in perpetuity to produce income that is to be expended for the purposes specified by the donors. Funds functioning as endowment consist of restricted gifts or unrestricted funds that have been allocated by the University for long-term investment purposes, but are not limited by donor stipulations requiring the University to preserve principal in perpetuity. Programs supported by endowment funds include scholarships, fellowships, professorships, research efforts and other important programs and activities.

Management's Discussion and Analysis (Unaudited)--Continued

The University uses its endowment funds to support operations in a way that strikes a balance between generating a predictable stream of annual support for current needs and preserving the purchasing power of the endowment funds for future periods. A majority of the endowment is maintained in the University Endowment Fund, a unitized pool which represents a collection of approximately 11,700 separate (individual) funds, the majority of which are restricted for specific purposes. The University Endowment Fund is invested in the University's Long Term Portfolio, a single diversified investment pool.

The endowment spending rule provides for distributions from the University Endowment Fund to the entities that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of University Endowment Fund shares. This spending rule is one element of an ongoing financial management strategy that has allowed the University to effectively weather challenging economic environments while avoiding measures such as faculty hiring freezes, furloughs, program cuts or halting construction.

To protect endowment principal in the event of a prolonged market downturn, distributions are limited to 5.3 percent of the current fair value of fund shares. Capital gains or income generated above the endowment spending rate are reinvested so that in lean times funds will be available for distribution. In addition, departments may also use withdrawals from funds functioning as endowment to support capital expenditures and operations.

Endowment spending rate distributions totaled \$368 million, \$346 million and \$325 million and withdrawals from funds functioning as endowment totaled \$48 million, \$33 million and \$7 million in 2019, 2018 and 2017, respectively. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.6 percent, 4.4 percent and 4.2 percent of the current year average fair value of the University Endowment Fund for 2019, 2018 and 2017, respectively. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.9 percent.

The University participates in certain split-interest agreements and currently holds life income funds for beneficiaries of the pooled income fund, charitable remainder trusts and the gift annuity program. These funds generally pay lifetime income to beneficiaries, after which the principal is made available to the University in accordance with donor intentions.

Management's Discussion and Analysis (Unaudited)--Continued

Capital and Debt Activities

One of the critical factors in continuing the quality of the University's academic, research and clinical programs is the development and renewal of capital assets. The University continues to implement its long-range plan to maintain and modernize its existing infrastructure and strategically invest in new construction.

Capital asset additions totaled \$679 million in 2019, as compared to \$650 million in 2018. Capital asset additions primarily represent renovation and new construction of academic, research, clinical and athletic facilities, as well as significant investments in equipment, including information technology. Current year capital asset additions were primarily funded with net position and gifts designated for capital purposes of \$504 million and debt proceeds of \$175 million.

Projects completed in 2019 include significant new facilities for patient care and student life, as well as technology enhancements.

Construction of the Brighton Center for Specialty Care helps meet growing ambulatory care demands. The new facility, with 300,000 square feet, houses more than 40 specialty services for pediatric and adult health care, including a comprehensive musculoskeletal center, sleep lab, ambulatory diagnostic and treatment center, medical procedure unit, radiation oncology, infusion, pharmacy, radiology, operating rooms and lab services. This new center is located near the existing Brighton Health Center, which continues to be utilized.

The new William Monroe Trotter Multicultural Center celebrates and fosters the University's diversity in a way that is inclusive and more visible. The new facility, with 20,000 square feet, accommodates program, lounge, kitchen and conference room spaces from the former center and adds a multipurpose room with capacity for 300 people for conferences and events, and an active-learning, classroom-style configuration that accommodates 100 students. Its location on State Street near the heart of central campus is easily accessible to the academic community.

An extensive upgrade of the University's WiFi network improves connectivity and helps support greater collaboration and engaged learning throughout the University's north, central and south campuses. This multi-year project encompassed 16 million square feet and added more than 15,000 new wireless access points in 253 academic, research, administrative and residence hall buildings and the Diag. The project was designed to support an increasingly mobile and collaborative learning environment, while also providing a consistently positive WiFi experience for the University's prospective students, parents, alumni and guests.

Management's Discussion and Analysis (Unaudited)--Continued

Construction in progress, which totaled \$413 million and \$301 million at June 30, 2019 and 2018, respectively, includes important projects for academic instruction and research as well as student life and services.

Construction of a new research and teaching facility for the College of Engineering's Robotics program continues. This state-of-the-art facility will include 140,000 square feet to house research and testing laboratories, associated support functions, offices and classroom space. The building will also accommodate space for its corporate partner, Ford Motor Company, which will establish collaborative research activities within the facility. The open plan design of the building allows for greater collaboration, increased flexibility and better space utilization. The facility will include labs for robot walking, flight testing, rehabilitation robotics, and electronics and software development. This project is scheduled to be completed in winter 2020.

Renovation and expansion of the Engineering Lab Building on the University's Dearborn campus also continues. The renovated building, which was originally constructed in 1959, will include teaching labs designed to facilitate entrepreneurial problem solving, encourage multidisciplinary cooperation in the context of 21st-century engineering instruction, and provide students with new collaboration and project spaces. The new facility is also designed to allow for research partnerships with industry as well as expanded K-12 and community outreach efforts, with a focus on women and minorities. When finished, the new facility will include 123,000 square feet of space to be used for classrooms, research and teaching laboratories, faculty offices and student support spaces. Regional boiler and electrical distribution equipment replacement are also included in this project, which is scheduled to be completed in spring 2020.

The Edward Henry Kraus Building, which was originally completed in 1915, is undergoing an extensive renovation of 183,000 square feet as well as construction of an infill addition of 62,000 square feet within the exterior courtyard. This renovation and addition will enable the School of Kinesiology to consolidate its programs and operations into one location and allow for future growth. The Department of Ecology and Evolutionary Biology and the Department of Molecular, Cellular, and Developmental Biology that were previously located in the Kraus Building relocated to the Biological Sciences Building when it opened in 2018. This project is scheduled to be completed in fall 2020.

Laboratory renovations are underway at two of the North Campus Research Complex buildings, covering 158,000 square feet to accommodate growth of the Medical School's wet laboratory research over the next decade. Construction of a 6,900 square foot infill addition will also improve connectivity between the buildings and throughout the complex. The project will also address deferred maintenance, including heating, ventilation, air conditioning, electrical and life safety system upgrades, and provide accessibility improvements and new finishes in public spaces. This project is scheduled to be completed in winter 2020.

Management's Discussion and Analysis (Unaudited)--Continued

The Michigan Union, which originally opened in 1919 with building additions in the 1930s and 1950s, is undergoing an extensive renovation. This project will improve accessibility throughout the building, create state-of-the-art student organization and student involvement space, improve space for counseling and student support services, and enhance meeting, lounge and study spaces. Deferred maintenance will also be addressed, including life safety, electrical, mechanical, and plumbing system improvements, replacement of the roof, windows and elevators, and upgrades to interior finish and restrooms. This project is scheduled to be completed in winter 2020.

The University is aware of its financial stewardship responsibility and works diligently to manage its financial resources effectively, including the prudent use of debt to finance capital projects. A strong debt rating is an important indicator of the University's success in this area. In 2019, S&P Global affirmed its highest credit rating (AAA) for bonds backed by a broad revenue pledge based on the University's robust enrollment and demand, exceptional student quality, retention and graduation rates, strong reputation of the University's health system, excellent balance sheet, exceptional research presence and manageable debt burden. Moody's also affirmed its highest credit rating (Aaa) based on the University's ability to translate its international brand into solid revenue growth, excellent student demand, strong philanthropic support and abundant financial reserves.

	2019			
	Beginning			Ending
	Balance	Additions	Reductions	Balance
		(in mi	llions)	
Commercial paper	\$ 158		\$ 13	\$ 145
Bonds	2,236	\$ 260	166	2,330
	\$ 2,394	\$ 260	\$ 179	\$ 2,475
		20	18	
	Beginning			Ending
	Balance	Additions	Reductions	Balance
		(in mi	llions)	
Commercial paper	\$ 161	\$6	\$9	\$ 158
Bonds	2,155	157	76	2,236
Other	2		2	-
	\$ 2,318	\$ 163	\$ 87	\$ 2,394

Long-term debt activity for the years ended June 30 is summarized as follows:

Management's Discussion and Analysis (Unaudited)--Continued

The University utilizes commercial paper, backed by a general revenue pledge, to provide interim financing for its capital improvement program. Outstanding commercial paper is converted to long-term debt financing as appropriate, within the normal course of business. Outstanding bonds are also supported by the University's general revenue pledge.

During 2019, the University issued \$227 million of general revenue bonds with a net original issue premium of \$33 million, which included \$210 million of fixed rate, tax-exempt bonds, and \$17 million of fixed rate, taxable bonds. Total bond proceeds of \$260 million were utilized to refund existing bonds of \$84 million and provide \$176 million for capital projects and debt issuance costs.

During 2018, the University issued \$138 million of fixed rate, tax-exempt, general revenue bonds with a net original issue premium of \$19 million. Total bond proceeds of \$157 million, were utilized for capital projects and debt issuance costs.

	2019	2018 (in millions)	2017
Variable rate:			
Commercial paper	\$ 145	\$ 158	\$ 161
Bonds	566	580	602
Fixed rate bonds	1,764	1,656	1,553
Other			2
	\$ 2,475	\$ 2,394	\$ 2,318

The composition of the University's debt at June 30 is summarized as follows:

A significant portion of the University's variable rate bonds are subject to remarketing and, in accordance with GASB requirements, such debt is classified as current unless supported by liquidity arrangements such as lines of credit or standby bond purchase agreements, which could refinance the debt on a long-term basis. In the event that variable rate bonds are put back to the University by the debt holder, management believes that the University's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time. In addition, the University utilizes remarketing agents to achieve a wide distribution of its variable rate bonds.

While fixed rate bonds typically have a higher effective rate of interest at the date of issuance as compared to variable rate bonds, they reduce the volatility of required debt service payments and do not require liquidity support, such as lines of credit, standby bond purchase agreements or internal liquidity.

Effective interest rates averaged 3.0 percent and 2.9 percent in 2019 and 2018, respectively, including the federal subsidies for interest on taxable Build America Bonds. Interest expense net of federal subsidies received for interest on taxable Build America Bonds and interest capitalized during construction totaled \$74 million and \$66 million in 2019 and 2018, respectively.

Management's Discussion and Analysis (Unaudited)--Continued

Obligations for Postemployment Benefits

Using current actuarial assumptions, and presuming a continuation of the current level of benefits, the University's obligations for postemployment benefits totaled \$3.1 billion at June 30, 2019, as compared to \$3.3 billion and \$3.2 billion at June 30, 2018 and 2017, respectively. The decrease in the reported liability at June 30, 2019 was driven primarily by an increase in the discount rate and a reduction in the expected health care claims cost due to favorable experience. The increase in the reported liability at June 30, 2018, was driven primarily by the recognition of additional service cost and interest expense, offset somewhat by an increase in the discount rate used in developing the valuation. Since a portion of retiree medical services will be provided by the University's health system, this liability is net of the related margin and fixed costs associated with providing those services which totaled \$580 million, \$611 million and \$674 million at June 30, 2019, 2018 and 2017, respectively.

By implementing a series of health benefit initiatives over the past several years, the University has favorably impacted its total liability for postemployment benefits by \$1.4 billion at June 30, 2019. These initiatives have included cost sharing changes, elimination of Medicare Part B reimbursements for certain retirees and the adjustment of retirement eligibility criteria.

Management's Discussion and Analysis (Unaudited)--Continued

Net Position

Net position represents the residual interest in the University's assets and deferred outflows after liabilities and deferred inflows are deducted. The composition of the University's net position at June 30 is summarized as follows:

	2019	2018 (in millions)	2017
Net investment in capital assets Restricted:	\$ 3,743	\$ 3,722	\$ 3,735
Nonexpendable:			
Permanent endowment corpus	2,329	2,146	1,967
Expendable:			
Net appreciation of permanent endowments	2,144	2,068	1,829
Funds functioning as endowment	2,382	2,308	2,126
Restricted for operations and other	686	632	633
Unrestricted	3,520	3,405	3,071
	\$ 14,804	\$ 14,281	\$ 13,361

Net investment in capital assets represents the University's capital assets net of accumulated depreciation, outstanding principal balances of debt and capital lease liabilities, unexpended bond proceeds and deferred outflows associated with the acquisition, construction or improvement of those assets.

Restricted nonexpendable net position represents the historical value (corpus) of gifts to the University's permanent endowment funds. Restricted expendable net position is subject to externally imposed stipulations governing their use and includes net appreciation of permanent endowments, funds functioning as endowment and net position restricted for operations, facilities and student loan programs. Restricted expendable net position increased 4 percent, or \$204 million, to \$5.2 billion at June 30, 2019, as compared to an increase of 9 percent, or \$420 million, to \$5.0 billion at June 30, 2018. The increase experienced during both 2019 and 2018 was driven primarily by investment income and new gift activity.

Although unrestricted net position is not subject to externally imposed stipulations, substantially all of the University's unrestricted net position has been designated for various academic programs, research initiatives and capital projects. Unrestricted net position at June 30, 2019 totaled \$3.5 billion and included funds functioning as endowment of \$5.4 billion offset by unfunded obligations for postemployment benefits of \$3.2 billion. Unrestricted net position at June 30, 2018 totaled \$3.4 billion and included funds functioning as endowment of \$5.2 billion offset by unfunded obligations for postemployment benefits of \$3.1 billion. Unrestricted net position at June 30, 2019 and 2018.

Management's Discussion and Analysis (Unaudited)--Continued

Statement of Revenues, Expenses and Changes in Net Position

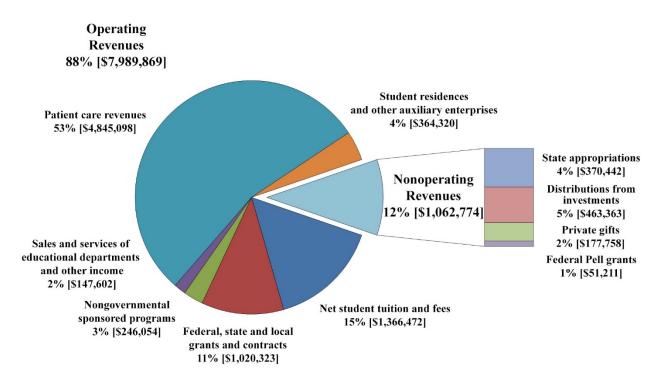
The statement of revenues, expenses and changes in net position presents the University's results of operations. In accordance with GASB reporting principles, revenues and expenses are classified as either operating or nonoperating. The University's revenues, expenses and changes in net position for the years ended June 30 are summarized as follows:

	2019	2018 (in millions)	2017
Operating revenues:			
Net student tuition and fees	\$ 1,366.5	\$ 1,310.9	\$ 1,240.6
Sponsored programs	1,266.4	1,229.4	1,180.2
Patient care revenues, net	4,845.1	4,438.7	4,200.1
Other	511.9	487.9	458.8
	7,989.9	7,466.9	7,079.7
Operating expenses	9,025.0	8,559.4	7,910.0
Operating loss	(1,035.1)	(1,092.5)	(830.3)
Nonoperating and other revenues (expenses):			
State educational appropriations	370.4	363.1	356.0
Federal Pell grants	51.2	49.2	43.8
Private gifts for operating activities	177.8	196.6	159.1
Net investment income	810.0	1,261.4	1,400.6
Interest expense, net	(81.4)	(72.9)	(73.1)
Federal subsidies for interest on Build America Bonds	7.0	7.4	7.5
State capital appropriations		5.0	18.0
Endowment and capital gifts and grants	206.1	209.2	187.0
Other	16.9	(6.1)	(6.9)
Nonoperating and other revenues, net	1,558.0	2,012.9	2,092.0
Increase in net position	522.9	920.4	1,261.7
Net position, beginning of year	14,281.0	13,360.6	13,001.2
Affiliation with Metro Health and adoption of GASB 75 and GASB 81			(902.3)
Net position, beginning of year, as restated	14,281.0	13,360.6	12,098.9
Net position, end of year	\$ 14,803.9	\$ 14,281.0	\$ 13,360.6

Management's Discussion and Analysis (Unaudited)--Continued

One of the University's greatest strengths is the diverse streams of revenue that supplement its student tuition and fees, including private support from individuals, foundations and corporations, along with government and other sponsored programs, state appropriations and investment income. The University continues to aggressively seek funding from all possible sources consistent with its mission in order to supplement student tuition and prudently manage the financial resources realized from these efforts to fund its operating activities, which include instruction, patient care and research.

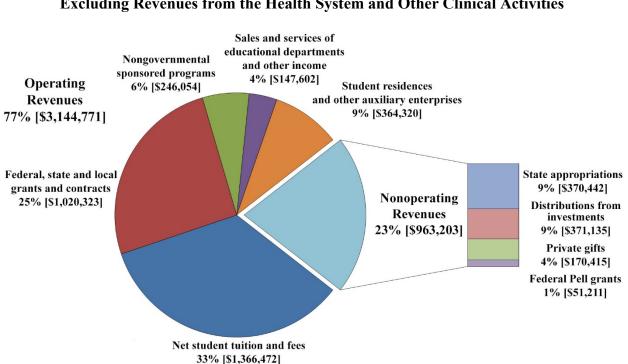
The following is a graphic illustration of revenues by source, both operating and nonoperating, which are used to fund the University's operating activities for the year ended June 30, 2019 (amounts are presented in thousands of dollars). Certain recurring sources of the University's revenues are considered nonoperating, as defined by GASB, such as state appropriations, distributions from investments, private gifts and federal Pell grants.



2019 Revenues for Operating Activities

Management's Discussion and Analysis (Unaudited)--Continued

The University measures its performance both for the University as a whole and for the University without its health system and other clinical activities. The exclusion of these activities allows a clearer view of the operations of the schools and colleges, as well as central administration. The following is a graphic illustration of University revenues by source, both operating and nonoperating, which are used to fund operating activities other than the health system and other clinical activities, for the year ended June 30, 2019 (amounts are presented in thousands of dollars).



2019 Revenues for Operating Activities Excluding Revenues from the Health System and Other Clinical Activities

Tuition and state appropriations are the primary sources of funding for the University's academic programs. There is a relationship between the growth or reduction in state support and the University's ability to restrain tuition fee increases. Together, net student tuition and fees and state educational appropriations increased 4 percent, or \$63 million, to \$1.74 billion in 2019, as compared to 5 percent, or \$77 million, to \$1.67 billion in 2018.

Management's Discussion and Analysis (Unaudited)--Continued

In 2019, the University's state educational appropriations increased 2 percent, or \$7 million, to \$370 million. In 2018, the University's state educational appropriations increased 2 percent, or \$7 million, to \$363 million.

For the years ended June 30, net student tuition and fees revenue consisted of the following components:

	2019	2018	2017
		(in millions)	
Student tuition and fees Less scholarship allowances	\$ 1,812.5 446.0	\$ 1,726.0 415.1	\$ 1,616.6 376.0
	\$ 1,366.5	\$ 1,310.9	\$ 1,240.6

In 2019, net student tuition and fees revenue increased 4 percent, or \$56 million, to \$1.4 billion, which reflects an increase of 5 percent, or \$87 million, in gross student tuition and fees revenue offset by an increase of 7 percent, or \$31 million, in scholarship allowances. Tuition rate increases in 2019 were 2.9 percent for resident undergraduate students, 3.9 percent for nonresident undergraduate students and 3.3 percent for most graduate students on the Ann Arbor campus, with a 3.7 and 4.3 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2019, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to nonresident students.

In 2018, net student tuition and fees revenue increased 6 percent, or \$70 million, to \$1.3 billion, which reflects an increase of 7 percent, or \$109 million, in gross student tuition and fees revenue offset by an increase of 10 percent, or \$39 million, in scholarship allowances. Tuition rate increases in 2018 were 2.9 percent for resident undergraduate students, 4.5 percent for nonresident undergraduate students and 4.1 percent for most graduate students on the Ann Arbor campus, with a 3.7 and 4.1 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2018, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to nonresident students.

The University's tuition rate increases have consistently been among the lowest in the state, even in years of significant reductions in state appropriations, which reflects a commitment to affordable higher education for Michigan families. In addition, the University has increased scholarship and fellowship expenses and related allowances to benefit students in financial need. The University's long-term plan includes an ongoing commitment to cost containment and reallocating resources to the highest priorities to provide support for innovative new initiatives to maintain academic excellence and help students keep pace with the evolving needs of society.

Management's Discussion and Analysis (Unaudited)--Continued

While tuition and state appropriations fund a large percentage of University costs, private support is also essential to the University's academic distinction. Private gifts for other than capital and endowment purposes totaled \$178 million in 2019, as compared to \$197 million in 2018 and \$159 million in 2017.

The University receives revenues for sponsored programs from various government agencies and private sources, which normally provide for both direct and indirect costs to perform these sponsored activities, with a significant portion related to federal research. Revenues for sponsored programs increased 3 percent, or \$37 million, to \$1.3 billion in 2019, and 4 percent, or \$49 million, to \$1.2 billion in 2018, driven primarily by increases in federally sponsored activity during these periods.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities. Patient care revenues increased 9 percent, or \$406 million, to \$4.8 billion in 2019, due primarily to an increase in patient volume. Patient care revenues increased 6 percent, or \$239 million, to \$4.4 billion in 2018, resulting from growth in patient volume as well as an increase in revenue per patient case.

	2019	2018 (in millions)	2017
University of Michigan Health System	\$ 4,212.4	\$ 3,890.0	\$ 3,694.7
UM Health	472.5	433.9	376.4
Michigan Health Corporation	39.1	17.9	18.4
Other	121.1	96.9	110.6
	\$ 4,845.1	\$ 4,438.7	\$ 4,200.1

For the years ended June 30, patient care revenues by source are summarized as follows:

The largest component of patient care revenues is generated by UMHS, a national leader in advanced patient care and comprehensive education of physicians and medical scientists. UMHS serves as the principal teaching facility for the University's Medical School and operates three hospitals with 1,043 licensed beds for acute care and psychiatric needs, as well as numerous ambulatory care centers, outpatient clinics and various other health care programs across the state. Substantially all physician services to UMHS patients are provided by the University's Medical School faculty. UMHS also provides educational and clinical opportunities to students of the University's Schools of Nursing, Dentistry, Social Work and Public Health, as well as the College of Pharmacy.

Management's Discussion and Analysis (Unaudited)--Continued

UM Health is a growing component of patient care activity and its revenues currently represent Metro Health, a community health care provider in west Michigan, which operates a hospital with 208 licensed beds for acute care, as well as neighborhood outpatient clinics and a growing network of specialty services. The University's affiliation with Metro Health positions UM Health to expand research capabilities, primary care, specialty services and the use of complex medical technologies.

Michigan Health Corporation generates revenue through its various joint venture and managed care initiatives, which provide services to patients including dialysis and other health services.

Other patient care revenues include amounts received from governmental and commercial payers associated with initiatives designed to improve accessibility and quality of care for patients, services provided by physicians working at facilities outside of the University and ambulatory care services provided by University Health Service, the School of Dentistry and the School of Nursing.

Contractual arrangements with governmental payers (Medicare and Medicaid) and private insurers impact patient care revenues. In 2019, the University realized payment rate increases from the majority of private insurers and governmental payers as compared to 2018. The distribution of net patient care service revenue by primary payer source for the years ended June 30 is summarized as follows:

	2019	2018	2017
Medicare	26%	26%	26%
Medicaid	12%	12%	11%
Blue Cross	38%	38%	34%
Other	24%	24%	29%

Net investment income totaled \$810 million in 2019 as compared to \$1.3 billion in 2018 and \$1.4 billion in 2017. The investment environment in 2019 was similar to that of 2018, but with increased volatility in the U.S. public equity markets as well as a more challenging landscape in the world equity markets. For 2019, the alternative asset class performance was relatively strong returning 11 percent. Leaders in this asset class included venture capital and private equity, which returned 24 percent and 10 percent, respectively. This compares to 2018 when the U.S. public equity markets were strong, as were alternative asset classes such as private equity and venture capital, which both returned 20 percent. In 2017, returns were strong in all asset classes including equity securities, as well as the alternative asset class where private equity and natural resources had the highest returns at 17 percent.

Management's Discussion and Analysis (Unaudited)--Continued

State capital appropriations help the University improve its academic buildings. Recent capital outlays have supported renovations of the George Granger Brown Memorial Laboratories on the Ann Arbor campus, the Science Building and Computer Information Science Building on the Dearborn campus and the William R. Murchie Science Building on the Flint campus.

Gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. Private gifts for permanent endowment purposes totaled \$176 million in 2019, as compared to \$169 million and \$143 million in 2018 and 2017, respectively. Capital gifts and grants totaled \$30 million in 2019, as compared to \$40 million and \$44 million in 2018 and 2017, respectively. In recent years, major gifts have been received in support of the University's wide-ranging capital initiatives which include the health system, Ross School of Business, College of Engineering and Intercollegiate Athletics.

In addition to revenue diversification, the University continues to make cost containment an ongoing priority. This is necessary as the University faces significant financial pressures, particularly in the areas of compensation and benefits, which represent 63 percent of total expenses, as well as in the areas of energy, technology and ongoing maintenance of facilities and infrastructure.

The University's expenses for the years ended June 30 are summarized as follows (amounts in millions):

	2019		2018		2017	
Operating:						
Compensation and benefits	\$ 5,769.0	63%	\$ 5,431.4	63%	\$ 5,064.4	63%
Supplies and services	2,523.8	28	2,402.6	27	2,164.0	27
Depreciation	567.8	6	568.7	7	537.7	7
Scholarships and fellowships	164.4	2	156.7	2	143.9	2
	9,025.0	99	8,559.4	99	7,910.0	99
Nonoperating:						
Interest, net	74.4	1	65.5	1	65.6	1
	\$ 9,099.4	100%	\$ 8,624.9	100%	\$ 7,975.6	100%

The University is committed to recruiting and retaining outstanding faculty and staff and the compensation package is one way to successfully compete with peer institutions and nonacademic employers. Compensation and benefits increased 6 percent, or \$338 million, to \$5.8 billion in 2019 as compared to 7 percent, or \$367 million, to \$5.4 billion in 2018. Of the 2019 increase, compensation increased 6 percent, or \$257 million, to \$4.4 billion, driven primarily by increases in staffing levels resulting from patient activity and capacity expansion

Management's Discussion and Analysis (Unaudited)--Continued

within the University's health system, and employee benefits increased 6 percent, or \$81 million, to \$1.4 billion, resulting from an increase in prescription drug costs as well as activity associated with the University's postemployment benefits obligations. For 2018, compensation increased 6 percent, to \$4.1 billion, and benefits increased 10 percent, to \$1.3 billion.

The University faces external and industry realities that put significant pressure on its ability to reduce compensation costs while remaining competitive. To help address this risk, the University continues to review components of its existing benefits program to find opportunities for potential savings without compromising the ability to offer competitive benefits to all faculty and staff.

Health care benefits are one of the most significant employee benefits. Over the past several years, the University has implemented initiatives to better control its rate of cost increase, encourage employees to choose the lowest cost health care plan that meets their needs and share a larger portion of health care cost increases with employees. These initiatives reflect the reality of the national landscape, while remaining true to the commitment we make to our employees for a robust benefits package. Careful stewardship of our health benefit plans, including the use of wellness initiatives, helps maintain our competitive position while preserving funding for the University's core mission.

During 2013, the University began to implement changes to eligibility requirements and the University contribution to retiree health benefits that were announced in 2011. These changes were recommended by a committee that evaluated ways to maintain competitive retiree health benefits while helping address the acceleration of future costs, and are being phased in over eight years in order to assist current employees with the transition.

Compared to most employers, the University is in a unique position to utilize internal experts to advise and guide its health care and drug plans. For example, the Pharmacy Benefits Advisory Committee, which consists of internal experts including health system physicians, College of Pharmacy faculty and on-staff pharmacists, monitors the safety and effectiveness of covered medications and guides appropriate prescribing, dispensing and cost effective use of prescription drugs. In addition, the University utilizes its nationally recognized health policy experts to guide future health plan strategies.

Supplies and services expenses increased 5 percent, or \$121 million, to \$2.5 billion in 2019 as compared to an increase of 11 percent, or \$239 million, to \$2.4 billion in 2018. These increases reflect the growth in patient care related expenses including higher costs of prescription drugs and infusion treatments, as well as costs associated with significant capital projects.

Management's Discussion and Analysis (Unaudited)--Continued

Depreciation expense decreased less than 1 percent, or \$850,000, to \$568 million in 2019, as compared to an increase of 6 percent, or \$31 million, to \$569 million in 2018. The decrease in depreciation expense is primarily related to a \$25 million impairment charge recorded in 2018 associated with certain components of Metro Health's hospital facilities. Capital assets placed in service during 2019 include the Brighton Center for Specialty Care, North Campus Recreation Building renovation and the William Monroe Trotter Multicultural Center. Capital assets placed in service during 2018 include the Biological Science Building, Weiser Hall renovation, West Ann Arbor Health Center, Clinical Pathology renovation and relocation, and Athletics South Competition and Performance Project.

In addition to their natural (object) classification, it is also informative to review operating expenses by function. The University's expenses by functional classification for the years ended June 30 are summarized as follows (amounts in millions):

	2019		2018		2017	7
Operating:						
Instruction	\$ 1,195.2	13%	\$ 1,153.2	13%	\$ 1,099.8	14%
Research	857.6	10	823.6	10	803.5	10
Public service	208.7	2	211.5	2	187.8	2
Institutional and academic support	767.0	8	681.0	8	646.7	8
Auxiliary enterprises:						
Patient care	4,661.5	51	4,349.2	50	3,976.1	50
Other	251.2	3	264.6	3	198.1	2
Operations and maintenance of plant	351.6	4	350.9	4	316.4	4
Depreciation	567.8	6	568.7	7	537.7	7
Scholarships and fellowships	164.4	2	156.7	2	143.9	2
* *	9,025.0	99	8,559.4	99	7,910.0	99
Nonoperating:	<i>,</i>				<i>,</i>	
Interest, net	74.4	1	65.5	1	65.6	1
	\$ 9,099.4	100%	\$ 8,624.9	100%	\$ 7,975.6	100%

Instruction expenses increased 4 percent, or \$42 million, in 2019, and 5 percent, or \$53 million, in 2018. This increase reflects the level of growth in the related revenue sources offset by cost containment efforts.

Research expenses increased 4 percent, or \$34 million, in 2019, and 3 percent, or \$20 million, in 2018. The increase in 2019 reflects the strength of the University's research enterprise, in spite of continued pressure on federal funding and intense competition for research dollars. To measure its total volume of research expenditures, the University considers research expenses included in the above table, as well as research related facilities and administrative expenses, research initiative and start-up expenses and research equipment purchases. These amounts totaled \$1.62 billion, \$1.55 billion and \$1.48 billion in 2019, 2018 and 2017, respectively.

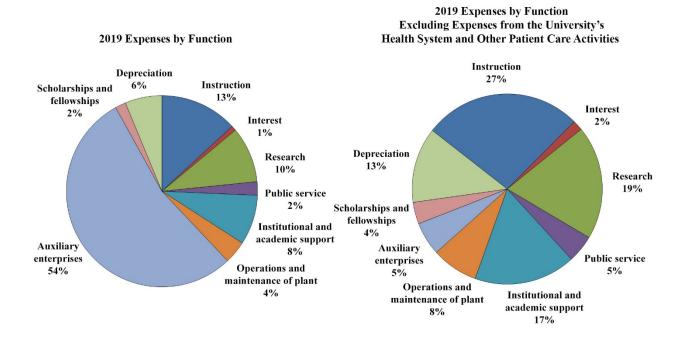
Management's Discussion and Analysis (Unaudited)--Continued

Patient care expenses increased 7 percent, or \$312 million, in 2019, and 9 percent, or \$373 million, in 2018, and reflect the impact of additional patient activity and capacity expansion. Increased compensation expense related to patient care includes both growth in staff levels and wage increases. Increased medical supplies expense results from higher patient activity levels, new information technology initiatives and the rising cost of pharmaceuticals.

Scholarships and fellowships provided to students totaled \$635 million in 2019, as compared to \$596 million in 2018 and \$543 million in 2017, an increase of 17 percent over the past two years. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarship and fellowship expenses. Scholarships and fellowships for the years ended June 30 are summarized as follows:

	2019	2018 (in millions)	2017
Paid directly to students Applied to tuition and fees Applied to University Housing	\$ 164.4 446.0 24.2 \$ 634.6	\$ 156.7 415.1 23.8 \$ 595.6	\$ 143.9 376.0 <u>22.7</u> \$ 542.6

The following graphic illustrations present total expenses by function, with and without the University's health system and other patient care activities:



Management's Discussion and Analysis (Unaudited)--Continued

Statement of Cash Flows

The statement of cash flows provides additional information about the University's financial results by reporting the major sources and uses of cash. The University's cash flows for the years ended June 30 are summarized as follows:

	2019	2018 (in millions)	2017
Cash received from operations	\$ 7,965.9	\$ 7,505.7	\$ 7,103.6
Cash expended for operations	(8,283.8)	(7,916.8)	(7,277.3)
Net cash used in operating activities	(317.9)	(411.1)	(173.7)
Net cash provided by noncapital financing activities	767.7	732.7	715.5
Net cash used in capital and related financing activities	(597.2)	(592.6)	(497.9)
Net cash provided by (used in) investing activities	411.3	299.3	(278.4)
Net increase (decrease) in cash and cash equivalents	263.9	28.3	(234.5)
Cash and cash equivalents, beginning of year	133.4	105.1	285.8
Affiliation with Metro Health Cash and cash equivalents, beginning of year, as restated	133.4	105.1	53.8 339.6
Cash and cash equivalents, end of year	\$ 397.3	\$ 133.4	\$ 105.1

Cash received from operations primarily consists of student tuition, sponsored program grants and contracts, and patient care revenues. Significant sources of cash provided by noncapital financing activities, as defined by GASB, include state appropriations, federal Pell grants and private gifts used to fund operating activities.

Economic Factors That May Affect the Future

The University maintains the highest credit ratings of S&P Global (AAA) and Moody's (Aaa). Achieving and maintaining the highest credit ratings provides the University with significant flexibility in securing capital funds on the most competitive terms. This flexibility, along with ongoing efforts toward revenue diversification and cost containment, will enable the University to provide the necessary resources to support a consistent level of excellence in service to students, patients, the research community, the state and the nation.

Management's Discussion and Analysis (Unaudited)--Continued

A crucial element to the University's future continues to be a strong relationship with the state of Michigan. Historically, there has been a connection between the growth, or reduction, of state support and the University's ability to control tuition increases. Over the past several years, the University has successfully addressed the realities of the state's challenging economy and, pursuant to a long-range plan, continues to work relentlessly to cut and mitigate operational costs in order to remain affordable and preserve access, while protecting the academic enterprise.

The University's budget for 2020 anticipates a 1.5 percent increase in state educational appropriations, a 1.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 11.2 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates will increase 3.7 percent, while most graduate and professional rates will increase 3.2 percent. Resident undergraduate tuition rates on the Dearborn and Flint campuses will increase 3.2 percent and 5.0 percent, respectively.

The University continues to execute its long-range plan to maintain, modernize and expand its complement of older facilities while adding key new facilities for instruction, research, patient care, athletics and residential life. This strategy addresses the University's growth and the continuing effects of technology on teaching, research and clinical activities. Authorized costs to complete construction and other projects totaled \$906 million at June 30, 2019. Funding for these projects is anticipated to include \$726 million from internal sources, gifts, grants and future borrowings, \$89 million from the State Building Authority and \$91 million from the utilization of unexpended bond proceeds. In September 2019, the Board of Regents approved plans for the construction of a 690,000 square foot clinical inpatient tower with an estimated cost of \$920 million and an expected completion date of fall 2024.

The University's health system continues its strategy to expand access to patients, locally and on a statewide basis. In addition to strategic capital and technological investments, the University's health system is also focusing on clinical affiliation arrangements and population management programs designed to expand community access and improve patient, family and provider experiences across the continuum of care. The affiliation arrangements are also expected to enhance clinical research, physician recruitment and support services.

Management's Discussion and Analysis (Unaudited)--Continued

While the University's health system is well positioned to maintain a strong financial condition in the near term, ongoing constraints on revenue are expected due to fiscal pressures from employers and federal and state governments. Lawmakers continue to discuss Medicare and Medicaid changes which may target graduate medical education-related payments and could result in a significant impact on teaching hospitals. In addition, private insurance and managed care contracts historically provide for annual increases in reimbursement rates that met or exceeded the rate of inflation; however, there can be no assurance that such trends will continue. Management believes that much of the payment pressure can be offset by growth in patient volume and continued efforts to contain certain costs.

The University will continue to employ its long-term investment strategy to maximize total returns, at an appropriate level of risk, while utilizing a spending rate policy to preserve endowment capital and insulate the University's operations from temporary market volatility.

As a labor-intensive organization, the University faces competitive pressures related to attracting and retaining faculty and staff. Moreover, consistent with the national landscape, the University also faces rising costs of health benefits for its employees and retirees. The University has successfully taken and will continue to take proactive steps to respond to these challenges while protecting the quality of the overall benefits package.

A portion of the University's labor force is unionized, with negotiated labor agreements defining terms and conditions of employment. Changes in relations with unions and represented employees, including the negotiation of new agreements, could have a material effect on the University.

While it is not possible to predict the ultimate results, management believes that the University's financial position will remain strong.

Consolidated Statement of Net Position

Consolidated Statement of Net Pos		
		e 30,
	2019	2018
	(in the	ousands)
Assets and Deferred Outflows		
Current Assets:		
Cash and cash equivalents	\$ 397,279	\$ 133,365
Investments for operating activities	882,303	1,117,063
Investments for capital activities	594,681	533,855
Investments for student loan activities	74,365	57,135
Accounts receivable, net	714,621	666,811
Current portion of notes and pledges receivable, net	80,035	79,765
Current portion of prepaid expenses and other assets	158,320	125,159
Cash collateral held by agent	29,485	29,727
Total Current Assets	2,931,089	2,742,880
Noncurrent Assets:		2,7 12,000
Unexpended bond proceeds	90,813	82,797
Endowment, life income and other investments	12,834,065	,
		12,305,228 336,870
Notes and pledges receivable, net	301,427	· · · · · · · · · · · · · · · · · · ·
Prepaid expenses and other assets	107,303	90,618
Capital assets, net	6,226,969	6,120,997
Total Noncurrent Assets	19,560,577	18,936,510
Total Assets	22,491,666	21,679,390
Deferred Outflows	371,574	383,589
Total Assets and Deferred Outflows	\$ 22,863,240	\$ 22,062,979
Liabilities, Deferred Inflows and Net Position		
Current Liabilities:		
	¢ 202 729	\$ 200.562
Accounts payable	\$ 293,728 500 507	\$ 290,563
Accrued compensation and other	508,597	451,458
Unearned revenue	312,092	306,803
Current portion of insurance and benefits reserves	104,235	98,159
Current portion of obligations for postemployment benefits	87,712	87,638
Commercial paper and current portion of bonds payable	232,095	237,371
Long-term bonds payable subject to remarketing, net	133,616	195,552
Collateral held for securities lending	29,485	29,727
Deposits of affiliates and others	52,296	77,422
Total Current Liabilities	1,753,856	1,774,693
Noncurrent Liabilities:		
Accrued compensation	34,126	40,682
Insurance and benefits reserves	127,677	137,003
Obligations for defined benefit pension plan, net	(2,918)	(3,823)
Obligations for postemployment benefits	3,026,343	3,216,102
Obligations under life income agreements	74,516	74,180
Government loan advances	83,542	81,510
Bonds payable	2,109,317	1,961,085
Deposits of affiliates and other	332,850	307,210
Total Noncurrent Liabilities	5,785,453	5,813,949
Total Liabilities	7,539,309	7,588,642
Deferred Inflows	520,023	193,292
Net Position:		
Net investment in capital assets	3,742,630	3,722,086
Restricted:	-,. 12,000	-,,
Nonexpendable	2,328,667	2,146,358
Trononpolitation	5,212,557	5,007,324
Expendable		J,007,J4T
Expendable		
Unrestricted	3,520,054	3,405,277

Consolidated Statement of Revenues, Expenses and Changes in Net Position

		ed June 30,
	2019 (in the	2018 ousands)
Operating Revenues		
Student tuition and fees	\$ 1,812,466	\$ 1,726,033
Less scholarship allowances	445,994	415,092
Net student tuition and fees	1,366,472	1,310,941
Federal grants and contracts	1,006,368	982,143
State and local grants and contracts	13,955	13,304
Nongovernmental sponsored programs	246,054	233,919
Sales and services of educational departments	145,070	140,139
Auxiliary enterprises:		
Patient care revenues (net of provision for bad debts of		
\$137,660 in 2019 and \$128,747 in 2018)	4,845,098	4,438,744
Student residence fees (net of scholarship allowances of		11-076
\$24,226 in 2019 and \$23,814 in 2018)	120,122	117,866
Other revenues	244,198	227,288
Student loan interest income and fees	2,532	2,537
Total Operating Revenues	7,989,869	7,466,881
Operating Expenses		
Compensation and benefits	5,768,951	5,431,392
Supplies and services	2,523,804	2,402,592
Depreciation	567,857	568,707
Scholarships and fellowships	164,428	156,738
Total Operating Expenses		8,559,429
Operating Loss	(1,035,171)	(1,092,548)
Nonoperating Revenues (Expenses)	270 442	262.074
State educational appropriations Federal Pell grants	370,442 51,211	363,074 49,190
Private gifts for other than capital and endowment purposes	177,758	196,639
Net investment income	809,997	1,261,443
Interest expense, net	(81,372)	(72,905)
Federal subsidies for interest on Build America Bonds	6,961	7,451
Total Nonoperating Revenues, Net		1,804,892
1 8 /	,	
Income Before Other Revenues (Expenses)	299,826	712,344
Other Revenues (Expenses)		4.070
State capital appropriations	20.004	4,978
Capital gifts and grants	29,884	39,835
Private gifts for permanent endowment purposes Other	176,210	169,337
Total Other Revenues, Net	16,943	(6,104) 208,046
i otai Other Revenues, Net	<u> </u>	200,040
Increase in Net Position	522,863	920,390
Net Position, Beginning of Year	14,281,045	13,360,655
Net Position, End of Year	• \$ 14,803,908	\$ 14,281,045

Consolidated Statement of Cash Flows

	Year Ended June 30,	
	2019	2018
	(in thousands)	
Cash Flows from Operating Activities		
Student tuition and fees	\$ 1,365,386	\$ 1,314,268
Federal, state and local grants and contracts	1,016,393	973,815
Nongovernmental sponsored programs	242,527	250,617
Sales and services of educational departments and other	388,016	394,892
Patient care revenues	4,812,476	4,431,064
Student residence fees	118,862	118,192
Payments to employees	(4,352,547)	(4,108,246)
Payments for benefits	(1,239,145)	(1,157,316)
Payments to suppliers	(2,520,758)	(2,478,042)
Payments for scholarships and fellowships	(164,428)	(156,738)
Student loans issued	(6,940)	(16,453)
Student loans collected	19,716	20,328
Student loan interest and fees collected	2,532	2,537
Net Cash Used in Operating Activities	(317,910)	(411,082)
Cash Flows from Nonconital Financing Astivitics		
Cash Flows from Noncapital Financing Activities State educational appropriations	369,103	361,787
Federal Pell grants	51,211	49,190
Private gifts and other receipts	350,112	317,215
Student direct lending receipts	280,307	298,011
Student direct lending receipts	(279,638)	(301,194)
Amounts received for annuity and life income funds	6,442	16,878
Amounts paid to annuitants and life beneficiaries and related expenses	(9,828)	(9,186)
Net Cash Provided by Noncapital Financing Activities	767,709	732,701
The Cush Provided by Honeuphan Pinaneing Heavities	101,105	/52,701
Cash Flows from Capital and Related Financing Activities		
State capital appropriations	1,217	4,968
Private gifts and other receipts	46,264	47,655
Proceeds from issuance of capital debt	260,034	163,328
Principal payments on capital debt	(164,553)	(75,918)
Interest payments on capital debt	(94,202)	(82,096)
Federal subsidies for Build America Bonds interest	3,696	7,413
Payments for bond refunding and related costs	(791)	(526)
Purchases of capital assets	(677,883)	(658,839)
Proceeds from sales of capital assets	28,996	1,329
Net Cash Used in Capital and Related Financing Activities	(597,222)	(592,686)
Cash Flows from Investing Activities		
Interest and dividends on investments, net	52,846	51,985
Proceeds from sales and maturities of investments	6,172,854	5,477,448
Purchases of investments	(5,841,764)	(5,119,195)
Net (increase) decrease in unexpended capital debt proceeds	(8,016)	15,658
Net decrease (increase) in cash equivalents from noncurrent investments	60,971 (25,554)	(126,745)
Net (decrease) increase in deposits of affiliates and other	(25,554)	154
Net Cash Provided by Investing Activities	411,337	299,305
Net Increase in Cash and Cash Equivalents	263,914	28,238
Cash and Cash Equivalents, Beginning of Year	132 265	105,127
Cash and Cash Equivalents, Beginning of Year Cash and Cash Equivalents, End of Year	133,365 \$ 397,279	\$ 133,365
Cash and Cash Equivalents, End of Year	\$ 371,219	ф 155,505

Consolidated Statement of Cash Flows--Continued

	Year Ended June 30, 2019 2018		
	(in tho	usands)	
Reconciliation of Operating Loss to Net Cash Used in Operating Activities:			
Operating loss	\$ (1,035,171)	\$ (1,092,548)	
Adjustments to reconcile operating loss to net cash used in operating activities:			
Depreciation expense	567,857	568,707	
Changes in assets and liabilities:			
Accounts receivable, net	(35,743)	(21,468)	
Prepaid expenses and other assets	(26,249)	(65,680)	
Accounts payable	4,052	(32,228)	
Accrued compensation and other	24,027	6,106	
Unearned revenue	5,539	23,502	
Deposits of affiliates and others	2,078		
Insurance and benefits reserves	(3,250)	21,127	
Obligations for defined benefit pension plan, net	905	(7,259)	
Obligations for postemployment benefits	(189,685)	105,413	
Deposits of affiliates and other	32,240	20,345	
Changes in deferred outflows	12,762	(43,176)	
Changes in deferred inflows	322,728	106,077	
Net Cash Used in Operating Activities	\$ (317,910)	\$ (411,082)	

Notes to Consolidated Financial Statements

June 30, 2019 and 2018

Note 1--Organization and Summary of Significant Accounting Policies

<u>Organization and Basis of Presentation</u>: The University of Michigan (the "University") is a state-supported institution with an enrollment of over 63,700 students on its three campuses. The financial statements include the individual schools, colleges and departments, the University of Michigan Health System ("UMHS"), Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives), UM Health (a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations, currently consisting of Metropolitan Health Corporation) and Veritas Insurance Corporation (a wholly-owned captive insurance company). While the University is a political subdivision of the state of Michigan, it is not a component unit of the State in accordance with Governmental Accounting Standards Board ("GASB") Statement No. 14, *The Financial Reporting Entity*. The University is classified as a state instrumentality under Internal Revenue Code Section 115 and a charitable organization under Internal Revenue Code Section 501(c)(3), and is therefore exempt from federal income taxes. Certain activities of the University may be subject to taxation as unrelated business income under Internal Revenue Code Sections 511 to 514.

The University reports as a special purpose government entity engaged primarily in business type activities, as defined by GASB, on the accrual basis. Business type activities are those that are financed in whole or in part by fees charged to external parties for goods or services.

The financial statements of all controlled organizations are included in the University's financial statements; affiliated organizations that are not controlled by, and not dependent on the University, such as booster and alumni organizations, are not included.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

Net position is categorized as:

- Net investment in capital assets: Capital assets, net of accumulated depreciation, outstanding principal balances of debt and capital lease liabilities, unexpended bond proceeds and deferred outflows associated with the acquisition, construction or improvement of those assets.
- Restricted:
 - <u>Nonexpendable</u> Net position subject to externally imposed stipulations that it be maintained permanently. Such net position includes the corpus portion (historical value) of gifts to the University's permanent endowment funds and certain investment earnings stipulated by the donor to be reinvested permanently.
 - <u>Expendable</u> Net position subject to externally imposed stipulations that can be fulfilled by actions of the University pursuant to those stipulations or that expire by the passage of time. Such net position includes net appreciation of the University's permanent endowment funds that have not been stipulated by the donor to be reinvested permanently.
- Unrestricted: Net position not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. Substantially all unrestricted net position is designated for various academic programs, research initiatives and capital projects.

<u>Summary of Significant Accounting Policies</u>: For purposes of the statement of cash flows, the University considers all highly liquid investments purchased with a maturity of three months or less, to be cash equivalents. Cash equivalents representing assets of the University's endowment, life income and other investments are included in noncurrent investments as these funds are not used for operating purposes.

Investments are reported in four categories in the statement of net position. Investments reported as endowment, life income and other investments are those funds invested in portfolios that are considered by management to be of a long duration. Investments for student loan and capital activities are those funds that are intended to be used for these specific activities. All other investments are reported as investments for operating activities.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

GASB defines fair value and establishes a framework for measuring fair value that includes a three tiered hierarchy of valuation inputs, placing a priority on those which are observable in the market. Observable inputs reflect market data obtained from sources independent of the reporting entity and unobservable inputs reflect the University's own assumptions about how market participants would value an asset or liability based on the best information available. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. The three levels of inputs, of which the first two are considered observable and the last unobservable, are as follows:

- Level 1 Quoted prices for identical assets or liabilities in active markets that can be accessed at the measurement date
- Level 2 Other significant observable inputs, either direct or indirect, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable; or market corroborated inputs
- Level 3 Unobservable inputs

GASB allows for the use of net asset value ("NAV") as a practical expedient to determine the fair value of nonmarketable investments if the NAV is calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies. Investments that use NAV in determining fair value are disclosed separately from the valuation hierarchy as presented in Note 2.

Investments in marketable securities are carried at fair value, as established by the major securities markets. Purchases and sales of investments are accounted for on the trade date basis. Investment income is recorded on the accrual basis. Realized and unrealized gains and losses are reported in investment income.

Investments in nonmarketable limited partnerships are carried at fair value, which is generally established using the NAV provided by the management of the investment partnerships at June 30, 2019 and 2018. The University may also adjust the fair value of these investments based on market conditions, specific redemption terms and restrictions, risk considerations and other factors. As these investments are not readily marketable, the estimated value is subject to uncertainty, and therefore, may differ from the value that would have been used had a ready market for the investments existed.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

Investments denominated in foreign currencies are translated into U.S. dollar equivalents using year end spot foreign currency exchange rates. Purchases and sales of investments denominated in foreign currencies and related income are translated at spot exchange rates on the transaction dates.

Derivative instruments such as financial futures, forward foreign exchange contracts and interest rate swaps held in investment portfolios, are recorded on the contract date and are carried at fair value using listed price quotations or amounts that approximate fair value. To facilitate trading in financial futures, the University is required to post cash or securities to satisfy margin requirements of the exchange where such futures contracts are listed. The University monitors the required amount of cash and securities on deposit for financial futures transactions and withdraws or deposits cash or securities as necessary.

Accounts receivable are recorded net of an allowance for uncollectible accounts receivable. The allowance is based on management's judgment of potential uncollectible amounts, which includes such factors as historical experience and type of receivable.

The University receives pledges and bequests of financial support from corporations, foundations and individuals. Revenue is recognized when a pledge representing an unconditional promise to give is received and all eligibility requirements, including time requirements, have been met. In the absence of such a promise, revenue is recognized when the gift is received. Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, and are not recorded as assets until the related gift is received.

Unconditional promises to give that are expected to be collected in future years are recorded at the present value of the estimated future cash flows. The discounts on these amounts are computed using risk-free interest rates applicable to the years in which the promises are made, commensurate with expected future payments. An allowance for uncollectible pledges receivable is provided based on management's judgment of potential uncollectible amounts and includes such factors as prior collection history, type of gift and nature of fundraising.

Capital assets are recorded at cost or, if donated, at acquisition value at the date of donation. Depreciation of capital assets is provided on a straight-line method over the estimated useful lives of the respective assets, which generally range from three to fifty years. The University does not capitalize works of art or historical treasures that are held for exhibition, education, research or public service. These collections are neither disposed of for financial gain nor encumbered in any way. Accordingly, such collections are not recognized or capitalized for financial statement purposes.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, debt and derivative activity, and the defined benefit pension plan for Metropolitan Health Corporation ("Metro Health").

Unearned revenue consists primarily of cash received from grant and contract sponsors which has not yet been earned under the terms of the agreement. Unearned revenue also includes amounts received in advance of an event, such as student tuition and advance ticket sales related to future fiscal years.

Deposits of affiliates and others represents cash and invested funds held by the University as a result of agency relationships with various groups. Noncurrent deposits of affiliates represents the portion of endowment and similar funds held by the University on behalf of others.

The University holds life income funds for beneficiaries of the pooled income fund, charitable remainder trusts and the gift annuity program. These funds generally pay lifetime income to beneficiaries, after which the principal is made available to the University in accordance with donor intentions. All life income fund assets, including those held in trust, are recorded at fair value. The present value of estimated future payments due to life income beneficiaries is recorded as a liability.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with the University's obligations for postemployment benefits, Metro Health's defined benefit pension plan and irrevocable split-interest agreements.

For donor restricted endowments, the Uniform Prudent Management of Institutional Funds Act, as adopted in Michigan, permits the Board of Regents to appropriate amounts for endowment spending rule distributions as is considered prudent. The University's policy is to retain net realized and unrealized appreciation with the endowment after spending rule distributions. Net appreciation of permanent endowment funds, which totaled \$2,144,532,000 and \$2,067,392,000 at June 30, 2019 and 2018, respectively, is recorded in restricted expendable net position. The University's endowment spending rule is further discussed in Note 2.

Student tuition and residence fees are presented net of scholarships and fellowships applied to student accounts, while stipends and other payments made directly to students are presented as scholarship and fellowship expenses.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

Patient care revenues are reported net of contractual allowances and bad debt expenses. Contractual allowances are estimated based on agreements with third-party payers that provide payments for patient care services at amounts different from established rates. These allowances are subject to the laws and regulations governing the federal and state programs and postpayment audits, and adjusted in future periods as final settlements are determined. Patient care services are primarily provided through the University's health system, which includes University Health Service, which offers health care services to students, faculty and staff, and Dental Faculty Associates, which offers dental care services performed by faculty dentists.

Patient care services are provided to patients who meet certain criteria under the University's charity care policies without charge or at amounts less than its established rates. Accordingly, charity care is not reported as revenue in the accompanying statement of revenues, expenses and changes in net position. Charges forgone for charity care services totaled \$78,370,000 and \$77,259,000 in 2019 and 2018, respectively.

Other auxiliary enterprise revenues primarily represent revenues generated by intercollegiate athletics, parking, student unions and student publications.

The University's policy for defining operating activities as reported on the statement of revenues, expenses and changes in net position are those that generally result from exchange transactions such as payments received for providing services and payments made for services or goods received. Nearly all of the University's expenses result from exchange transactions.

Certain significant revenue streams relied upon for operations result from nonexchange transactions and are recorded as nonoperating revenues including state appropriations, federal Pell grants, gifts and investment income.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. The most significant areas that require management estimates relate to self-insurance and benefits obligations.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments

<u>Summary</u>: The University maintains centralized management for substantially all of its cash and investments.

Working capital of individual University units is primarily invested in the University Investment Pool ("UIP"). Together with the University's short-term insurance and other benefits reserves, the UIP is invested in the Daily and Monthly Portfolios, which are principally invested in investment-grade money market securities, U.S. government and other fixed income securities, and absolute return strategies.

The University collectively invests substantially all of the assets of its endowment funds along with a portion of its insurance and benefits reserves, charitable remainder trusts and gift annuity program in the Long Term Portfolio. The longer investment horizon of the Long Term Portfolio allows for an equity-oriented strategy to achieve higher expected returns over time, and permits the use of less liquid alternative investments, providing for equity diversification beyond the stock markets. The Long Term Portfolio includes investments in domestic and non-U.S. stocks and bonds, commingled funds and limited partnerships consisting of venture capital, private equity, real estate, natural resources and absolute return strategies.

The University also separately invests certain endowments and charitable remainder trusts, unexpended bond proceeds and other funds with investment restrictions outside of the Daily, Monthly and Long Term Portfolios.

<u>Authorizations</u>: The University's investment policies are governed and authorized by University Bylaws and the Board of Regents. The approved asset allocation policy for the Long Term Portfolio sets general targets for both equities and fixed income securities. Since diversification is a fundamental risk management strategy, the Long Term Portfolio is broadly diversified within these general categories.

The endowment spending rule provides for distributions from the University Endowment Fund to the entities that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of fund shares. To protect endowment principal in the event of a prolonged market downturn, distributions are limited to 5.3 percent of the current fair value of fund shares. Distributions are also made from the UIP based on the 90-day U.S. Treasury Bill rate. The University's costs to administer and grow the University Endowment Fund and UIP are funded by investment returns.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

<u>Cash and Cash Equivalents and Unexpended Bond Proceeds</u>: Cash and cash equivalents, which totaled \$397,279,000 and \$133,365,000 at June 30, 2019 and 2018, respectively, represent cash and short-term money market investments in mutual funds, overnight collective funds managed by the University's custodian or short-term highly liquid investments registered as securities and held by the University or its agents in the University's name. Of its cash and cash equivalents, the University had actual cash balances in its bank accounts in excess of Federal Deposit Insurance Corporation limits in the amount of \$14,121,000 and \$42,720,000 at June 30, 2019 and 2018, respectively. The University does not require its deposits to be collateralized or insured.

Unexpended bond proceeds, which totaled \$90,813,000 and \$82,797,000 at June 30, 2019 and 2018, respectively, represent short-term money market investments in mutual funds. These amounts are used solely for the reimbursement of qualifying expenditures for construction projects associated with certain outstanding general revenue bonds issued by the University.

Cash and cash equivalents and unexpended bond proceeds include certain securities that are subject to the leveling requirements defined by GASB. Level 1 securities, which primarily consist of money market funds and U.S. government securities, totaled \$278,275,000 and \$132,042,000 at June 30, 2019 and 2018, respectively. Level 2 securities, which primarily consist of U.S. agencies, totaled \$36,000,000 and \$34,100,000 at June 30, 2019 and 2018, respectively.

<u>Investments</u>: At June 30, 2019 and 2018, the University's investments, which are held by the University or its agents in the University's name, are summarized as follows:

	2019	2018	
	(in thousands)		
Cash equivalents, noncurrent	\$ 167,876	\$ 229,067	
Equity securities	1,222,061	1,238,818	
Fixed income securities	1,361,575	1,826,821	
Commingled funds	3,295,746	3,101,671	
Nonmarketable alternative investments	8,339,202	7,608,059	
Other investments	(1,046)	8,845	
	\$ 14,385,414	\$ 14,013,281	

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

At June 30, 2019 and 2018, the fair value of the University's investments based on the inputs used to value them is summarized as follows:

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				2019			
Equity securities: $314,972$ \$ 46,539 $361,511$ Domestic $314,972$ \$ 46,539 $360,550$ Fired income securities: $1,174,524$ - $47,537$ - $1,222,061$ Fixed income securities: U.S. Treasury $735,365$ $735,365$ $27,355$ $27,355$ U.S. government agency $735,365$ $586,024$ $12,831$ - $1,361,575$ Commingled funds: $Absolute return$ $586,024$ $12,831$ - $1,361,575$ Domestic equities 162 $423,668$ $423,830$ $423,830$ $569,546$ $569,546$ $569,546$ $569,546$ Domestic equities 162 $3,164$ $3,164$ $3,164$ $3,275,440$ $3,295,746$ Nonmarketable alternative investments: $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ Absolute return $267,327$ $1,354,169$ $1,621,496$ $10,993$ $1,265,848$ $1,276,841$ Nonmarketable alternative investments: $267,327$ $1,354,169$ $1,621,496$ $10,993$ $1,265,848$ $1,276,841$		Level 1	Level 2	-	NAV		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Cash equivalents, noncurrent	\$ 167,876	-	-	-	\$ 167,876	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Equity securities:						
Foreign $859,552$ 998 $860,550$ Fixed income securities: U.S. Treasury U.S. government agency Corporate and other $735,365$ $735,365$ $735,365$ $735,365$ $735,365$ $735,365$ $27,355$ Commingled funds: Absolute return Domestic equities 162 $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,0306$ $ 3,164$ $3,164$ 0 ther $16,977$ $20,306$ - $2,249,481$		314.972		\$ 46.539		361.511	
1,174,524 - $47,537$ - $1,222,061$ Fixed income securities: U.S. Treasury $735,365$ $735,365$ $735,365$ U.S. government agency $735,365$ $586,024$ $12,831$ $735,365$ Corporate and other $735,365$ $586,024$ $12,831$ $ 1,361,575$ Commingled funds: Absolute return $586,024$ $12,831$ $ 1,361,575$ Commingled funds: $Absolute return$ $569,546$ $569,546$ $569,549$ Domestic equities 162 $423,668$ $423,830$ Global equities 3 $569,546$ $569,549$ U.S. fixed income $3,164$ $569,546$ $569,546$ Other $16,977$ $20,306$ $ -$ Nonmarketable alternative investments: $22,249,481$ $2,249,481$ $2,249,481$ Absolute return $267,327$ $1,354,169$ $1,621,496$ Real estate $10,993$ $1,265,848$ $1,276,841$ Natural resources $ 482,875$ $7,856,327$ $8,339,20$. ,			
Fixed income securities: U.S. Treasury U.S. government agency Corporate and other735,365 $$ 27,355$ $$ 288,855$ $$ 288,855$ $$ 288,855$ $$ 288,855$ $$ 288,855$ $$ 288,855$ $$ 298,855$ $$ 2,282,226$ $$ 423,668$ $$ 423,830$ $$ 423,668$ $$ 423,830$ $$ 569,546$ $$ 569,546$ $$ 569,546$ $$ 569,546$ $$ 3,164$ $$ 0 ther$ $$ 162$ $$ 16,977$ $$ 20,306$ $$ - $ 3,275,440$ $$ 3,295,746$ Nonmarketable alternative investments: Venture capital Absolute return Private equity Real estate Natural resources $$ 2,249,481$ $$ 1,885,870$ $$ 1,993$ $$ 1,265,848$ $$ 1,276,841$ $$ 1,00,959$ $$ 1,305,514$ $$ 204,555$ $$ 1,100,959$ $$ 1,305,514$ $$ 2,249,481$ $$ 2,255$ $$ 1,100,959$ $$ 1,305,514$ $$ 2,249,481$ $$ 2,249,481$ $$ 2,249,481$ $$ 2,255$ $$ 3,39,202$ $$ 2,249,481$ $$ 2,249,481$ $$ 2,249,481$ $$ 2,$	8	,	-		-	,	
U.S. Treasury U.S. government agency Corporate and other735,365 $$ 27,355$ $$ 27,282,226$ $$ 2,282,226$ $$ 3 3$ $$ 3,164$ $$ 0,6977$ $$ 20,306$ $$ - $ 3,275,440$ $$ 3,295,746$ Nonmarketable alternative investments: Venture capital Absolute return Private equity Real estate Natural resources $$ 2,249,481$ $$ 1,265,848$ $$ 1,276,841$ $$ 1,206,555$ $$ 1,100,959$ $$ 1,305,514$ $$ 204,555$ $$ 1,100,959$ $$ 1,305,514$ $$ 204,555$ Other investments $$ (3,145)$ $$ (7,184)$ $$ 9,283$ $$ - $ (1,046)$	Fixed income securities:	1,171,521		17,557		1,222,001	
U.S. government agency Corporate and other $\$ 27,355$ $586,024$ $27,355$ $12,831$ Commingled funds: Absolute return Domestic equities $735,365$ $613,379$ $12,831$ $ 1,361,575$ Commingled funds: Absolute return Domestic equities 162 3 $\$ 2,282,226$ $2,282,226$ $2,282,226$ Domestic equities U.S. fixed income Other $3,164$ $16,977$ $\$ 2,282,226$ $2,282,226$ $3,164$ Other $16,977$ $20,306$ $ 3,275,440$ $3,295,746$ Nonmarketable alternative investments: Venture capital Absolute return Private equity Real estate $267,327$ $1,354,169$ $1,885,870$ $1,265,848$ $1,276,841$ $1,209,551$ Natural resources $ 482,875$ $7,856,327$ $8,339,202$ Other investments $(3,145)$ $(7,184)$ $9,283$ $ (1,046)$		735 365				735 365	
Corporate and other $586,024$ $12,831$ $598,855$ Corporate and other $735,365$ $613,379$ $12,831$ $ 1,361,575$ Commingled funds: Absolute return Domestic equities 162 $8 2,282,226$ $2,282,226$ Domestic equities 162 $423,668$ $423,830$ Global equities $3,164$ $3,164$ Other $3,164$ $3,164$ Other $3,164$ $3,164$ $3,164$ $3,164$ $3,164$ $3,164$ $3,164$ $3,164$ $3,164$ $2,0306$ $ 3,275,440$ $3,295,746$ Nonmarketable alternative investments: $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ $2,249,481$ <th< td=""><td>•</td><td>755,505</td><td>\$ 27355</td><td></td><td></td><td>,</td></th<>	•	755,505	\$ 27355			,	
735,365 $613,379$ $12,831$ - $1,361,575$ Commingled funds: Absolute return Domestic equities 162 $$2,282,226$ $2,282,226$ Domestic equities 162 $$423,668$ $423,668$ $423,868$ Global equities $3,164$ $$59,546$ $569,546$ $569,546$ Other investments:Venture capital Absolute return Private equity Real estate $$2,249,481$ <th c<="" td=""><td></td><td></td><td>4 ·)= = =</td><td>12 831</td><td></td><td>,</td></th>	<td></td> <td></td> <td>4 ·)= = =</td> <td>12 831</td> <td></td> <td>,</td>			4 ·)= = =	12 831		,
Commingled funds: Absolute return Domestic equities 162 $$ 2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $2,282,226$ $423,668$ $423,830$ $6lobal equities$ 3 $569,546$ $569,546$ $569,549$ 0.5 fixed income $3,164$ 0 ther $16,977$ $20,306$ - $ 3,275,440$ $3,295,746$ Nonmarketable alternative investments: Venture capital Absolute return Private equity Real estate $2,249,481$ $1,885,870$ $20,306$ $3,275,440$ $3,295,746$ $2,249,481$ $1,885,870$ $2,249,481$ $1,885,870$ $1,885,870$ $1,885,870$ $1,885,870$ $1,885,870$ $1,993$ $1,265,848$ $1,276,841$ $204,555$ $1,00,959$ $1,305,514$ $ 482,875$ $7,856,327$ $8,339,202$ $ (1,046)$		735 365		/	-		
Other $16,977$ $16,977$ 20,306 $3,275,440$ $3,295,746$ Nonmarketable alternative investments: Venture capital Absolute return Private equity Real estate $2,249,481$ $1,885,870$ $2,249,481$ $1,885,870$ $2,249,481$ $1,885,870$ Private equity Real estate Natural resources $267,327$ $1,354,169$ $1,621,496$ $10,993$ $1,265,848$ $1,276,841$ $204,555$ $1,100,959$ $1,305,514$ Other investments $(3,145)$ $(7,184)$ $9,283$ - $(1,046)$	Absolute return Domestic equities Global equities	162 3		,	423,668	2,282,226 423,830 569,549	
Nonmarketable alternative investments: 20,306 - 3,275,440 3,295,746 Nonmarketable alternative investments: 20,306 - - 3,275,440 3,295,746 Venture capital Absolute return Private equity Real estate Natural resources 2,249,481 2,249,481 2,249,481 1,885,870 1,885,870 1,885,870 1,885,870 Private equity Real estate 267,327 1,354,169 1,621,496 Natural resources 204,555 1,100,959 1,305,514 Other investments (3,145) (7,184) 9,283 - (1,046)		,					
Nonmarketable alternative investments: 2,249,481 2,249,481 Venture capital Absolute return Private equity Real estate 2,67,327 1,885,870 1,885,870 Natural resources 267,327 1,354,169 1,621,496 004,555 10,993 1,265,848 1,276,841 004,555 1,100,959 1,305,514 004,555 1,100,959 1,305,514 004,555 1,100,959 1,305,514 004,555 1,100,959 1,305,514 004,555 1,100,959 1,305,514 004,815 0,7,184) 9,283 -	ould	/			3 275 440		
Absolute return $1,885,870$ $1,885,870$ Private equity $267,327$ $1,354,169$ $1,621,496$ Real estate $10,993$ $1,265,848$ $1,276,841$ Natural resources $ 482,875$ $7,856,327$ Other investments $(3,145)$ $(7,184)$ $9,283$ $ (1,046)$		20,300		-		3,293,740	
Private equity Real estate $267,327$ $1,354,1691,621,4961,265,848Natural resources204,5551,100,9591,305,514482,8757,856,3278,339,202Other investments(3,145)(7,184)9,283-(1,046)$						/ /	
Real estate $10,993$ $1,265,848$ $1,276,841$ Natural resources $204,555$ $1,100,959$ $1,305,514$ $482,875$ $7,856,327$ $8,339,202$ Other investments $(3,145)$ $(7,184)$ $9,283$ - $(1,046)$	Absolute return				1,885,870	1,885,870	
Natural resources $204,555$ $1,100,959$ $1,305,514$ - - $482,875$ $7,856,327$ $8,339,202$ Other investments $(3,145)$ $(7,184)$ $9,283$ - $(1,046)$	Private equity			267,327	1,354,169	1,621,496	
- - 482,875 7,856,327 8,339,202 Other investments (3,145) (7,184) 9,283 - (1,046)	Real estate			/	1,265,848	1,276,841	
Other investments (3,145) (7,184) 9,283 - (1,046)	Natural resources			204,555	1,100,959	1,305,514	
		-	-	482,875	7,856,327	8,339,202	
	Other investments	(3 145)	(7 184)	9 283	-	(1.046)	
		\$ 2,094,926	\$ 606,195	\$ 552,526	\$ 11,131,767	\$ 14,385,414	

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

			2018		
-	Level 1	Level 2	Level 3 (in thousands)	NAV	Total Fair Value
Cash equivalents, noncurrent	\$ 229,067	_	-	-	\$ 229,067
Equity securities:					
Domestic	401,755		\$ 34,971		436,726
Foreign	801,506		586		802,092
-	1,203,261	-	35,557	-	1,238,818
Fixed income securities:	-,- •• ,- • -				
U.S. Treasury	752,529				752,529
U.S. government agency		\$ 116,085			116,085
Corporate and other		955,166	3,041		958,207
-	752,529	1,071,251	3,041	-	1,826,821
Commingled funds:	,	, ,	,		
Absolute return				\$ 2,006,037	2,006,037
Domestic equities	17,089			263,389	280,478
Global equities	9,495			758,608	768,103
U.S. fixed income	9,453			33,589	43,042
Other	4,011				4,011
_	40,048	-	-	3,061,623	3,101,671
Nonmarketable alternative investments:					
Venture capital				1,771,258	1,771,258
Absolute return				1,636,355	1,636,355
Private equity			343,688	1,504,786	1,848,474
Real estate			9,225	1,104,080	1,113,305
Natural resources			224,151	1,014,516	1,238,667
-	-	-	577,064	7,030,995	7,608,059
-					
Other investments	(2,131)	966	10,010	-	8,845
_	\$ 2,222,774	\$ 1,072,217	\$ 625,672	\$ 10,092,618	\$ 14,013,281

Investments categorized as Level 1 are valued using prices quoted in active markets for those securities. Equity securities categorized as Level 3 represent investments in start-up or venture companies. Fixed income securities categorized as Level 2 represent investments valued using a matrix pricing technique, which values debt securities based on their relationship to a benchmark and the relative spread to that benchmark. Fixed income securities categorized as Level 3 represent debt investments with select venture funded University faculty start-ups as well as a note receivable associated with the sale of a portion of the University's nonmarketable alternative real estate investments at June 30, 2019. Nonmarketable alternative investments categorized as Level 3 primarily represent direct investments which are valued using models that rely on inputs which are unobservable in the market.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The University's investment strategy incorporates certain financial instruments that involve, to varying degrees, elements of market risk and credit risk in excess of amounts recorded in the financial statements. Market risk is the potential for changes in the value of financial instruments due to market changes, including interest and foreign exchange rate movements and fluctuations embodied in forwards, futures and commodity or security prices. Market risk is directly impacted by the volatility and liquidity of the markets in which the underlying assets are traded. Credit risk is the possibility that a loss may occur due to the failure of a counterparty to perform according to the terms of the contract. The University's risk of loss in the event of a counterparty default is typically limited to the amounts recognized in the statement of net position and is not represented by the contract or notional amounts of the instruments.

Fixed income securities have inherent financial risks, including credit risk and interest rate risk. Credit risk for fixed income securities is the risk that the issuer will not fulfill its obligations. Nationally recognized statistical rating organizations ("NSROs"), such as S&P Global and Moody's, assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors. Fixed income securities considered investment grade are those rated at least BBB by S&P Global and Baa by Moody's. To manage credit risk, the University specifies minimum average and minimum absolute quality NSRO ratings for securities held pursuant to its management agreements.

The University minimizes concentration of credit risk, the risk of a large loss attributed to the magnitude of the investment in a single issuer of fixed income securities, by diversifying its fixed income issues and issuers and holding U.S. Treasury securities which are considered to have minimal credit risk. The University also manages this risk at the account level by limiting each fixed income manager's holding of any non-U.S. government issuer to 5 percent of the value of the investment account.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of fixed income securities. Effective duration, a commonly used measure of interest rate risk, incorporates a security's yield, coupon, final maturity, call features and other embedded options into one number expressed in years that indicates how price-sensitive a security or portfolio indicates the approximate percentage change in fair value expected for a one percent change in interest rates. The longer the duration, the more sensitive the security or portfolio is to changes in interest rates. The weighted average effective duration of the University's fixed income securities was 5.0 years at June 30, 2019 compared to 4.2 years at June 30, 2018. The University manages the effective duration of its fixed income securities at the account level, where fixed income managers generally may not deviate from the duration of their respective benchmarks by more than 25 percent. The Monthly Portfolio held positions in bond futures at June 30, 2019 and 2018, which are used to adjust the duration of cash equivalents and the fixed income portfolios.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The composition of fixed income securities at June 30, 2019 and 2018, along with credit quality and effective duration measures, is summarized as follows:

			2019			
	U.S. Government	Investment Grade	Non- Investment Grade (in thousands)	Not Rated	Total	Duration (in years)
U.S. Treasury U.S. Treasury inflation	\$ 724,727				\$ 724,727	5.0
protected U.S. government agency	10,638 27,355				10,638 27,355	7.3 0.9
Mortgage backed Asset backed		\$ 13,346 34,271	\$ 404	\$ 6,514 377	20,264 34,648	0.8 0.7
Corporate and other	\$ 762,720	508,015 \$ 555,632	13,583 \$ 13,987	22,345 \$ 29,236	543,943 \$ 1,361,575	5.5 5.0
			2018			
	U.S. Government	Investment Grade	Non- Investment Grade (in thousands)	Not Rated	Total	Duration (in years)
U.S. Treasury U.S. Treasury inflation	\$ 527,662				\$ 527,662	8.7
protected U.S. government agency	224,867 116,085				224,867 116,085	2.2 0.4
Mortgage backed Asset backed		\$ 82,258 68,336	\$ 2,930	\$ 22,634 2,210	107,822 70,546	0.6 0.7
Corporate and other	\$ 868,614	753,876 \$ 904,470	16,841 \$ 19,771	9,122 \$ 33,966	779,839 \$1,826,821	3.2 4.2

Of the University's fixed income securities, 97 percent were rated investment grade or better at both June 30, 2019 and 2018, and 63 percent and 59 percent of these securities consisted of either U.S. treasury and government agencies or non-U.S. government securities rated AAA/Aaa at June 30, 2019 and 2018, respectively.

Commingled (pooled) funds include Securities and Exchange Commission regulated mutual funds and externally managed funds, limited partnerships and corporate structures which are generally unrated and unregulated. Certain commingled funds may use derivatives, short positions and leverage as part of their investment strategy. These investments are structured to limit the University's risk exposure to the amount of invested capital.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

Nonmarketable alternative investments consist of limited partnerships and similar vehicles involving an advance commitment of capital called by the general partner as needed and distributions of capital and return on invested capital as underlying strategies are concluded during the life of the partnership. There is not an active secondary market for these alternative investments, which are generally unrated and unregulated, and the liquidity of these investments is dependent on actions taken by the general partner. The University's limited partnerships are diversified in terms of manager selection, industry and geographic focus. At June 30, 2019 and 2018, no individual partnership investment represented 5 percent or more of total investments.

Absolute return strategies in the commingled funds and nonmarketable alternative investments classifications include long/short stock programs, merger arbitrage, intra-capital structure arbitrage and distressed debt investments. The goal of absolute return strategies is to provide, in aggregate, a return that is consistently positive and uncorrelated with the overall market.

The University's investments in commingled funds and nonmarketable alternative investments are contractual agreements that may limit the ability to initiate redemptions due to notice periods, lock-ups and gates. Additional information about current redemption terms and outstanding commitments at June 30, 2019 is summarized as follows (amounts in thousands):

	Fair Value	Remaining Life	Outstanding Commitments	Redemption Terms	Redemption Notice
Commingled funds	\$ 3,295,746	N/A		Daily, monthly, quarterly and annually, with varying notice periods	Lock-up provisions range from none to 3 years
Nonmarketable alternative investments	\$ 8,339,202	1-12 years	\$ 6,089,675	Ineligible for redemption	N/A

Commingled funds have liquidity (redemption) provisions, which enable the University to make full or partial withdrawals with notice, subject to restrictions on the timing and amount. Of the University's commingled funds at June 30, 2019 and 2018, approximately 75 percent and 79 percent are redeemable within one year, with 58 percent and 63 percent redeemable within 90 days under normal market conditions. The remaining amounts are redeemable beyond one year, with redemption of certain funds dependent on disposition of the underlying assets. The University's committed but unpaid obligation to nonmarketable alternative investments is further discussed in Note 14.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The University participates in non-U.S. developed and emerging markets through commingled funds invested in non-U.S./global equities and absolute return strategies. Although all of these funds are reported in U.S. dollars, price changes of the underlying securities in local markets as well as changes to the value of local currencies relative to the U.S. dollar are embedded in investment returns. In addition, a portion of the University's equity securities and nonmarketable alternative investments are denominated in foreign currencies, which must be settled in local (non-U.S.) currencies.

Foreign exchange risk is the risk that investments denominated in foreign currencies may lose value due to adverse fluctuations in the value of the U.S. dollar relative to foreign currencies. Forward foreign currency contracts are typically used to manage the risks related to fluctuations in currency exchange rates between the time of purchase or sale and the actual settlement of foreign securities. Various investment managers acting for the University use forward foreign exchange contracts in risk-based transactions to carry out their portfolio strategies and are subject to agreements that provide minimum diversification and maximum exposure limits by country and currency.

The value of the University's non-U.S. dollar holdings, net of the value of the outstanding forward foreign exchange contracts, totaled \$1,726,091,000 or 12 percent of total investments at June 30, 2019, and \$1,766,714,000 or 13 percent of total investments at June 30, 2018, and are summarized as follows:

		2019	, ,	2018
		(in tho	usands)
Euro	\$	805,536	\$	983,971
British pound sterling		289,940		252,537
Japanese yen		232,252	,	233,049
Swedish krona		111,224		78,464
Canadian dollar		83,105		79,368
Swiss franc		68,733		35,564
Norwegian krone		39,071		49,760
Other	_	96,230		54,001
	\$ 1,	726,091	\$ 1,	766,714

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The Long Term Portfolio and the Monthly Portfolio participate in a short-term, fully collateralized, securities lending program administered by the University's master custodian. Together, the Portfolios had \$64,548,000 and \$79,224,000 in securities loans outstanding at June 30, 2019 and 2018, respectively. At loan inception, an approved borrower must deliver collateral of cash, securities or letters of credit to the University's lending agent equal to 102 percent of fair value for domestic securities and 105 percent for foreign securities. Collateral positions are monitored daily to ensure that borrowed securities are never less than 100 percent collateralized. At June 30, 2019, collateral of \$67,327,000 (104 percent of securities on loan) includes invested cash of \$29,485,000 and U.S. government securities of \$37,842,000, while at June 30, 2018, collateral of \$82,085,000 (104 percent of securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities on loan) includes invested cash of \$29,727,000 and U.S. government securities of \$52,358,000.

Cash collateral held by the University's lending agent, along with the offsetting liability to return the collateral at loan termination, are recorded in the statement of net position. Neither the University nor its securities lending agent has the ability to pledge or sell securities received as collateral unless a borrower defaults. Securities loans may be terminated upon notice by either the University or the borrower.

Note 3--Accounts Receivable

The composition of accounts receivable at June 30, 2019 and 2018 is summarized as follows:

	2019	2018
	(11) the	ousands)
Patient care	\$ 539,653	\$ 507,827
Sponsored programs	172,681	164,264
State appropriations, educational and capital	67,353	67,230
Student accounts	32,715	27,457
Other	36,975	32,219
	849,377	798,997
Less allowance for uncollectible accounts receivable:		
Patient care	125,731	123,370
All other	9,025	8,816
	\$ 714,621	\$ 666,811

Notes to Consolidated Financial Statements--Continued

Note 4--Notes and Pledges Receivable

The composition of notes and pledges receivable at June 30, 2019 and 2018 is summarized as follows:

	2019	2018
	(in thou	usands)
Notes:		
Federal student loan programs	\$ 74,153	\$ 85,918
University student loan funds	15,691	16,664
Other	1,396	1,390
	91,240	103,972
Less allowance for uncollectible notes	3,134	3,134
Total notes receivable, net	88,106	100,838
Gift pledges: Capital	138,983	165,342
Operations	167,350	164,920
1	306,333	330,262
Less:		
Allowance for uncollectible pledges	8,137	9,523
Unamortized discount to present value	4,840	4,942
Total pledges receivable, net	293,356	315,797
Total notes and pledges receivable, net	381,462	416,635
Less current portion	80,035	79,765
	\$ 301,427	\$ 336,870

The principal repayment and interest rate terms of federal and University loans vary considerably. The allowance for uncollectible notes only applies to University funded notes and the University portion of federal student loans, as the University is not obligated to fund the federal portion of uncollected student loans. Federal loan programs are funded principally with federal advances to the University under the Perkins and various health professions loan programs.

Notes to Consolidated Financial Statements--Continued

Note 4--Notes and Pledges Receivable--Continued

Payments on pledges receivable at June 30, 2019 are expected to be received in the following years ended June 30 (in thousands):

2020	\$ 63,261
2021	57,970
2022	43,855
2023	35,386
2024	46,680
2025 and after	59,181
	\$ 306,333

Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, until the related gift is received. Accordingly, permanent endowment pledges totaling \$156,957,000 and \$168,926,000 at June 30, 2019 and 2018, respectively, are not recognized as assets in the accompanying financial statements. In addition, bequest intentions and other conditional promises are not recognized as assets until the specified conditions are met due to uncertainties with regard to their realizability and valuation.

Notes to Consolidated Financial Statements--Continued

Note 5--Capital Assets

Capital assets activity for the years ended June 30, 2019 and 2018 is summarized as follows:

	2019				
	Beginning			Ending	
	Balance	Additions	Retirements	Balance	
		(in th	iousands)	1	
Land	\$ 129,376	\$ 24,533	\$ 599	\$ 153,310	
Land improvements	143,738	18,026	1,463	160,301	
Infrastructure	262,207	2,550		264,757	
Buildings	9,178,875	265,783	31,782	9,412,876	
Construction in progress	301,434	111,773		413,207	
Equipment	2,098,370	228,688	84,565	2,242,493	
Library materials	646,376	28,115		674,491	
	12,760,376	679,468	118,409	13,321,435	
Less accumulated depreciation	6,639,379	567,857	112,770	7,094,466	
	\$ 6,120,997	\$ 111,611	\$ 5,639	\$ 6,226,969	

		20	18	
	Beginning			Ending
	Balance	Additions	Retirements	Balance
		(in th	iousands)	1
Land	\$ 126,617	\$ 2,952	\$ 193	\$ 129,376
Land improvements	137,981	7,275	1,518	143,738
Infrastructure	258,449	4,149	391	262,207
Buildings	8,618,377	620,725	60,227	9,178,875
Construction in progress	476,124	(174,690)		301,434
Equipment	2,050,848	163,428	115,906	2,098,370
Library materials	620,200	26,176		646,376
-	12,288,596	650,015	178,235	12,760,376
Less accumulated depreciation	6,243,154	568,707	172,482	6,639,379
-	\$ 6,045,442	\$ 81,308	\$ 5,753	\$ 6,120,997

The increase in construction in progress of \$111,773,000 in 2019 represents the amount of capital expenditures for new projects of \$559,735,000 net of assets placed in service of \$447,962,000. The decrease in construction in progress of \$174,690,000 in 2018 represents the amount of capital expenditures for new projects of \$527,908,000 net of assets placed in service of \$702,598,000.

During 2018, the University recognized \$24,698,000 of additional depreciation expense in connection with the impairment of certain components of Metro Health's hospital facilities.

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt

Long-term debt at June 30, 2019 and 2018 is summarized as follows:

	2019	2018
	(in thou	isands)
Commercial paper:		
Tax-exempt, variable rate (1.57%)*	\$ 142,990	\$ 155,595
Taxable, variable rate (2.30%)*	2,250	2,865
General revenue bonds:		
Series 2019A, 5.00% through 2036	148,330	
unamortized premium	26,936	
Series 2019B, taxable, 2.535% to 3.416% through 2029	16,755	
Series 2019C, 4.00% through 2049	61,725	
unamortized premium	5,949	
Series 2018A, 4.00% to 5.00% through 2048	135,130	137,510
unamortized premium	17,988	19,055
Series 2017A, 4.00% to 5.00% through 2047	447,410	456,265
unamortized premium	72,310	78,186
Series 2015, 4.00% to 5.00% through 2046	294,850	302,415
unamortized premium	44,612	47,640
Series 2014A, 4.25% to 5.00% through 2044	74,250	76,060
Series 2014B, 2.071% to 3.516% through 2024	4,820	5,730
unamortized premium	6,056	6,503
Series 2013A, 2.50% to 5.00% through 2029	43,575	44,975
unamortized premium	1,424	1,649
Series 2012A, variable rate (1.78%)* through 2036	50,000	50,000
Series 2012B, variable rate (1.86%)* through 2042	65,000	65,000
Series 2012D-1, variable rate (1.80%)* through 2025 with partial swap		
to fixed through 2025	56,635	60,220
Series 2012D-2, variable rate (1.80%)* through 2030 with partial swap		
to fixed through 2026	58,315	62,725
Series 2012E**, variable rate (2.17%)* through 2033	94,525	95,020
Series 2010A, taxable Build America Bonds, 4.926% to 5.593% through 2040	163,110	163,110
Series 2010C, 3.75% to 5.00% through 2027	38,330	50,485
unamortized premium	2,937	3,647
Series 2010D, taxable Build America Bonds, 3.356% to 5.333% through 2041	157,860	165,790
Series 2009A, 3.00% to 5.00% through 2019		4,165
unamortized premium		2,769
Series 2009B, variable rate (1.52%)* through 2039	118,710	118,710
Series 2009D, taxable Build America Bonds, 5.155% to 6.172% through 2019		89,815
Series 2008A, variable rate (1.93%)* through 2038	57,085	57,085
Series 2008B, variable rate (1.82%)* through 2028 with swap to fixed		
through 2026	65,070	70,845
Other	91	174
	2,475,028	2,394,008
Less:		
Commercial paper and current portion of bonds payable	232,095	237,371
Long-term bonds payable subject to remarketing, net	133,616	195,552
	\$ 2,109,317	\$ 1,961,085
* Denotes veriable rate at June 20, 2010		

* Denotes variable rate at June 30, 2019
** Denotes variable rate bonds not subject to remarketing

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt--Continued

Certain variable rate bonds have remarketing features which allow bondholders to put debt back to the University. Accordingly, variable rate bonds payable is classified as current unless supported by liquidity agreements, such as lines of credit or standby bond purchase agreements, which can refinance the debt on a long-term basis. The classification of the University's variable rate bonds payable at June 30, 2019 and 2018 is summarized as follows:

	2019 (in the	2018 pusands)
Variable rate bonds payable subject to remarketing	\$ 470,815	\$ 484,585
Less: Current principal maturities	14,365	13,770
Long-term liquidity agreements: Unsecured lines of credit	275,263	275,263
Standby bond purchase agreements	47,571	
Long-term bonds payable subject to remarketing, net	\$ 133,616	\$ 195,552

The University's available lines of credit were entirely unused at both June 30, 2019 and 2018.

In connection with certain issues of variable rate debt, the University has entered into floating-tofixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. The fair value, significant terms and other information about the University's interest rate swaps is discussed in Note 7.

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt--Continued

Long-term debt activity for the years ended June 30, 2019 and 2018 is summarized as follows:

	2019			
	Beginning			Ending
	Balance	Additions	Reductions	Balance
		(in thou	isands)	
Commercial paper	\$ 158,460		\$ 13,220	\$ 145,240
Bonds	2,235,374	\$ 260,034	165,711	2,329,697
Other	174		83	91
	\$ 2,394,008	\$ 260,034	\$ 179,014	\$ 2,475,028
		20	18	
	Beginning			Ending
	Balance	Additions	Reductions	Balance
		(in tho	usands)	.
Commercial paper	\$ 161,045	\$ 6,600	\$ 9,185	\$ 158,460
Bonds	2,154,723	156,728	76,077	2,235,374
Other	1,747		1,573	174
	\$ 2,317,515	\$ 163,328	\$ 86,835	\$ 2,394,008

The University maintains a combination of variable and fixed rate debt supported by general revenues, with effective interest rates that averaged 3.0 percent and 2.9 percent in 2019 and 2018, respectively, including federal subsidies for interest on taxable Build America Bonds.

The University utilizes commercial paper to provide interim financing for its capital improvement program. The Board of Regents has authorized the issuance of up to \$300,000,000 in commercial paper backed by a general revenue pledge. Outstanding commercial paper debt is converted to long-term debt financing, as appropriate, within the normal course of business.

During 2019, the University issued \$226,810,000 of General Revenue Bonds with a net original issue premium of \$33,224,000, which included \$148,330,000 of fixed rate, tax-exempt bonds Series 2019A, \$16,755,000 of fixed rate, taxable bonds Series 2019B and \$61,725,000 of fixed rate, tax-exempt bonds Series 2019C. Total bond proceeds of \$260,034,000 were utilized to refund existing bonds of \$83,985,000 and to provide \$175,245,000 for capital projects and \$804,000 for debt issuance costs.

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt--Continued

The refunded bonds represent the remaining portion of General Revenue Bonds Series 2009D, which had an average interest rate of 5.98 percent and a final maturity date of April 1, 2030. As a result of the refunding, the University reduced its aggregate debt service payments over the next 11 years by \$10,769,000, resulting in an economic gain with present value savings of \$9,493,000.

During 2018, the University issued \$137,510,000 of fixed rate General Revenue Bonds Series 2018A with a net original issue premium of \$19,218,000. Total bond proceeds of \$156,728,000 were utilized to provide \$156,200,000 for capital projects and \$528,000 for debt issuance costs.

Deferred outflows associated with the University's refunding activity totaled \$10,481,000 and \$14,095,000 at June 30, 2019 and 2018, respectively, which will be amortized into interest expense over the remaining life of the refunded bonds.

Debt obligations are generally callable by the University and mature at various dates through fiscal 2049. Principal maturities, including interest on debt obligations, based on scheduled bond maturities for the next five years and in subsequent five-year periods are as follows:

	Princ	cipal		nterest* housands)		Total
2020	\$ 21	7,551	\$	86,047	\$	303,598
2021	7	6,250		83,700		159,950
2022	7	9,725		81,303		161,028
2023	8	1,010		78,325		159,335
2024	8	7,225		75,214		162,439
2025-2029	46	8,850		321,451		790,301
2030-2034	46	5,690		223,482		689,172
2035-2039	49	0,670		130,926		621,596
2040-2044	23	3,755		49,834		283,589
2045-2049	9	6,090		10,367		106,457
Total payments	2,29	6,816	\$ 1	,140,649	\$3	3,437,465
Plus unamortized premiums	17	8,212				
-	\$ 2,47	5,028				

* Interest on variable rate debt is estimated based on rates in effect at June 30, 2019; amounts do not reflect federal subsidies to be received for Build America Bonds interest

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt--Continued

If all variable rate bonds were put back to the University and existing unsecured lines of credit were not extended upon their current expiration dates, the total principal payments due in 2020 would increase to \$351,167,000, total principal payments due in 2021 would increase to \$259,752,000, total principal payments due in 2022 would increase to \$112,582,000, total principal payments due in 2023 would increase to \$93,848,000 and total principal payments due in 2024 would increase to \$89,379,000. Accordingly, principal payments due in subsequent years would be reduced to \$396,813,000 in 2025 through 2029, \$364,240,000 in 2030 through 2034, \$331,065,000 in 2035 through 2039 and \$201,880,000 in 2040 through 2044. Principal payments due in 2045 through 2049 would not change. There would not be a material impact on annual interest payments due to the low variable rate of interest on these bonds.

Note 7--Derivative Instruments

Derivatives held by the University are recorded at fair value in the statement of net position. For hedging derivative instruments that are effective in significantly reducing an identified financial risk, the corresponding change in fair value is deferred and included in the statement of net position. For all other derivative instruments, changes in fair value are reported as net investment income (loss).

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments--Continued

Derivative instruments held by the University at June 30, 2019 and 2018 are summarized as follows:

	2019	
	Notional	
	Amount	Fair Value
	(in thou	isands)
Investment derivative instruments:		
Futures	\$ 79,838	\$ (3,145)
Foreign currency forwards:		
Chinese yuan	340,704	7,792
New Zealand dollar	181,678	4,568
Norwegian krone	168,849	(2,938)
Russian ruble	36,354	2,784
Euro	210,332	1,987
Japanese yen	14,948	(1,929)
All other currencies	1,079,010	(1,474)
	2,031,875	10,790
Other	1,834,929	(14,445)
	\$ 3,946,642	\$ (6,800)
Effective cash flow hedges:		
Floating-to-fixed interest rate swaps on debt	\$ 138,900	\$ (13,695)
	20	18
	Notional	10
	Amount	Fair Value
	Alloulli	

Amount	rall value
(in thousands)	
\$ 183,096	\$ (2,131)
332,924	10,829
209,549	8,221
58,800	(7,463)
207,419	(7,647)
59,214	(8,269)
123,133	(11,745)
1,573,663	20,467
2,564,702	4,393
2,939,567	(790)
\$ 5,687,365	\$ 1,472
¢ 150.655	\$ (12 212)
\$ 152,655	\$ (12,212)
	(in thou \$ 183,096 332,924 209,549 58,800 207,419 59,214 123,133 1,573,663 2,564,702 2,939,567

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments--Continued

The University utilizes bond futures in its investment portfolios to adjust the duration of cash equivalents and fixed income securities, while foreign currency forward contracts are utilized to settle securities and transactions denominated in foreign currencies and manage foreign exchange risk. Other derivative instruments in the University's investment portfolios consist primarily of interest rate swaps, credit default swaps and total return swaps used to carry out investment and portfolio strategies.

In connection with certain issues of variable rate debt, the University has entered into floating-tofixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. The fair value of these swaps generally represent the estimated amount that the University would pay to terminate the swap agreements at the statement of net position date, taking into account current interest rates and creditworthiness of the underlying counterparty. The valuation inputs used to determine the fair value of these instruments are considered Level 2, as they rely on observable inputs other than quoted market prices. The notional amount represents the underlying reference of the instrument and does not represent the amount of the University's settlement obligations.

At June 30, 2019 and 2018, the fair value of floating-to-fixed interest rate swaps associated with the University's variable rate debt is (\$13,695,000) and (\$12,212,000), respectively, and is included in the statement of net position as a component of deposits of affiliates and other. The deferred outflows for these effective cash flow hedges totaled \$4,694,000 and \$731,000 at June 30, 2019 and 2018, respectively.

The change in fair value of derivative instruments, which includes realized gains and losses on positions closed, for the years ended June 30, 2019 and 2018 is summarized as follows:

	2019 (in thou	2018 (sands)
Investment derivative instruments: Investment portfolios: Futures	\$ 22,332	\$ 8,592
Foreign currency forwards Other	$ \begin{array}{r} $	(58,308) 1,098 \$ (48,618)
Floating-to-fixed interest rate swap on debt	\$ -	\$ 186
Effective cash flow hedges: Floating-to-fixed interest rate swaps on debt	\$ (1,483)	\$ 7,100

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments--Continued

The University's interest rate swaps, along with their associated variable rate debt and significant terms, are summarized below.

The floating-to-fixed interest rate swap associated with the Series 2008B General Revenue Bonds has a notional amount of \$48,355,000 and \$54,130,000 at June 30, 2019 and 2018, respectively, and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 3.105 percent and receives variable rate payments from the swap counterparty based on 68 percent of One-Month USD LIBOR, until the swap terminates in April 2026. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of (\$3,884,000) and (\$3,076,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 2012D-2 General Revenue Bonds has a notional amount of \$34,030,000 and \$38,430,000 at June 30, 2019 and 2018, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 3.229 percent and receives variable rate payments from the swap counterparty based on 68 percent of the One-Month USD LIBOR, until the swap terminates in December 2025. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of (\$2,376,000) and (\$2,010,000), respectively.

The first floating-to-fixed interest rate swap associated with the Series 2012D-1 General Revenue Bonds has a notional amount of \$44,670,000 at both June 30, 2019 and 2018, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 4.705 percent and receives variable rate payments from the swap counterparty based on the floating Securities Industry and Financial Markets Association ("SIFMA") Municipal Index through the final maturity dates of the underlying bonds in December 2024. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of (\$6,816,000) and (\$6,234,000), respectively.

The second floating-to-fixed interest rate swap associated with the Series 2012D-1 General Revenue Bonds has a notional amount of \$11,845,000 and \$15,425,000 at June 30, 2019 and 2018, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments--Continued

on a fixed rate of 4.685 percent and receives variable rate payments based on the floating SIFMA Municipal Index through the final maturity dates of a portion of the underlying bonds in December 2021. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of (\$619,000) and (\$892,000), respectively.

Using rates in effect at June 30, 2019, the projected cash flows for the floating-to-fixed interest rate swaps deemed effective cash flow hedges, along with the debt service requirements of the associated variable rate debt, are summarized as follows:

	Variable Rate Bonds		Swap	Total
	Principal	Interest	Payments, Net	Payments
		(in tho	usands)	
2020	\$ 14,365	\$ 3,144	\$ 2,717	\$ 20,226
2021	15,000	2,871	2,438	20,309
2022	15,645	2,599	2,157	20,401
2023	26,150	2,208	1,660	30,018
2024	27,320	1,728	1,022	30,070
2025-2029	79,405	3,209	426	83,040
2030	2,135	16		2,151
	\$ 180,020	\$ 15,775	\$ 10,420	\$ 206,215

By using derivative financial instruments to hedge exposures to changes in interest rates, the University is exposed to termination risk and basis risk. There is termination risk with floating-to-fixed interest rate swaps as the University or swap counterparty may terminate a swap if the other party fails to perform under the terms of the contract or its credit rating falls below investment grade. Termination risk is the risk that the associated variable rate debt no longer carries a synthetic fixed rate and if at the time of termination a swap has a negative fair value, the University is liable to the counterparty for payment equal to the swap's fair value. The University is also exposed to basis risk as a portion of the variable payments paid to the University by the counterparties are based on a percentage of LIBOR. Basis risk is the risk that changes in the relationship between SIFMA and LIBOR may impact the synthetic fixed rate of the variable rate debt. At June 30, 2019 and 2018, the University is not exposed to credit risk as the swaps have negative fair values.

The University is subject to collateral requirements with its counterparties on certain derivative instrument positions. To meet trading margin requirements for bond futures, the University had cash and U.S. government securities with a fair value of \$10,227,000 and \$15,306,000 at June 30, 2019 and 2018, respectively, on deposit with its futures broker as collateral.

Notes to Consolidated Financial Statements--Continued

Note 8--Self-Insurance

The University is self-insured for medical malpractice, workers' compensation, directors' and officers' liability, property damage, auto liability and general liability through Veritas Insurance Corporation. The University is also self-insured for various employee benefits through internally maintained funds.

Claims and expenses are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Those losses include an estimate of claims that have been incurred but not reported and the future costs of handling claims. These liabilities are generally based on actuarial valuations and are reported at present value, discounted at a rate of 5 percent.

Changes in the total reported liability for insurance and benefits obligations for the years ended June 30, 2019 and 2018 are summarized as follows:

	2019 (in tho	2018 usands)
Balance, beginning of year Claims incurred and changes in estimates Claim payments	\$ 235,162 745,730 (748,980)	\$ 214,035 694,199 (673,072)
Balance, end of year Less current portion	231,912 104,235 \$ 127,677	235,162 98,159 \$ 137,003

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan

Metro Health has a noncontributory, single employer defined benefit pension plan, which covered substantially all employees prior to being frozen as of December 31, 2007. The plan generally provides benefits based on each employee's years of service and final average earnings, as defined, and does not provide any automatic or ad-hoc cost of living adjustments. The Metro Health Board of Directors has the authority to establish and amend benefit provisions of the plan.

The annual pension expense and net pension liability is actuarially determined using the entry age normal level percentage of pay method. Metro Health has elected to measure the net pension liability one year prior to the fiscal year end reporting date and amounts measured at June 30, 2018 and 2017 were determined based on an actuarial valuation at October 1, 2017 and 2016, respectively. There are no significant changes known which would impact the total net pension liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2018 and 2017 measurement dates, the number of plan participants consisted of the following:

	2018	2017
• • • • • • •	574	(10)
Active participants	574	612
Vested terminated participants	905	947
Retirees, beneficiaries and disabled participants	372	366
	1,851	1,925

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

Changes in the reported net pension liability for the years ended June 30, 2019 and 2018 are summarized as follows:

		2019	
	Total Pension	Plan Fiduciary	Net Pension
	Liability	Net Position	Liability
		(in thousands)	
Balance, beginning of year	\$ 72,680	\$ 76,503	\$ (3,823)
Interest cost	4,930		4,930
Changes in assumptions	(273)		(273)
Differences between expected and actual			
plan experience	1,361		1,361
Benefit payments	(4,489)	(4,489)	-
Contributions from the employer		1,047	(1,047)
Net investment income:			
Expected investment earnings		5,234	(5,234)
Differences between expected and actual			
investment earnings		(1,168)	1,168
Balance, end of year	\$ 74,209	\$ 77,127	\$ (2,918)

		2018		
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position	Liability	
		(in thousands)		
Balance, beginning of year	\$ 73,968	\$ 70,532	\$ 3,436	
Interest cost	5,013	4 / 0,000	5,013	
Changes in assumptions	(822)		(822)	
Differences between expected and actual	× ,			
plan experience	(767)		(767)	
Benefit payments	(4,712)	(4,712)	-	
Contributions from the employer		2,171	(2,171)	
Net investment income:				
Expected investment earnings		4,848	(4,848)	
Differences between expected and actual				
investment earnings		3,664	(3,664)	
Balance, end of year	\$ 72,680	\$ 76,503	\$ (3,823)	

The plan fiduciary net position as a percentage of the total pension liability was 104 percent and 105 percent at June 30, 2019 and 2018, respectively.

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

Significant actuarial assumptions used at the June 30, 2018 and 2017 measurement dates are as follows:

	2018	2017
Discount rate	7.00%	7.00%
Inflation	2.00%	2.00%
Investment rate of return	7.00%	7.00%
Mortality table	RP-2014 Employee and Healthy	RP-2014 Employee and Healthy
	Annuitant, Scale MP-2017	Annuitant, Scale MP-2016

Discount rates are based on the expected rate of return on pension plan investments. The projection of cash flows used to determine the single discount rate for each fiscal year end assumed that employer contributions will be made based on the minimum contribution projection under provisions of ERISA and the Pension Protection Act of 2006, including MAP-21, for future years. Based on the stated assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the future benefit payments of the current plan members for all projection years. As a result, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments of 7.00 percent at both June 30, 2018 and 2017 was determined using the expected future rates of return for the target asset allocation of the portfolio. The target allocation and best estimate geometric rates of return by asset class are summarized as follows:

	2018		2017	
	Portfolio	Long-Term	Portfolio	Long-Term
	Allocation	Expected Return	Allocation	Expected Return
U.S. large cap	25.0%	6.3%	25.0%	6.8%
U.S. mid cap	10.5%	7.1%	10.5%	7.6%
U.S. small cap	6.5%	7.8%	6.5%	8.3%
International developed	14.0%	5.2%	14.0%	5.6%
Emerging market	9.0%	5.1%	9.0%	5.6%
STRIPs	7.0%	4.3%	7.0%	4.5%
Corporate 10+ year	28.0%	5.0 %	28.0%	4.8%

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

A one-percentage point change in the discount rate would impact the reported net pension liability at June 30, 2019 and 2018 as follows:

	2019		2018	
	1% Decrease	1% Increase	1% Decrease	1% Increase
		(in thou	isands)	
Net pension liability	\$ 8,313	\$ (6,931)	\$ 8,751	\$ (7,252)

The components of pension income for the years ended June 30, 2019 and 2018 are summarized as follows:

	2019	2018
	(in tho	usands)
Interest cost Expected investment earnings	\$ 4,930 (5,234)	\$ 5,013 (4,848)
Amortization of deferred outflows and deferred	(3,231)	(1,010)
inflows	(7,857)	(9,582)
	\$ (8,161)	\$ (9,417)

Deferred outflows and deferred inflows related to the reported net pension liability at June 30, 2019 and 2018 are summarized as follows:

	2019		20	18
	Deferred	Deferred	Deferred	Deferred
	Outflows	Inflows	Outflows	Inflows
		(in tho	usands)	-
Changes in assumptions Differences between expected and		\$ 330		\$ 8,047
actual plan experience	\$ 789	161	\$ 626	464
Differences between expected and actual investment earnings	934	2,724		3,720
	1,723	3,215	626	12,231
Contributions made after measurement	,	,		,
date	1,244		1,047	
	\$ 2,967	\$ 3,215	\$ 1,673	\$ 12,231

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

Deferred outflows and deferred inflows related to changes in assumptions and differences between expected and actual experience will be recognized into expense in the following years ended June 30 based upon the average future work life expectancy of plan participants (in thousands):

2020	\$ (638)
2021	(589)
2022	(499)
2023	234
	\$ (1,492)

The inputs used to determine the fair value of the plan's investments reported at June 30, 2019 and 2018 are summarized as follows:

		20	19	
	Level 1	Level 2 (in tho	NAV usands)	Total Fair Value
Equity securities Fixed income securities Nonmarketable	\$ 53,515	\$ 22,616		\$ 53,515 22,616
alternative investments			\$ 996	996
	\$ 53,515	\$ 22,616	\$ 996	\$ 77,127
	_	20	18	
	Level 1	Level 2 (in tho	NAV usands)	Total Fair Value
Equity securities Fixed income securities Nonmarketable	\$ 54,057	\$ 21,297		\$ 54,057 21,297
alternative investments			\$ 1,149	1,149
	\$ 54,057	\$ 21,297	\$ 1,149	\$ 76,503

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits

The University provides retiree health and welfare benefits, primarily medical, prescription drug, dental and life insurance coverage, to eligible retirees and their eligible dependents. Substantially all full-time regular University employees may become eligible for these benefits if they reach retirement age while working for the University. For employees retiring on or after January 1, 1987, contributions toward health and welfare benefits are shared between the University and the retiree and can vary based on date of hire, date of retirement, age and coverage elections.

The University also provides income replacement benefits, retirement savings contributions and health and life insurance benefits to substantially all regular University employees that are enrolled in a University sponsored long-term disability plan and qualify, based on disability status while working for the University, to receive basic or expanded long-term disability benefits. Contributions toward the expanded long-term disability plan are shared between the University and employees and vary based on years of service, annual base salary and coverage elections. Contributions toward the basic long-term disability plan are paid entirely by the University.

These postemployment benefits are provided through single-employer plans administered by the University. The Executive Vice Presidents of the University have the authority to establish and amend benefit provisions of the plans.

Actuarial projections of benefits expense are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided and announced future changes at the time of each valuation and the historical pattern of sharing benefit costs between the employer and plan members to that point.

The University's reported liability for postemployment benefits obligations is calculated using the entry age normal level percent of pay method. The University has elected to measure the total postemployment liability one year prior to the fiscal year end reporting date and amounts measured at June 30, 2018 and 2017 were determined based on an actuarial valuation at January 1, 2018 and 2017, respectively. There are no significant changes known which would impact the total postemployment liability between the measurement date and the reporting date, other than typical plan experience.

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

For purposes of the June 30, 2018 and 2017 measurement dates, the number of plan participants consisted of the following:

	2018	3	2017	
	Retiree Health	Long-term	Retiree Health	Long-term
	and Welfare	Disability	and Welfare	Disability
Active employees	42,559	36,331	40,757	35,020
Retirees receiving benefits	10,092		9,694	
Surviving spouses	871		862	
Participants receiving				
disability benefits		578		619
-	53,522	36,909	51,313	35,639

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

Changes in the reported total liability for postemployment benefits obligations for the years ended June 30, 2019 and 2018 are summarized as follows:

		2019	
	Retiree Health and Welfare	Long-term Disability (in thousands)	Total
		(III tilousailus)	
Balance, beginning of year	\$ 3,002,304	\$ 301,436	\$ 3,303,740
Service cost	112,698	29,235	141,933
Interest cost	110,559	11,241	121,800
Changes in assumptions	(379,778)	(3,537)	(383,315)
Differences between expected and			
actual plan experience	23,232	(5,697)	17,535
Benefit payments	(53,974)	(33,664)	(87,638)
Balance, end of year	2,815,041	299,014	3,114,055
Less current portion	56,815	30,897	87,712
	\$ 2,758,226	\$ 268,117	\$ 3,026,343
		2018	
	Retiree Health and Welfare	Long-term Disability (in thousands)	Total
Balance, beginning of year	\$ 2,930,656	\$ 267,671	\$ 3,198,327
Service cost	115,686	28,101	143,787
Interest cost	86,129	8,024	94,153
Changes in assumptions	(124,729)	16,855	(107, 874)
Differences between expected and		ŕ	
actual plan experience	43,472	9,249	52,721
Benefit payments	(48,910)	(28,464)	(77,374)
Balance, end of year	3,002,304	301,436	3,303,740
Less current portion	53,974	33,664	87,638
	\$ 2,948,330	\$ 267,772	\$ 3,216,102

Since a portion of retiree medical services will be provided by the University's health system, the reported liability for postemployment benefits obligations is net of the related margin and fixed costs associated with providing those services which totaled \$579,735,000 and \$611,361,000 at June 30, 2019 and 2018, respectively.

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

The University's liability for postemployment benefits obligations at June 30, 2019 is not reduced by the anticipated Medicare Retiree Drug Subsidy for future periods. This subsidy would reduce the total postemployment benefits liability by approximately \$295,000,000.

Assets used to fund postemployment benefits are not maintained in a separate legal trust. The University has no obligation to make contributions in advance of when insurance premiums or claims are due for payment and currently pays for postemployment benefits on a pay-as-you-go basis. The University's reported postemployment benefits obligations at June 30, 2019 and 2018 as a percentage of covered payroll of \$4,013,983,000 and \$3,792,553,000 was 78 percent and 87 percent, respectively.

Significant actuarial assumptions used at the June 30, 2018 and 2017 measurement dates are as follows:

	2018	2017
Discount rate*	3.87%	3.58%
Inflation rate	2.00%	2.00%
Immediate/ultimate administrative trend rate	0.0%/3.0%	0.0%/3.0%
Immediate/ultimate medical trend rate	6.5%/4.5%	6.5%/4.5%
Immediate/ultimate Rx trend rate	9.0%/4.5%	9.5%/4.5%
Increase in compensation rate	4.00%	4.00%
Mortality table**	RP-2014 White Collar Head Count Table, Scale MP-2017	RP-2014 White Collar Head Count Table, Scale MP-2016
Average future work life expectancy (years): Retiree health and welfare Long-term disability	9.14 11.47	9.17 11.43

* Bond Buyer 20-year General Obligation Municipal Bond Index as of the last publication of the measurement period

** Based on the University's study of mortality experience from 2010-2014

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

A one-percentage point change in the discount rate and assumed health care cost trend rates would impact the reported total liability for postemployment benefits obligations at June 30, 2019 and 2018 as follows:

	2019		2018	
	1% Decrease	1% Increase	1% Decrease	1% Increase
		(in tho	usands)	
Discount rate: Retiree health and welfare Long-term disability	\$ 604,507 \$ 11,362	\$ (467,375) \$ (11,012)	\$ 677,895 \$ 11,211	\$ (520,431) \$ (11,260)
Health care trend rates: Retiree health and welfare Long-term disability	\$ (511,949) \$ (12,311)	\$ 688,288 \$ 12,540	\$ (563,305) \$ (11,907)	\$ 768,219 \$ 12,196

The components of postemployment benefits expense for the years ended June 30, 2019 and 2018 are summarized as follows:

		2019	
	Retiree Health	Long-term	
	and Welfare	Disability	Total
		(in thousands)	
Service cost	\$ 112,698	\$ 29,235	\$ 141,933
Interest cost	110,559	11,241	121,800
Amortization of deferred outflows			
and deferred inflows	(21,731)	3,135	(18,596)
	\$ 201,526	\$ 43,611	\$ 245,137

		2018	
	Retiree Health	Long-term	
	and Welfare	Disability	Total
		(in thousands)	
Service cost	\$ 115,686	\$ 28,101	\$ 143,787
Interest cost	86,129	8,024	94,153
Amortization of deferred outflows			
and deferred inflows	17,278	3,940	21,218
	\$ 219,093	\$ 40,065	\$ 259,158

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

Deferred outflows and deferred inflows related to the reported total liability for postemployment benefits obligations at June 30, 2019 and 2018 are summarized as follows:

	2019		20	2018	
	Deferred	Deferred	Deferred	Deferred	
	Outflows	Inflows	Outflows	Inflows	
		(in tho	usands)		
Changes in assumptions Differences between expected	\$ 189,425	\$ 438,981	\$ 217,407	\$ 111,127	
and actual plan experience	72,475	5,200	58,623		
	261,900	444,181	276,030	111,127	
Benefit payments made after					
measurement date	87,712		87,638		
	\$ 349,612	\$ 444,181	\$ 363,668	\$ 111,127	

Deferred outflows and deferred inflows related to changes in assumptions and the differences between expected and actual plan experience will be recognized into expense in the following years ended June 30 based upon the average future work life expectancy of plan participants (in thousands):

2020	\$ (18,596)
2021	(18,596)
2022	(18,596)
2023	(18,596)
2024	(18,596)
2025 and beyond	 (89,301)
	\$ (182,281)

Notes to Consolidated Financial Statements--Continued

Note 11--Retirement Plan

The University has a defined contribution retirement plan for all qualified employees through TIAA and Fidelity Management Trust Company ("FMTC") mutual funds. All regular and supplemental instructional and primary staff are eligible to participate in the plan based upon age and service requirements. Participants maintain individual contracts with TIAA, or accounts with FMTC, and are fully vested.

For payroll covered under the plan, eligible employees generally contribute 5 percent of their pay and the University generally contributes 10 percent of employees' pay to the plan, while certain employees generally contribute 4.5 percent of their pay, with the University contributing 9 percent of those employees' pay to the plan. The University contribution commences after an employee has completed one year of employment. Participants may elect to contribute additional amounts to the plans within specified limits that are not matched by University contributions. Contributions and covered payroll under the plan (excluding participants' additional contributions) for the years ended June 30, 2019 and 2018 are summarized as follows:

	2019	2018
	(in tho	usands)
University contributions	\$ 304,344	\$ 286,376
Employee contributions	\$ 158,856	\$ 150,488
Payroll covered under plan	\$ 4,013,983	\$ 3,792,553
Total payroll	\$ 4,182,021	\$ 3,947,501

Notes to Consolidated Financial Statements--Continued

Note 12--Net Position

The composition of net position at June 30, 2019 and 2018 is summarized as follows:

		2019	2018
	(in thousands)		
Net investment in capital assets	\$	3,742,630	\$ 3,722,086
Restricted:			
Nonexpendable:			
Permanent endowment corpus		2,328,667	2,146,358
Expendable:			
Net appreciation of permanent endowments		2,144,532	2,067,392
Funds functioning as endowment		2,382,037	2,308,185
Restricted for operations and other		685,988	631,747
Unrestricted		3,520,054	3,405,277
	\$	14,803,908	\$ 14,281,045

Unrestricted net position is not subject to externally imposed stipulations; however, it is subject to internal restrictions. For example, unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. At June 30, 2019 and 2018, substantially all of the unrestricted net position has been designated for various academic programs, research initiatives and capital projects.

Note 13--Federal Direct Lending Program

The University distributed \$279,638,000 and \$301,194,000 during the years ended June 30, 2019 and 2018, respectively, for student loans through the U.S. Department of Education ("DoED") federal direct lending program. These distributions and related funding sources are not included as expenses and revenues in the accompanying financial statements. The statement of net position includes a receivable of \$2,514,000 and \$3,183,000 at June 30, 2019 and 2018, respectively, for DoED funding received subsequent to distribution.

Notes to Consolidated Financial Statements--Continued

Note 14--Commitments and Contingencies

Authorized expenditures for construction and other projects unexpended at June 30, 2019 were \$905,719,000. Of these expenditures, the University expects that \$725,656,000 will be funded by internal sources, gifts, grants and future borrowings; \$89,250,000 by the State Building Authority and the remaining \$90,813,000 will be funded using unexpended bond proceeds.

Under the terms of various limited partnership agreements approved by the Board of Regents or University officers, the University is obligated to make periodic payments for advance commitments to venture capital, private equity, real estate, natural resources and absolute return strategies. At June 30, 2019, the University had committed, but not paid, a total of \$6,089,675,000 in funding for these alternative investments. Based on historical capital calls and discussions with those managing the limited partnerships, outstanding commitments for such investments are anticipated to be paid in the following years ended June 30 (in thousands):

2020	\$ 2,028,944
2021	1,413,306
2022	1,017,833
2023	631,414
2024	393,723
2025 and beyond	604,455
	\$ 6,089,675

These commitments are generally able to be called prior to an agreed commitment expiration date and therefore may occur earlier or later than estimated.

The University has entered into capital and operating leases for certain space and equipment, which expire at various dates through 2039. Outstanding commitments for these leases are expected to be paid in the following years ended June 30:

	Capital	Operating
	(in tho	usands)
2020	\$ 10,589	\$ 47,369
2021	10,053	42,360
2022	10,211	38,335
2023	10,327	33,058
2024	8,815	29,771
2025-2029	45,738	78,248
2030-2034	48,351	16,526
2035-2039	18,821	2,135
	162,905	\$ 287,802
Less amount representing interest	72,894	
Present value of minimum lease payments	\$ 90,011]

Notes to Consolidated Financial Statements--Continued

Note 14--Commitments and Contingencies--Continued

Operating lease expenses totaled \$47,572,000 and \$49,058,000 in 2019 and 2018, respectively.

Substantial amounts are received and expended by the University under federal and state programs and are subject to audit by cognizant governmental agencies. This funding relates to research, student aid, patient care and other programs. The University believes that any liabilities arising from such audits will not have a material effect on its financial position.

The University is a party to various pending legal actions and other claims in the normal course of business, and is of the opinion that the outcome of these proceedings will not have a material adverse effect on its financial position.

Notes to Consolidated Financial Statements--Continued

Note 15--Operating Expenses by Function

Operating expenses by functional classification for the years ended June 30, 2019 and 2018 are summarized as follows:

			2019		
	Compensation	Supplies		Scholarships	
	and	and		and	
	Benefits	Services	Depreciation	Fellowships	Total
			(in thousands)		
Instruction	\$ 1,031,768	\$ 163,400			\$ 1,195,168
Research	583,018	274,560			857,578
Public service	132,685	76,032			208,717
Academic support	278,109	87,967			366,076
Student services	100,220	28,743			128,963
Institutional support	196,839	75,132			271,971
Operations and maintenance of					
plant	92,387	259,190			351,577
Auxiliary enterprises	3,353,925	1,558,780			4,912,705
Depreciation			\$ 567,857		567,857
Scholarships and fellowships				\$ 164,428	164,428
	\$ 5,768,951	\$ 2,523,804	\$ 567,857	\$ 164,428	\$ 9,025,040

			2018		
	Compensation	Supplies		Scholarships	
	and	and		and	
	Benefits	Services	Depreciation	Fellowships	Total
			(in thousands)		
Instruction	\$ 1,000,388	\$ 152,833			\$ 1,153,221
Research	555,853	267,734			823,587
Public service	129,675	81,769			211,444
Academic support	255,641	61,604			317,245
Student services	89,762	27,516			117,278
Institutional support	185,801	60,702			246,503
Operations and maintenance of					
plant	53,337	297,558			350,895
Auxiliary enterprises	3,160,935	1,452,876			4,613,811
Depreciation			\$ 568,707		568,707
Scholarships and fellowships				\$ 156,738	156,738
	\$ 5,431,392	\$ 2,402,592	\$ 568,707	\$ 156,738	\$ 8,559,429

Notes to Consolidated Financial Statements--Continued

Note 16--UM Health

Condensed financial information for UM Health, a blended component unit, before the elimination of certain intra-University transactions, at and for the years ended June 30, 2019 and 2018 is as follows:

	2019	2018
	(in thou	sands)
Condensed Statement of Net Position		
Assets:		
Current assets	\$ 78,296	\$ 121,110
Noncurrent assets	258,841	242,561
Total assets	337,137	363,671
Deferred outflows	5,479	5,094
Total assets and deferred outflows	\$ 342,616	\$ 368,765
Liabilities:	¢ 40.200	¢ (0.717
Current liabilities	\$ 49,389	\$ 60,717
Noncurrent liabilities	208,875	214,465
Total liabilities	258,264	275,182
Deferred inflows	5,860	15,042
Net position:		
Net investment in capital assets	19,765	(2,536)
Restricted:	19,705	(2,550)
Nonexpendable	3,881	3,247
Expendable	13,567	13,310
Unrestricted	41,279	64,520
Total net position	78,492	78,541
Total liabilities, deferred inflows and net position	\$ 342,616	\$ 368,765
Condensed Statement of Revenues, Expenses and Changes in Net Position		
Operating revenues	\$ 472,905	\$ 434,611
Operating expenses other than depreciation expense	438,974	401,607
Depreciation expense	22,028	46,268
Operating gain (loss)	11,903	(13,264)
Nonoperating expenses, net	(6,966)	(7,408)
Other expenses, net	(4,986)	(3,268)
Decrease in net position	(49)	(23,940)
Net position, beginning of year	78,541	102,481
Net position, end of year	\$ 78,492	\$ 78,541
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Condensed Statement of Cash Flows		
Net cash provided by operating activities	\$ 15,865	\$ 10,509
Net cash used in noncapital financing activities	(1,033)	(1,187)
Net cash used in capital and related financing activities	(53,924)	(32,866)
Net cash provided by investing activities	23,942	148
Net decrease in cash and cash equivalents	(15,150)	(23,396)
Cash and cash equivalents, beginning of year	21,327	44,723
Cash and cash equivalents, end of year	\$ 6,177	\$ 21,327

Required Supplementary Information (Unaudited)

Pension Plan

Changes in the reported net pension liability for the years ended June 30are summarized as follows:

	2019			
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position	Liability	
	-	(in thousands)	-	
Balance, beginning of year	\$ 72,680	\$ 76,503	\$ (3,823)	
Interest cost	4,930		4,930	
Changes in assumptions	(273)		(273)	
Differences between expected and actual				
plan experience	1,361		1,361	
Benefit payments	(4,489)	(4,489)	-	
Contributions from the employer		1,047	(1,047)	
Net investment income:				
Expected investment earnings		5,234	(5,234)	
Differences between expected and actual				
investment earnings		(1,168)	1,168	
Balance, end of year	\$ 74,209	\$ 77,127	\$ (2,918)	

	2018			
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position	Liability	
		(in thousands)	·	
Balance, beginning of year	\$ 73,968	\$ 70,532	\$ 3,436	
Interest cost	5,013		5,013	
Changes in assumptions	(822)		(822)	
Differences between expected and actual				
plan experience	(767)		(767)	
Benefit payments	(4,712)	(4,712)	-	
Contributions from the employer		2,171	(2,171)	
Net investment income:				
Expected investment earnings		4,848	(4,848)	
Differences between expected and actual				
investment earnings		3,664	(3,664)	
Balance, end of year	\$ 72,680	\$ 76,503	\$ (3,823)	

Required Supplementary Information (Unaudited)--Continued

Pension Plan--Continued

	2017			
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position (in thousands)	Liability	
Balance, beginning of year	\$ 96,414	\$ 67,236	\$ 29,178	
Interest cost	4,482		4,482	
Changes in assumptions	(24,906)		(24,906)	
Differences between expected and actual				
plan experience	2,067		2,067	
Benefit payments	(4,089)	(4,089)	-	
Contributions from the employer	. ,	2,903	(2,903)	
Net investment income:				
Expected investment earnings		3,166	(3,166)	
Differences between expected and actual				
investment earnings		1,316	(1,316)	
Balance, end of year	\$ 73,968	\$ 70,532	\$ 3,436	

The plan fiduciary net position as a percentage of the total pension liability reported at June 30 was as follows:

2019	104%
2018	105%
2017	95%

Employer contributions in relation to actuarially determined contributions for the years ended June 30 are as follows:

	Employer Contributions*	Actuarially Determined Contributions (in thousands)	Excess (Deficient) Contributions
2019	\$ 1,244	\$ 393	\$ 851
2018	\$ 1,047	\$ 1,622	\$ (575)
2017	\$ 2,171	\$ 1,754	\$ 417

* Reflects no employer contributions after April 30 of the respective fiscal year

Required Supplementary Information (Unaudited)--Continued

Pension Plan--Continued

Significant methods and assumptions used to calculate the actuarially determined contributions for the years ended June 30 are as follows:

Actuarially determined contributions	Pension Protection Act of 2006 (including MAP-21, HATFA and BBA). T actuarially determined contributions represent the IRC Section 430 minimu required contributions.								
Contributions in relation to actuarially determined contributions	the plan y	ear is generally 81	¹ / ₂ months after the	ninimum required e end of the plan ye e by June 15 of the	ear. For the plan				
Actuarial cost method	Unit Credi	it method							
Asset valuation method	24-month	smoothed value of	assets						
Interest rate		First	Second	Third	Effective				
		Segment Rate	Segment Rate	Segment Rate	Rate				
	2019	4.16%	5.72%	6.48%	5.94%				
	2018	4.16%	5.72%	6.48%	5.93%				
	2017	4.43%	5.91%	6.65%	6.13%				
Mortality	1.430(h)(3 mortality)-1. Based on the improvements 15	RP-2000 gender	l described in Tre distinct table that r uture from the va or annuitants.	reflects projected				

Required Supplementary Information (Unaudited)--Continued

Postemployment Benefits

The historical reconciliation of the total reported liability for postemployment benefits obligations for the years ended June 30 is summarized as follows (amounts in thousands):

-	2019	2018	2017
Service cost Interest cost Changes in assumptions Differences between expected and actual	\$ 141,933 121,800 (383,315)	\$ 143,787 94,153 (107,874)	\$ 122,073 108,561 255,041
plan experience Benefit payments Net change	17,535 (87,638) \$ (189,685)	52,721 (77,374) \$ 105,413	14,028 (72,302) \$ 427,401
Total liability, beginning of year Total liability, end of year Covered employee payroll Total liability, end of year, as a percentage	\$ 3,303,740 \$ 3,114,055 \$ 4,013,983	\$ 3,198,327 \$ 3,303,740 \$ 3,792,553	\$ 2,770,926 \$ 3,198,327 \$ 3,568,918
of covered employee payroll	78%	87%	90%

Discount rates used in determining the total reported liability for postemployment benefits obligations at June 30 are as follows:

2019	3.87%
2018	3.58%
2017	2.85%
2016	3.80%

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
STUDENT FINANCIAL ASSISTANCE CLUSTER	2						
ducation, Department of	Direct			84.007	Federal Supplemental Educational Opportunity Grant	\$ 2,313,032	s -
ducation, Department of	Direct			84.033	Federal Work-Study Program	\$ 5,595,113	\$ -
Education, Department of	Direct			84.038	Federal Perkins Loan Program Federal Capital Contributions Balance Outstanding at Beginning of Year	\$ 65,176,442	s -
Education, Department of	Direct			84.038	Federal Perkins Loan Program Federal Capital Contributions New Loans		
					Federal Perkins Loan Program Federal Capital Contributions	-	,
Education, Department of	Direct			84.038	Administrative Cost Allowance	\$ 65,197,501	
Education, Department of	Direct			84.063	Federal Pell Grant Program	\$ 51,268,298	
Education, Department of	Direct			84.268	William D. Ford Federal Direct Loan Program Teacher Education Assistance for College and Higher	\$ 279,638,474	ş -
Education, Department of	Direct		Total Education, Department of	84.379	Education Grants (TEACH Grants)	\$ 63,310 \$ 404,075,728	
			Total Education, Department of			\$ 404,075,728	3 -
Health and Human Services, Department of	Direct			93.264	Nurse Faculty Loan Program (NFLP) - Balance Outstanding at Beginning of Year	\$ 3,726,685	s -
Health and Human Services, Department of	Direct			93.264	Nurse Faculty Loan Program (NFLP) - New Loans	811,125	-
					Harld Decker in the last Last Including Deine Con-	\$ 4,537,810	s -
					Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students - Balance		
Health and Human Services, Department of	Direct			93.342	Outstanding at Beginning of Year	\$ 10,559,675	s -
					Health Professions Student Loans, Including Primary Care		
Health and Human Services, Department of	Direct			93.342	Loans/Loans for Disadvantaged Students - New Loans	1,461,329	-
					Nursing Student Loans - Balance Outstanding at Beginning	\$ 12,021,004	\$ -
Health and Human Services, Department of	Direct			93.364	of Year	\$ 1,819,023	s -
Health and Human Services, Department of	Direct			93.364	Nursing Student Loans - New Loans	389,215	-
						\$ 2,208,238	s -
					Scholarships for Health Professions Students from Disadvantaged Backgrounds - Balance Outstanding at		
Health and Human Services, Department of	Direct			93.925	Beginning of Year	\$ 4,636,098	s -
	D			02.025	Scholarships for Health Professions Students from	533.278	
Health and Human Services, Department of	Direct			93.925	Disadvantaged Backgrounds - New Loans	\$ 5,169,376	s -
			Total Health and Human Services, Dep	artment of		\$ 23,936,428	
			Total student financial assistance clu	ster		\$ 428,012,156	s -
HIGHWAY PLANNING AND CONSTRUCTION	CLUSTER						
Transportation, Department of-Federal Highway Admin		igan, State of, Transportation, Department of	2014-0006/Job 122203	20.205	Highway Planning and Construction	\$ 100,170	\$ -
			Total highway planning and constru-	ction cluster		\$ 100,170	s -
HIGHWAY SAFETY CLUSTER							
Transportation, Department of	Pass-Through Michig	igan, State of, State Police	TR-19-04	20.600	State and Community Highway Safety	\$ 358,235	\$-
Transportation, Department of	Pass-Through Michig	igan, State of, State Police	TR-19-08	20.600	State and Community Highway Safety	4,959	-
	D 771 1 1(1)		221 1000000107	20.616		\$ 363,194 \$ 38,361	
Transportation, Department of Transportation, Department of		igan, State of, Secretary of State igan, State of, State Police	231, 1900000197 PS-18-10	20.616	National Priority Safety Programs National Priority Safety Programs	\$ 38,361 25,336	5 -
Transportation, Department of		igan, State of, State Police	TR-18-01	20.616	National Priority Safety Programs	250,916	-
Transportation, Department of		igan, State of, State Police	TR-18-07	20.616	National Priority Safety Programs	30,991	-
Transportation, Department of		igan, State of, State Police	TR-18-11	20.616	National Priority Safety Programs	39,570	-
Transportation, Department of		igan, State of, State Police	TR-19-04 TR-19-05	20.616 20.616	National Priority Safety Programs	84,030	-
Transportation, Department of Transportation, Department of		igan, State of, State Police igan, State of, State Police	TR-19-05 TR-19-06	20.616	National Priority Safety Programs National Priority Safety Programs	62,017 62,167	-
Tailsportation, Department of	rass-rinougn when	gail, State 0, State I blice	11(-19-00	20.010	National Phoney Salety Programs	\$ 593,388	ş -
			Total highway safety cluster			\$ 956,582	\$ -
TRIO CLUSTER							
Education, Department of	Direct		P047M170268	84.047	TRIO Upward Bound	\$ 298,483	s -
			Total trio cluster			\$ 298,483	s -
AGING CLUSTER					Special Programs for the Aging, Title III, Part C, Nutrition		
Health and Human Services, Department of	Pass-Through Washt	tenaw, County of	CR 45755	93.045	Services	\$ (315)\$-
Health and Human Services, Department of	Pass-Through Washt	ttenaw, County of	CR 45755.2	93.045	Special Programs for the Aging, Title III, Part C, Nutrition Services	9,499	-
			Total aging cluster			\$ 9,184	\$ -
CCDF CLUSTER							
Health and Human Services, Department of	Pass-Through Colum	nbia University	1 (GG008358-06)	93.575	Child Care and Development Block Grant	\$ 403,684	s -

	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal	Expenditures P	Pass-Through
			Total ccdf cluster			\$	403,684 \$	
IEDICAID CLUSTER								
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	20180230-00 / E20182957-00	93.778	Medical Assistance Program	\$	41,753 \$	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171469-00	93.778	Medical Assistance Program		(73)	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172064-00	93.778	Medical Assistance Program		53	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172449-00	93.778	Medical Assistance Program		887	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180330-001	93.778	Medical Assistance Program		30,252	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180331-00	93.778	Medical Assistance Program		28,110	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180522-001	93,778	Medical Assistance Program		138,934	
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180567-003	93.778	Medical Assistance Program		71,830	
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180649-00	93.778	Medical Assistance Program		511,027	4,470
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180649-00 E20180660-001	93.778	Medical Assistance Program		64,501	4,47
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180661-001	93.778	Medical Assistance Program		33,999	
								-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180662-002	93.778	Medical Assistance Program		96,143	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180663-002	93.778	Medical Assistance Program		4,178	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180664-001	93.778	Medical Assistance Program		121,370	(10,86)
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180666-00	93.778	Medical Assistance Program		7,204	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180671-00	93.778	Medical Assistance Program		28,530	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180672-001	93.778	Medical Assistance Program		296,427	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181633-00	93.778	Medical Assistance Program		32,088	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181638-001	93.778	Medical Assistance Program		74,115	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181714-00	93.778	Medical Assistance Program		(394,564)	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182637-003	93.778	Medical Assistance Program		39,837	-
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182712-00	93,778	Medical Assistance Program		58,711	
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182761-002	93.778	Medical Assistance Program		236,204	
			E20182762-00	93.778	Medical Assistance Program		68,620	-
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182762-00 E20182763-001	93.778	Medical Assistance Program Medical Assistance Program		39,225	-
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of						-
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182767-00	93.778	Medical Assistance Program		73,873	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182778-00	93.778	Medical Assistance Program		24,591	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182779-002	93.778	Medical Assistance Program		5,633	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182780-00	93.778	Medical Assistance Program		4,752	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182781-00	93.778	Medical Assistance Program		77,210	-
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182782-001	93.778	Medical Assistance Program		40,798	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182783-001	93.778	Medical Assistance Program		(7,365)	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182815-001	93.778	Medical Assistance Program		203,388	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182831-00	93,778	Medical Assistance Program		41,660	-
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182876-00	93.778	Medical Assistance Program		8,103	
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182884-00	93.778	Medical Assistance Program		28,665	
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182884-00 E20182956-00	93.778	Medical Assistance Program		622,337	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182930-00 E20182971-00	93.778	Medical Assistance Program		100.634	-
	0						,	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182996-00	93.778	Medical Assistance Program		124,146	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20191301-00	93.778	Medical Assistance Program		14,819	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20191302-00 AA	93.778	Medical Assistance Program		145,524	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20191303-00	93.778	Medical Assistance Program		96,381	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20191304-00	93.778	Medical Assistance Program		34,491	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192399-00/H	93.778	Medical Assistance Program		23,990	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192400-001	93.778	Medical Assistance Program		18,187	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192401-00	93.778	Medical Assistance Program		405,014	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192406-00	93.778	Medical Assistance Program		825,633	
Iealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192435-001/Proj. AT	93.778	Medical Assistance Program		263,198	
Itealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192438-00	93.778	Medical Assistance Program		101,412	_
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192439-00	93.778	Medical Assistance Program		111,588	-
							633,026	
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192441-00 E20192539-002	93.778 93.778	Medical Assistance Program Medical Assistance Program		147.412	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of						-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192625-001	93.778	Medical Assistance Program		112,863	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192626-00	93.778	Medical Assistance Program		53,356	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192662-002	93.778	Medical Assistance Program		402,319	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192663-00	93.778	Medical Assistance Program		82,025	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193007-001	93.778	Medical Assistance Program		115,457	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193008-00	93.778	Medical Assistance Program		68,195	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193009-00	93.778	Medical Assistance Program		63,595	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193021-00	93.778	Medical Assistance Program		67,880	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193023-00	93,778	Medical Assistance Program		115.736	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193024-001	93.778	Medical Assistance Program		103,077	
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193024-001 E20193025-002	93.778	Medical Assistance Program		9,553	-
			E20193025-002 E20193026-00	93.778			32,334	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of			Medical Assistance Program			-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193029-00	93.778	Medical Assistance Program		18,229	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193074-002	93.778	Medical Assistance Program		85,579	-
ealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193098-00	93.778	Medical Assistance Program		69,513	-
lealth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193099-00/Proj. R	93.778	Medical Assistance Program		55,477	-
	D (771)	Michigan, State of, Health and Human Services, Department of	E20193168-001	93,778	Medical Assistance Program		20,149	-
Iealth and Human Services, Department of	Pass-Through	whenigan, state of, meanin and munian services, bepartment of						
	Pass-Through Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193400-00 CF	93.778	Medical Assistance Program		126	-
lealth and Human Services, Department of								-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Thro
RESEARCH AND DEVELOPMENT CLUSTER							
Agriculture, Department of	Direct		1232SC18P0173	10.RD		\$ 13,94	
Agriculture, Department of	Direct		15-JV-11242309-073	10.RD		6,30	
Agriculture, Department of	Direct		16-CR-11242306-071	10.RD		20,96	
Agriculture, Department of	Direct		17-CR-11242306-028	10.RD		9,96	
Agriculture, Department of	Direct		19-CR-11242306-007	10.RD		9,79	
Agriculture, Department of	Direct		17-7415-1329-CA	10.028	Wildlife Services	\$ 60,96 \$ 24,94	
Agriculture, Department of	Pass-Through	University of Washington	UWSC9961	10.028	Federal-State Marketing Improvement Program	\$ 24,30	
Agriculture, Department of	Direct	Chiveishy of Washington	NI17MSCFRXXXG068	10.202	Cooperative Forestry Research	\$ 51,76	
Agriculture, Department of	Direct		NI18MSCFRXXXG046	10.202	Cooperative Forestry Research	264,65	
Agriculture, Department of	Direct		NI19MSCFRXXXG057	10.202	Cooperative Forestry Research	29,50	
						\$ 345,92	7 \$
Agriculture, Department of	Pass-Through	University of Minnesota	H006607425	10.215	Sustainable Agriculture Research and Education	\$ 2,12	3 \$
Agriculture, Department of	Direct		2016-70003-24838	10.217	Higher Education - Institution Challenge Grants Program	\$ 4,73	3\$
					Agricultural and Rural Economic Research, Cooperative		
Agriculture, Department of	Pass-Through	University of Nebraska-Lincoln	26-6224-0160-002	10.250	Agreements and Collaborations		3) \$
Agriculture, Department of	Direct		58-4000-8-0048-R	10.253	Consumer Data and Nutrition Research	\$ 6,89	
Agriculture, Department of	Direct		59-4000-8-0065	10.253	Consumer Data and Nutrition Research	40,74	
Agriculture, Department of	Direct		59-4000-8-0066	10.253	Consumer Data and Nutrition Research	2,46	
Agriculture, Department of	Direct		59-5000-5-0008	10.253	Consumer Data and Nutrition Research	52,33	
Agriculture, Department of	Pass-Through	University of Kentucky	3200000900-17-237	10.253	Consumer Data and Nutrition Research	\$ 121,83	
Agriculture, Department of	Direct		2012-68004-20028	10.310	Agriculture and Food Research Initiative (AFRI)	\$ 121,83	
Agriculture, Department of	Direct		2012-08004-20028	10.310	Agriculture and Food Research Initiative (AFRI)	90,38	
Agriculture, Department of	Direct		2015-67015-22993	10.310	Agriculture and Food Research Initiative (AFRI)	125,68	
Agriculture, Department of	Direct		2017-67019-26292	10.310	Agriculture and Food Research Initiative (AFRI)	198,35	
Agriculture, Department of	Direct		2018-67030-28239	10.310	Agriculture and Food Research Initiative (AFRI)	41,37	
Agriculture, Department of	Direct		2018-67030-28497	10.310	Agriculture and Food Research Initiative (AFRI)	41,27	
Agriculture, Department of	Direct		2019-67019-29460	10.310	Agriculture and Food Research Initiative (AFRI)	31,34	
Agriculture, Department of	Pass-Through	Husson University	2018-UM-01	10.310	Agriculture and Food Research Initiative (AFRI)	63,07	
Agriculture, Department of	Pass-Through	Michigan State University	RC104749B	10.310	Agriculture and Food Research Initiative (AFRI)	466,12	
Agriculture, Department of	Pass-Through	University at Buffalo	R996610	10.310	Agriculture and Food Research Initiative (AFRI)	30,64	4
Agriculture, Department of	Pass-Through	University of Wisconsin	460K795	10.310	Agriculture and Food Research Initiative (AFRI)	6,58	3
						\$ 1,179,41	
Agriculture, Department of	Direct		2014-JV-11261975-073	10.652	Forestry Research	\$ 13,84	
Agriculture, Department of	Direct		18-DG-11420004-182	10.674	Wood Utilization Assistance	\$ 37,80	
Agriculture, Department of	Pass-Through	University of Washington	UWSC10647	10.674	Wood Utilization Assistance	40,86	
	D 771 1		LIEDOD00011026/D	10 (75		\$ 78,66	
Agriculture, Department of	Pass-Through Direct	University of Florida, The	UFDSP00011036/Prime 00119996	10.675 10.701	Urban and Community Forestry Program	\$ 1,33 \$ 12,31	
Agriculture, Department of	Direct		16-JV-11221636-174 Total Agriculture, Department of	10.701	Stewardship Agreements	\$ 12,31 \$ 1,870,36	
			Total Agriculture, Department of			\$ 1,870,50	+ 3 105
Commerce, Department of	Direct		0099-FY16-IPA-0002	11.RD		\$ 12,20	8 S
Commerce, Department of	Direct		RA-133W-14-CN-0134	11.RD		(13	
Commerce, Department of	Direct		RA133W17CN0166	11.RD		194,59	
Commerce, Department of	Pass-Through	Consortium for Ocean Leadership	76911	11.RD		11,06	
· •	U	·				\$ 217,72	3 \$
Commerce, Department of	Direct		NA18SEC0080006	11.008	NOAA Mission-Related Education Awards	\$ 60,19	2 \$ 23
Commerce, Department of	Pass-Through	Great Lakes Observing System (GLOS)	IOOS/DATA-09	11.012	Integrated Ocean Observing System (IOOS)	\$ 76,48	
Commerce, Department of	Pass-Through	University of Maryland, The	SA7525796B	11.012	Integrated Ocean Observing System (IOOS)	174,78	
						\$ 251,27	
Commerce, Department of	Direct		ED17HDQ0200083	11.020	Cluster Grants	\$ 169,59	
Commerce, Department of	Direct		ED16CHI3030032	11.303	Economic Development Technical Assistance	\$ 79,98	
Commerce, Department of	Direct		ED16HDQ3130040	11.313	Trade Adjustment Assistance for Firms	\$ (131,03	
Commerce, Department of	Direct		ED17HDQ3130045	11.313	Trade Adjustment Assistance for Firms	1,511,98 \$ 1,380,94	
Commerce, Department of	Direct		NA14OAR4170070	11.417	Sea Grant Support	\$ 1,375,67	
Commerce, Department of	Direct		NA140AR4170070 NA150AR4170206	11.417	Sea Grant Support	2,32	
Commerce, Department of	Direct		NA15OAR4170200 NA18OAR4170010	11.417	Sea Grant Support	26,51	
Commerce, Department of	Direct		NA18OAR4170033	11.417	Sea Grant Support	20,20	
Commerce, Department of	Direct		NA18OAR4170102	11.417	Sea Grant Support	445,45	
Commerce, Department of	Direct		NA18OAR4170102	11.417	Sea Grant Support	7,03	
Commerce, Department of	Direct		NA19OAR4170001	11.417	Sea Grant Support	26,29	
Commerce, Department of	Direct		NA19OAR4170002	11.417	Sea Grant Support	23,68	
Commerce, Department of	Direct		NA19OAR4170003	11.417	Sea Grant Support	22,86	
Commerce, Department of	Pass-Through	Ohio Sea Grant	60063781	11.417	Sea Grant Support	24,24	
Commerce, Department of	Pass-Through	University of Illinois-Urbana-Champaign	091182-17109	11.417	Sea Grant Support	4,56	Ð
						\$ 1,978,88	
Commerce, Department of	Direct		NA14NOS4190145	11.419	Coastal Zone Management Administration Awards	\$ 5,216,09	
Commerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	16-Climate-003	11.419	Coastal Zone Management Administration Awards	54,74	
Commerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	17-Resiliency Strategy-002	11.419	Coastal Zone Management Administration Awards	50,11	
Commerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	18-Clean Marinas-002	11.419	Coastal Zone Management Administration Awards	15,37	
Commerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	18-Resiliency Strategy-002	11.419	Coastal Zone Management Administration Awards Coastal Zone Management Administration Awards	36,96	
Commerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	19-Resiliency Strategy-003	11.419		9,09	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Commerce, Department of	Pass-Through	Michigan, State of, Natural Resources, Department of	19-Clean Marinas-002	11.419	Coastal Zone Management Administration Awards	8,884	
	Direct		NA13OAR4310096	11 (2)		\$ 5,391,266 \$ 28,538	
Commerce, Department of				11.431	Climate and Atmospheric Research		5 -
Commerce, Department of Commerce, Department of	Direct Direct		NA15OAR4310067 NA15OAR4310148	11.431 11.431	Climate and Atmospheric Research	3,008 594,058	103,875
Commerce, Department of	Direct		NA18OAR4310148	11.431	Climate and Atmospheric Research Climate and Atmospheric Research	47,164	105,875
Commerce, Department of	Direct		NA18OAR4310110 NA18OAR4310263	11.431	Climate and Atmospheric Research	31.636	8,432
connecc, Department of	Direct		101100/10205	11.451	Chinate and Autospherie Research	\$ 704,404	
					National Oceanic and Atmospheric Administration (NOAA)	\$ 704,404	112,507
Commerce, Department of	Direct		NA12OAR4320071	11.432	Cooperative Institutes	\$ 551,331	\$ 87,377
× 1					National Oceanic and Atmospheric Administration (NOAA)		
Commerce, Department of	Direct		NA17OAR4320152	11.432	Cooperative Institutes	4,519,184	1,314,230
						\$ 5,070,515	\$ 1,401,607
Commerce, Department of	Direct		NA18OAR4590363	11.459	Weather and Air Quality Research	\$ 22,447	\$ 6,905
					Center for Sponsored Coastal Ocean Research Coastal Ocean		· · · · · · · · · · · · · · · · · · ·
Commerce, Department of	Direct		NA16NOS4780209	11.478	Program	\$ 344,508	s -
Commerce, Department of	Direct		60NANB17D191	11.609	Measurement and Engineering Research and Standards	\$ 175,154	\$ 64,567
Commerce, Department of	Direct		70NANB15H022	11.609	Measurement and Engineering Research and Standards	(332)	-
Commerce, Department of	Direct		70NANB16H132	11.609	Measurement and Engineering Research and Standards	(27)	-
Commerce, Department of	Direct		70NANB16H205	11.609	Measurement and Engineering Research and Standards	59,159	-
Commerce, Department of	Direct		70NANB16H307	11.609	Measurement and Engineering Research and Standards	19,586	-
Commerce, Department of	Direct		70NANB17H163	11.609	Measurement and Engineering Research and Standards	321,629	-
Commerce, Department of	Direct		70NANB17H176	11.609	Measurement and Engineering Research and Standards	194,122	-
Commerce, Department of	Direct		70NANB17H214	11.609	Measurement and Engineering Research and Standards	15,246	9,994
Commerce, Department of	Direct		70NANB17H291	11.609	Measurement and Engineering Research and Standards	49,687	6,528
Commerce, Department of	Direct		70NANB18H140	11.609	Measurement and Engineering Research and Standards	165,927	-
						\$ 1,000,151	
Commerce, Department of	Direct		70NANB16H267	11.620	Science, Technology, Business and/or Education Outreach	\$ 3,963	s -
Commerce, Department of	Direct		70NANB17H310	11.620	Science, Technology, Business and/or Education Outreach	139,344	-
Commerce, Department of	Direct		70NANB18H135	11.620	Science, Technology, Business and/or Education Outreach	600	-
						\$ 143,907	
			Total Commerce, Department of			\$ 16,815,802	
Defense, Department of	Direct		FA8650-17-C-9105	12.RD		\$ 274,039	s -
Defense, Department of	Direct		FA8650-17-C-9106	12.RD		35,602	-
Defense, Department of	Direct		FA8650-19-C-1831	12.RD		14,861	-
Defense, Department of	Direct		Goodson IPA	12.RD		280,081	-
Defense, Department of	Direct		HDTRA-1-15-C-0049	12.RD		166,829	-
Defense, Department of	Direct		HDTRA1-17-C-00001	12.RD		302,381	-
Defense, Department of	Direct		HDTRA1-17-C-0001	12.RD		76,144	-
Defense, Department of	Direct		HDTRA117C0046/CLIN001	12.RD		23,371	-
Defense, Department of	Direct		HDTRA117C0046/CLIN002	12.RD		241,881	-
Defense, Department of	Direct		HDTRA117C0046/CLIN003	12.RD		15,194	-
Defense, Department of	Direct		HDTRA118C0073	12.RD		1,053,679	-
Defense, Department of	Direct		HQ0147-16-C-6004	12.RD		47,466	-
Defense, Department of	Direct		HQ0727-17-2-4100	12.RD		222,219	-
Defense, Department of	Direct		HR0011-15-C-0142	12.RD		441,218	-
Defense, Department of	Direct		HR001118C0019	12.RD		834,269	377,219
Defense, Department of	Direct		N00014-18-C-1025	12.RD		63,481	-
Defense, Department of	Direct		N00014-19-C-1029	12.RD		5,085	-
Defense, Department of	Direct		N00173-19-P-0050	12.RD		95,104	-
Defense, Department of	Direct		N00174-16-C-0021	12.RD		124,705	-
Defense, Department of	Direct		N00174-16-C-0027	12.RD		132,028	-
Defense, Department of	Direct		N65540-10-C-0003	12.RD		(414)	(414)
Defense, Department of	Direct		Visiting Faculty Program	12.RD		14,603	-
Defense, Department of	Direct		W56HZV-17-P-L507	12.RD		1,984	-
Defense, Department of	Direct		W81XWH-17-C-0246	12.RD		495,757	-
Defense, Department of	Direct		W81XWH1810078	12.RD		858,023	-
Defense, Department of	Direct		W81XWH1810443	12.RD		161,482	-
Defense, Department of	Direct		W911QY-15-C-0053	12.RD		527,993	135,002
Defense, Department of	Direct		W912HQ18C0019	12.RD		163,999	-
Defense, Department of	Direct		HR00111990028	12.RD		189,840	-
Defense, Department of	Pass-Through	Advanced Computational Technology, LLC	14-ACT-001-U-Michigan	12.RD		4,667	-
Defense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0007B-8 4007-01	12.RD		(8,074)	-
Defense, Department of Defense, Department of	Pass-Through Pass-Through	American Lightweight Materials Manufacturing Innovation Institute BARRON ASSOCIATES, INC	4007-01 503-SC01	12.RD 12.RD		102,042 60,317	-
							-
Defense, Department of	Pass-Through	Daniel H. Wagner Associates, Inc. Dow Chemical Company	9221-0001 613-3.1	12.RD 12.RD		101,335 28,964	-
Defense, Department of	Pass-Through Pass Through	Dow Chemical Company ERC, Inc.	613-3.1 PS190002	12.RD 12.RD		28,964 45,483	-
Defense, Department of	Pass-Through Pass Through	ERC, Inc. General Dynamics Information Technology	DVBIC-SC-14-0013/ #07ESM912302	12.RD 12.RD		45,483 302,327	132,051
Defense, Department of Defense, Department of	Pass-Through Pass-Through	Indiana University	DVBIC-SC-14-0013/ #0/ESM912302 IN-4386932-UM	12.RD 12.RD		302,327 17,992	152,051
	Pass-Through Pass-Through	Indiana University Infoscitex Corporation	IN-4386932-UM IDIQ 6000-S009, TO 0002, PO 17	12.RD 12.RD		17,992 129,374	-
		mosenex corporation	IDIQ 0000-5009, 10 0002, PO 17			129,374	-
befense, Department of		Innovative Bio Thomasics (IBT)	Devicest an existic addee down	12 00		10 402	
Defense, Department of Defense, Department of	Pass-Through	Innovative Bio Therapies (IBT)	Project specific addendum	12.RD		10,403	-
Jefense, Department of Jefense, Department of Defense, Department of Jefense, Department of		Innovative Bio Therapies (IBT) Innovative Bio Therapies (IBT) Innovision LLC	Project specific addendum SSP9825 Research Agreement	12.RD 12.RD 12.RD		10,403 9,486 50,426	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Numbe	r CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Pass-Through	iReprogram, LLC	Roundtable Research Agreement 114322	12.RD 12.RD		86,627	98,033
Defense, Department of Defense, Department of	Pass-Through Pass-Through	Johns Hopkins University Johns Hopkins University	114322 151533	12.RD 12.RD		307,352 462,865	98,033
Defense, Department of	Pass-Through	Kapteyn-Murnane Laboratories, Inc	Res Agrmt # 19953	12.RD		402,803	-
Defense, Department of	Pass-Through	Leidos. Inc.	P010183085	12.RD		99,857	
Defense, Department of	Pass-Through	Leidos, Inc.	P010184830	12.RD		384,124	-
Defense, Department of	Pass-Through	Leidos, Inc.	P010217713	12.RD		393.009	-
Defense, Department of	Pass-Through	Leidos, Inc.	PO 10204554	12.RD		552,693	-
Defense, Department of	Pass-Through	Mettle Ops	PO 123	12.RD		18,790	-
Defense, Department of	Pass-Through	Mettle Ops	PO 87	12.RD		174,415	-
Defense, Department of	Pass-Through	Michigan Engineering Services	P.O. 1021.1	12.RD		13,708	-
Defense, Department of	Pass-Through	Michigan Tech Research Institute (MTRI)	1702001Z1	12.RD		28,461	-
Defense, Department of	Pass-Through	Microelectronics Advanced Research Corporation (MARCO)	2013-MA-2384	12.RD		(17)	-
Defense, Department of	Pass-Through	NanoFlex Power Corporation	Cooperative Agreement	12.RD		175,500	-
Defense, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI1808-1818	12.RD		5,034	-
Defense, Department of Defense, Department of	Pass-Through Pass-Through	NuCrypt, LLC Oceanit Laboratories, Inc.	NC-UM-RA-N00014-16-C-2004 A18B-T010	12.RD 12.RD		22,100 60,022	-
Defense, Department of	Pass-Through	Ohio Aerospace Institute	OAI-C2644-17020	12.RD		10,576	-
Defense, Department of	Pass-Through	Palo Alto Research Center (PARC)	313498	12.RD		84,388	-
Defense, Department of	Pass-Through	PAR Government Systems Corporation	PGSC-SC111346-04	12.RD		169,546	_
Defense, Department of	Pass-Through	Partners Health Care System	233453	12.RD		2,572	_
Defense, Department of	Pass-Through	Physical Sciences, Inc.	SC# 76052-1948-46	12.RD		14,215	-
Defense, Department of	Pass-Through	Prytime Medical Devices, Inc.	W911QY-15-C-0099	12.RD		43,629	-
Defense, Department of	Pass-Through	Raytheon Company	2017-17063000002	12.RD		(12,028)	-
Defense, Department of	Pass-Through	Robotic Research, LLC	Subcontract SUB2017-UM-011-TAM	12.RD		190,112	-
Defense, Department of	Pass-Through	Rydberg Technologies LLC	Research Agreement dtd 10/1/17	12.RD		4,617	-
Defense, Department of	Pass-Through	SenSigma LLC	Roundtable Research Agrmt	12.RD		33,763	-
Defense, Department of	Pass-Through	Shirley Ryan AbilityLab	Subaward No. 6345	12.RD		(22,933)	-
Defense, Department of	Pass-Through	Soar Technology, Inc.	10322.01	12.RD		257,412	-
Defense, Department of	Pass-Through	Soar Technology, Inc.	SC-17-010/Project 10332.01	12.RD		(16,718)	-
Defense, Department of	Pass-Through	Soar Technology, Inc.	SC-18-030	12.RD		82,583	-
Defense, Department of	Pass-Through	The Feinstein Institute for Medical Research	500773UM	12.RD		53,749	-
Defense, Department of	Pass-Through	Triple Ring Technologies	STTR Agrmt	12.RD		88,487	-
Defense, Department of	Pass-Through	United Technologies Corporation Power (UTC Power)	PSA #1213639	12.RD		1,784	-
Defense, Department of	Pass-Through	Universal Technology Corporation	17-7900-0008-32-C6	12.RD		3,782	-
Defense, Department of	Pass-Through	Universal Technology Corporation	18-7900-0008-38-C6	12.RD		7,824	-
Defense, Department of	Pass-Through	University of California - San Francisco	11180sc RSC17064	12.RD 12.RD		15,897 100,656	-
Defense, Department of Defense, Department of	Pass-Through Pass-Through	University of Dayton University of Florida, The	UFDSP00012082 / P0069639	12.RD 12.RD		57,028	-
		University of Illinois-Urbana-Champaign	078122-15632	12.RD		188,029	-
Defense, Department of Defense, Department of	Pass-Through Pass-Through	University of Illinois-Orbana-Champaign	2013-01024-03 C4432	12.RD		7,192	-
Defense, Department of	Pass-Through	University of Southern California	87779041	12.RD		7,192	
Defense, Department of	Pass-Through	University of Washington	UWSC10720	12.RD		184,470	-
Defense, Department of	Pass-Through	Wake Forest University	WFUHS 330607	12.RD		(617)	-
Defense, Department of	Pass-Through	Wayne State University	WSU18060	12.RD		735,805	-
Defense, Department of	Pass-Through	Wayne State University	WSU18080	12.RD		72,914	-
Defense, Department of	Pass-Through	Westat, Inc.	6367-S01/W81XWH-15-C-0128	12.RD		88,346	-
Defense, Department of	Pass-Through	Women and Infants Hospital	9607	12.RD		6,252	-
Defense, Department of	Pass-Through	Women and Infants Hospital	subcontract 9607	12.RD		6,998	-
Defense, Department of	Pass-Through	Wright State University	669737 PO# P0038097	12.RD		38,937	-
Defense, Department of	Pass-Through	BAE Systems	316095	12.114	Collaborative Research and Development	\$ 13,301,597 \$ (19,687)	
Defense, Department of	Direct	Di El Systems	FA8750-17-2-0125	12.300	Basic and Applied Scientific Research	\$ 418,547	
Defense, Department of	Direct		FA8750-18-2-0011	12.300	Basic and Applied Scientific Research	229,117	· .
Defense, Department of	Direct		FA8750-18-2-0019	12.300	Basic and Applied Scientific Research	401,861	102,592
Defense, Department of	Direct		FA9550-18-1-0044	12.300	Basic and Applied Scientific Research	92,103	-
Defense, Department of	Direct		N00014-13-1-0217	12.300	Basic and Applied Scientific Research	(1,044)	-
Defense, Department of	Direct		N00014-14-1-0680	12.300	Basic and Applied Scientific Research	44,094	-
Defense, Department of	Direct		N00014-14-1-0712	12.300	Basic and Applied Scientific Research	(52,336)	-
Defense, Department of	Direct		N00014-15-1-2141	12.300	Basic and Applied Scientific Research	253,590	-
Defense, Department of	Direct		N00014-15-1-2163	12.300	Basic and Applied Scientific Research	(4,411)	-
Defense, Department of	Direct		N00014-15-1-2224	12.300	Basic and Applied Scientific Research	56,330	-
Defense, Department of	Direct		N00014-15-1-2382	12.300	Basic and Applied Scientific Research	(3,700)	-
Defense, Department of	Direct		N00014-15-1-2390	12.300	Basic and Applied Scientific Research	47,704	-
Defense, Department of	Direct		N00014-15-1-2725	12.300	Basic and Applied Scientific Research	140,285	-
Defense, Department of	Direct		N00014-15-1-2752	12.300	Basic and Applied Scientific Research	306,719	67,318
Defense, Department of	Direct		N00014-16-1-2102	12.300	Basic and Applied Scientific Research	187,712	-
Defense, Department of	Direct Direct		N00014-16-1-2239 N00014-16-1-2353	12.300 12.300	Basic and Applied Scientific Research	(126,210) 270,414	-
Defense, Department of Defense, Department of	Direct		N00014-16-1-2353 N00014-16-1-2433	12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	270,414 54,863	-
Defense, Department of	Direct		N00014-16-1-2433 N00014-16-1-2560	12.300	Basic and Applied Scientific Research	206,260	-
Defense, Department of	Direct		N00014-16-1-2560 N00014-16-1-2614	12.300	Basic and Applied Scientific Research	103,013	-
Defense, Department of	Direct		N00014-16-1-2614 N00014-16-1-2672	12.300	Basic and Applied Scientific Research	141,094	-
Defense, Department of	Direct		N00014-16-1-2728	12.300	Basic and Applied Scientific Research	199,407	-
Defense, Department of	Direct		N00014-16-1-2738	12.300	Basic and Applied Scientific Research	1,085	-
Defense, Department of	Direct		N00014-16-1-2910	12.300	Basic and Applied Scientific Research	97,058	-
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Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Direct		N00014-16-1-2928	12.300	Basic and Applied Scientific Research	18,455	-
Defense, Department of Defense, Department of	Direct Direct		N00014-16-1-2969 N00014-16-1-2971	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	170,719 253,434	-
Defense, Department of	Direct		N00014-16-1-2972	12.300	Basic and Applied Scientific Research	78,947	-
Defense, Department of	Direct		N00014-16-1-2975	12.300	Basic and Applied Scientific Research	(7,314)	-
Defense, Department of	Direct		N00014-16-1-2978	12.300	Basic and Applied Scientific Research	171,416	-
Defense, Department of	Direct		N00014-16-1-3108	12.300	Basic and Applied Scientific Research	244,338	-
Defense, Department of	Direct		N00014-16-1-3115	12.300	Basic and Applied Scientific Research	48,142	-
Defense, Department of	Direct		N00014-16-1-3135	12.300	Basic and Applied Scientific Research	(54,121)	-
Defense, Department of	Direct		N00014-16-1-3204	12.300	Basic and Applied Scientific Research	8	-
Defense, Department of	Direct		N00014-17-1-2050	12.300	Basic and Applied Scientific Research	396,393	-
Defense, Department of	Direct		N00014-17-1-2057	12.300	Basic and Applied Scientific Research	103,071	18,302
Defense, Department of Defense, Department of	Direct Direct		N00014-17-1-2211 N00014-17-1-2277	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	170,403 (4)	-
Defense, Department of	Direct		N00014-17-1-2296	12.300	Basic and Applied Scientific Research	172,000	
Defense, Department of	Direct		N00014-17-1-2357	12.300	Basic and Applied Scientific Research	4,447	
Defense, Department of	Direct		N00014-17-1-2364	12.300	Basic and Applied Scientific Research	352,565	150,000
Defense, Department of	Direct		N00014-17-1-2491	12.300	Basic and Applied Scientific Research	82,918	-
Defense, Department of	Direct		N00014-17-1-2747	12.300	Basic and Applied Scientific Research	204,328	85,705
Defense, Department of	Direct		N00014-17-1-2958	12.300	Basic and Applied Scientific Research	17,318	-
Defense, Department of	Direct		N00014-17-1-2966	12.300	Basic and Applied Scientific Research	84,517	-
Defense, Department of	Direct		N00014-17-1-2982	12.300	Basic and Applied Scientific Research	201,427	-
Defense, Department of	Direct		N00014-17-1-2992	12.300	Basic and Applied Scientific Research	490,967	11,405
Defense, Department of	Direct		N00014-17-1-2998	12.300 12.300	Basic and Applied Scientific Research	260,022	-
Defense, Department of Defense, Department of	Direct Direct		N00014-18-1-2010 N00014-18-1-2015	12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	193,865 90,709	-
Defense, Department of	Direct		N00014-18-1-2013	12.300	Basic and Applied Scientific Research	398,038	-
Defense, Department of	Direct		N00014-18-1-2141	12.300	Basic and Applied Scientific Research	239,165	
Defense, Department of	Direct		N00014-18-1-2211	12.300	Basic and Applied Scientific Research	108,006	-
Defense, Department of	Direct		N00014-18-1-2269	12.300	Basic and Applied Scientific Research	120,214	-
Defense, Department of	Direct		N00014-18-1-2330	12.300	Basic and Applied Scientific Research	151,699	-
Defense, Department of	Direct		N00014-18-1-2333	12.300	Basic and Applied Scientific Research	95,927	-
Defense, Department of	Direct		N00014-18-1-2337	12.300	Basic and Applied Scientific Research	307,419	-
Defense, Department of	Direct		N00014-18-1-2477	12.300	Basic and Applied Scientific Research	229,600	-
Defense, Department of	Direct		N00014-18-1-2499	12.300	Basic and Applied Scientific Research	149,693	-
Defense, Department of	Direct Direct		N00014-18-1-2501 N00014-18-1-2531	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	73,128 151,569	68,988
Defense, Department of Defense, Department of	Direct		N00014-18-1-2536	12.300	Basic and Applied Scientific Research	127,240	08,988
Defense, Department of	Direct		N00014-18-1-2544	12.300	Basic and Applied Scientific Research	39,051	
Defense, Department of	Direct		N00014-18-1-2575	12.300	Basic and Applied Scientific Research	76,440	-
Defense, Department of	Direct		N00014-18-1-2656	12.300	Basic and Applied Scientific Research	41,964	-
Defense, Department of	Direct		N00014-18-1-2699	12.300	Basic and Applied Scientific Research	253,912	-
Defense, Department of	Direct		N00014-18-1-2703	12.300	Basic and Applied Scientific Research	169,583	-
Defense, Department of	Direct		N00014-18-1-2726	12.300	Basic and Applied Scientific Research	12,979	-
Defense, Department of	Direct		N00014-18-1-2867	12.300	Basic and Applied Scientific Research	18,606	-
Defense, Department of	Direct		N00014-18-1-2868	12.300	Basic and Applied Scientific Research	33,031	-
Defense, Department of	Direct		N00014-18-1-2876	12.300	Basic and Applied Scientific Research	241,702	-
Defense, Department of Defense, Department of	Direct Direct		N00014-19-1-2017 N00014-19-1-2086	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	37,709 45,717	-
Defense, Department of	Direct		N00014-19-1-2080	12.300	Basic and Applied Scientific Research	43,717	-
Defense, Department of	Direct		N00014-19-1-2171	12.300	Basic and Applied Scientific Research	21,214	_
Defense, Department of	Direct		N00014-19-1-2202	12.300	Basic and Applied Scientific Research	31,063	-
Defense, Department of	Direct		N00014-19-1-2225	12.300	Basic and Applied Scientific Research	8,094	-
Defense, Department of	Direct		N00014-19-1-2249	12.300	Basic and Applied Scientific Research	1,180	-
Defense, Department of	Direct		N00014-19-1-2262	12.300	Basic and Applied Scientific Research	31,895	-
Defense, Department of	Direct		N00014-19-1-2273	12.300	Basic and Applied Scientific Research	928	-
Defense, Department of	Direct		N00014-19-1-2459	12.300	Basic and Applied Scientific Research	9,922	-
Defense, Department of	Direct		N00173-14-1-G904	12.300	Basic and Applied Scientific Research	(885)	-
Defense, Department of	Direct		N00173-16-1-G022	12.300	Basic and Applied Scientific Research	86,447	-
Defense, Department of Defense, Department of	Direct		N00173-18-1-G006	12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	138,602	-
Defense, Department of Defense, Department of	Direct Direct		N00173-18-2-C009 N00174-18-1-0007	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	142,080 1,509	-
Defense, Department of	Direct		N00174-18-1-0007 N00174-19-1-0017	12.300	Basic and Applied Scientific Research	7,606	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	0002C-10	12.300	Basic and Applied Scientific Research	32,215	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	0003 LCA	12.300	Basic and Applied Scientific Research	86,794	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	0003C-6	12.300	Basic and Applied Scientific Research	(12,016)	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	0003D-5	12.300	Basic and Applied Scientific Research	35,314	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	0004G-3	12.300	Basic and Applied Scientific Research	16,657	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	0007A-4	12.300	Basic and Applied Scientific Research	28,387	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	Sub-award 0002-LIFT Core ICME	12.300	Basic and Applied Scientific Research	288,748	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	Subaward 0003B-3	12.300	Basic and Applied Scientific Research	(20,622)	-
Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute	Subaward 0005A-5	12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	6,778	-
Defense, Department of Defense, Department of		nerican Lightweight Materials Manufacturing Innovation Institute nerican Lightweight Materials Manufacturing Innovation Institute	Sub-Award Agreement 0001 Subaward Agreement 0002B-9	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	273,164 (3,213)	-
Defense, Department of Defense, Department of		iston University	4500002613	12.300	Basic and Applied Scientific Research	(3,213) 95,381	-
		own University	00001041	12.300	Basic and Applied Scientific Research	852	-
Defense, Department of	Pass-Through Bro						

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title		Pass-Through
Defense, Department of		University of Science and Technology (aka Iowa State University)	4212021A	12.300	Basic and Applied Scientific Research	72,092	-
fense, Department of		Technological University	1603033Z2	12.300	Basic and Applied Scientific Research	71,521	-
ense, Department of		ern University	SP0026757-PROJ0007034	12.300	Basic and Applied Scientific Research	49,244	-
ense, Department of	Pass-Through Princeton U		SUB0000103	12.300	Basic and Applied Scientific Research	(3,547)	-
ense, Department of	Pass-Through Stanford U		60622292-114018	12.300	Basic and Applied Scientific Research	43,836	-
ense, Department of		M University	M1803207	12.300	Basic and Applied Scientific Research	72,453	-
ense, Department of		of California - Los Angeles	0160 G VA521	12.300	Basic and Applied Scientific Research	271,676	-
ense, Department of		of Minnesota	A006141805	12.300	Basic and Applied Scientific Research	187,900	-
ense, Department of		of Pennsylvania	574340	12.300	Basic and Applied Scientific Research	305,799	-
ense, Department of		of St. Andrews	14338-SBE2-XOBO29	12.300	Basic and Applied Scientific Research	(793)	-
ense, Department of	Pass-Through University		GG13332.156539	12.300	Basic and Applied Scientific Research	45,105	-
ense, Department of	Pass-Through University	of Wisconsin	824K390	12.300	Basic and Applied Scientific Research	\$ 12,927,891 \$	504,310
					Scientific Research - Combating Weapons of Mass	\$ 12,927,891 3	5 504,510
ense, Department of	Direct		HDTRA1-12-1-0038	12.351	Destruction	\$ 233,383 \$	s -
					Scientific Research - Combating Weapons of Mass		
nse, Department of	Direct		HDTRA1-13-1-0013	12.351	Destruction Scientific Research - Combating Weapons of Mass	37,874	28,912
nse, Department of	Direct		HDTRA1-15-1-0001	12.351	Destruction	45,116	-
					Scientific Research - Combating Weapons of Mass		
nse, Department of	Direct		HDTRA1-15-1-0045	12.351	Destruction	509,564	358,564
Deve transfer	Direct		UDTD 41 15 1 00(7	12 251	Scientific Research - Combating Weapons of Mass Destruction	(2.110)	
ense, Department of	Direct		HDTRA1-15-1-0067	12.351	Scientific Research - Combating Weapons of Mass	(3,110)	-
ense, Department of	Direct		HDTRA1-16-1-0004	12.351	Destruction	267,531	-
· 1						\$ 1,090,358 \$	387,470
nse, Department of	Direct		W81XWH-12-1-0080	12.420	Military Medical Research and Development	\$ 6,277 \$	s -
nse, Department of	Direct		W81XWH-12-2-0057	12.420	Military Medical Research and Development	347,571	-
nse, Department of	Direct		W81XWH-13-1-0134	12.420	Military Medical Research and Development	107,899	19,15
nse, Department of	Direct		W81XWH-13-1-0377	12.420	Military Medical Research and Development	82,685	-
ense, Department of	Direct		W81XWH-14-1-0005	12.420	Military Medical Research and Development	1,196,844	449,39
ense, Department of	Direct		W81XWH-14-1-0287	12.420	Military Medical Research and Development	59,501	
ense, Department of	Direct		W81XWH-14-1-0292	12.420	Military Medical Research and Development	(2,200)	-
				12.420		555,642	-
ense, Department of	Direct		W81XWH-14-1-0362		Military Medical Research and Development		-
ense, Department of	Direct		W81XWH-14-1-0555	12.420	Military Medical Research and Development	(215)	-
ense, Department of	Direct		W81XWH-15-1-0020	12.420	Military Medical Research and Development	46,025	-
ense, Department of	Direct		'W81XWH-15-1-0083	12.420	Military Medical Research and Development	(6,373)	-
fense, Department of	Direct		W81XWH-15-1-0194	12.420	Military Medical Research and Development	215,109	
ense, Department of	Direct		W81XWH-15-1-0222	12.420	Military Medical Research and Development	159,997	1,54
ense, Department of	Direct		W81XWH-15-1-0237	12.420	Military Medical Research and Development	(635)	-
ense, Department of	Direct		W81XWH-15-1-0413	12.420	Military Medical Research and Development	43,493	-
ense, Department of	Direct		W81XWH-15-1-0503	12.420	Military Medical Research and Development	119,010	-
ense, Department of	Direct		W81XWH-15-1-0548	12.420	Military Medical Research and Development	2,692	-
ense, Department of	Direct		W81XWH-15-1-0637	12.420	Military Medical Research and Development	35,352	-
ense, Department of	Direct		W81XWH-15-1-0689	12.420	Military Medical Research and Development	851,833	-
nse, Department of	Direct		W81XWH-15-1-0703	12.420	Military Medical Research and Development	27,488	-
ense, Department of	Direct		W81XWH-15-2-0021	12.420	Military Medical Research and Development	181,775	-
ense, Department of	Direct		W81XWH-16-1-0314	12.420	Military Medical Research and Development	132,393	-
ense, Department of	Direct		W81XWH-16-1-0369	12.420	Military Medical Research and Development	126,300	-
ense, Department of	Direct		W81XWH-16-1-0426	12.420	Military Medical Research and Development	106,987	-
ise, Department of	Direct		W81XWH-16-1-0551	12.420	Military Medical Research and Development	263,598	31,3
ise, Department of	Direct		W81XWH-16-1-0571	12.420	Military Medical Research and Development	203,598	
ise, Department of	Direct		W81XWH-16-1-0574	12.420	Military Medical Research and Development	226,566	-
ise, Department of	Direct		W81XWH-16-1-0574 W81XWH-16-1-0587	12.420	Military Medical Research and Development	10,401	-
se, Department of	Direct			12.420		255,430	-
			W81XWH-16-1-0648		Military Medical Research and Development		-
se, Department of	Direct		W81XWH-16-1-0684	12.420	Military Medical Research and Development	310,210	-
se, Department of	Direct		W81XWH-16-1-0752	12.420	Military Medical Research and Development	564,713	
se, Department of	Direct		W81XWH-16-2-0051	12.420	Military Medical Research and Development	185,516	91,5
se, Department of	Direct		W81XWH-17-1-0130	12.420	Military Medical Research and Development	41,597	-
se, Department of	Direct		W81XWH-17-1-0134	12.420	Military Medical Research and Development	40,247	-
se, Department of	Direct		W81XWH-17-1-0155	12.420	Military Medical Research and Development	99,904	-
se, Department of	Direct		W81XWH-17-1-0171	12.420	Military Medical Research and Development	348,252	-
se, Department of	Direct		W81-XWH-17-1-0224	12.420	Military Medical Research and Development	133,628	
se, Department of	Direct		W81XWH-17-1-0367	12.420	Military Medical Research and Development	76,045	33,6
se, Department of	Direct		W81XWH-17-1-0494	12.420	Military Medical Research and Development	193,682	12,7
se, Department of	Direct		W81XWH-17-1-0496	12.420	Military Medical Research and Development	265,842	
se, Department of	Direct		W81XWH-17-1-0575	12.420	Military Medical Research and Development	141,928	24,0
nse, Department of	Direct		W81XWH-17-1-0641	12.420	Military Medical Research and Development	311,801	-
nse, Department of	Direct		W81XWH-17-1-0655	12.420	Military Medical Research and Development	395,715	-
nse, Department of	Direct		W81XWH-17-1-0701	12.420	Military Medical Research and Development	520,900	
nse, Department of	Direct		W81XWH-17-2-0012	12.420	Military Medical Research and Development	639,026	
ise, Department of	Direct		W81XWH-18-1-0005	12.420	Military Medical Research and Development	564,883	-
nse, Department of			W81XWH-18-1-0003	12.420	Military Medical Research and Development	916,814	-
	Direct				Military Medical Research and Development Military Medical Research and Development		-
nse, Department of	Direct		W81XWH-18-1-0180	12.420		187,882	-
Desertment of							
fense, Department of fense, Department of	Direct Direct		W81XWH-18-1-0219 W81XWH-18-1-0275	12.420 12.420	Military Medical Research and Development Military Medical Research and Development	117,562 700,569	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expendit		ass-Through
Defense, Department of	Direct		W81XWH1810346	12.420	Military Medical Research and Development		14,267	-
Defense, Department of	Direct		W81XWH-18-1-0407	12.420	Military Medical Research and Development		47,581	84,584
Defense, Department of	Direct		W81XWH1810427	12.420	Military Medical Research and Development		37,273	-
Defense, Department of	Direct		W81XWH1810453	12.420	Military Medical Research and Development		34,852	-
befense, Department of	Direct		W81XWH-18-1-0487	12.420	Military Medical Research and Development		14,748	-
Defense, Department of	Direct		W81XWH1810567	12.420	Military Medical Research and Development		98,653	-
Defense, Department of	Direct		W81XWH1810587	12.420	Military Medical Research and Development		23,637	-
Defense, Department of	Direct		W81XWH1810653	12.420	Military Medical Research and Development		96,231	3,500
Defense, Department of	Direct		W81XWH1810656	12.420	Military Medical Research and Development		21,419	-
Defense, Department of	Direct		W81XWH-18-1-0721	12.420	Military Medical Research and Development		55,983	-
Defense, Department of	Direct		W81XWH-18-2-0038	12.420	Military Medical Research and Development		13,630	-
Defense, Department of	Direct		W81XWH1910093	12.420	Military Medical Research and Development		1,210	-
Defense, Department of	Direct Direct		W81XWH1910094 W81XWH1910162	12.420 12.420	Military Medical Research and Development Military Medical Research and Development		4,568 17,776	-
Defense, Department of Defense, Department of		Case Western Reserve University	RES509313	12.420	Military Medical Research and Development Military Medical Research and Development		53,800	-
	Pass-Through							-
Defense, Department of	Pass-Through	Case Western Reserve University	RES513795	12.420	Military Medical Research and Development		8,876 77,244	-
befense, Department of	Pass-Through	Cincinnati Children's Hospital Medical Center (CCHMC)	Sub 135643/ PO 3100614000	12.420	Military Medical Research and Development			-
Defense, Department of	Pass-Through	Duke University	3130896	12.420	Military Medical Research and Development		2,800	-
befense, Department of	Pass-Through	Indiana University	IN4386948UM/PO25931	12.420	Military Medical Research and Development		32,910	-
efense, Department of	Pass-Through	Memorial Sloan-Kettering Cancer Center (MSKCC)	Amendment No 3/POBD520594C	12.420	Military Medical Research and Development		50,110	-
efense, Department of	Pass-Through	Memorial Sloan-Kettering Cancer Center (MSKCC)	BD520591	12.420	Military Medical Research and Development		(7,110)	-
efense, Department of	Pass-Through	Memorial Sloan-Kettering Cancer Center (MSKCC)	W81XWH1520018	12.420	Military Medical Research and Development		(8,217)	-
efense, Department of	Pass-Through	New York University	17-A0-00-1000082-01	12.420	Military Medical Research and Development		33,263	-
efense, Department of	Pass-Through	New York University	17-A0-00-1000082-01	12.420	Military Medical Research and Development		3,691	-
efense, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	Subaward No. 1683	12.420	Military Medical Research and Development		1,854	-
efense, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI1808-1818	12.420	Military Medical Research and Development		1,619	-
efense, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI1872-03, Ref # 095447	12.420	Military Medical Research and Development		26,919	-
fense, Department of	Pass-Through	Ohio Willow Wood Co	W81XWH-17-1-0704-SA01	12.420	Military Medical Research and Development	29	95,117	-
efense, Department of	Pass-Through	Oregon Health and Science University	1011056_UMICH	12.420	Military Medical Research and Development		12,274	-
efense, Department of	Pass-Through	Oregon Health and Science University	1011056_UMICH	12.420	Military Medical Research and Development		3,370	-
efense, Department of	Pass-Through	University of Alabama	000507860-002	12.420	Military Medical Research and Development	10	55,778	-
efense, Department of	Pass-Through	University of Alabama	000507860-002	12.420	Military Medical Research and Development		1,507	-
efense, Department of	Pass-Through	University of Delaware	47471	12.420	Military Medical Research and Development		35,013	-
efense, Department of	Pass-Through	University of Minnesota	A003728703	12.420	Military Medical Research and Development		3,380	-
fense, Department of	Pass-Through	University of Pittsburgh	0056666 (413614-6)	12.420	Military Medical Research and Development		6,211	-
efense, Department of	Pass-Through	University of Rochester	417438 / URFAO: GR510636	12.420	Military Medical Research and Development		23,919	
efense, Department of	Pass-Through	University of Southern California	70250537	12.420	Military Medical Research and Development		36,849)	
efense, Department of	Pass-Through	University of Texas Health Science Center at San Antonio	159425 / 155536	12.420	Military Medical Research and Development		38,089	
efense, Department of	Pass-Through	University of Utah	10040357-00	12.420	Military Medical Research and Development		36,771	
efense, Department of	Pass-Through	Veterans Education & Research Assoc of MI (VERAM)	V-SUBUM-11-10	12.420	Military Medical Research and Development)5,724	
efense, Department of	Pass-Through	Veterans Education & Research Assoc of MI (VERAM)	V-SUBUM-1602	12.420	Military Medical Research and Development)6,190	_
efense, Department of	Pass-Through	Veterans Education & Research Assoc of MI (VERAM)	V-VUBUM-1601	12.420	Military Medical Research and Development		18,548	-
Defense, Department of	Pass-Through	Wayne State University	WSU 16046	12.420	Military Medical Research and Development		29,608	-
erense, Department of	rass-mough	wayne state University	W30 10040	12.420	Wintary Wedicar Research and Development		10,995 \$	751,541
efense, Department of	Direct		FA9550-17-1-0454	12.431	Basic Scientific Research		04,460 \$	-
efense, Department of	Direct		W911NF-12-1-0214	12.431	Basic Scientific Research		54,991	-
efense, Department of	Direct		W911NF-13-1-0387	12.431	Basic Scientific Research	1,20	08,555	813,532
efense, Department of	Direct		W911NF-14-1-0573	12.431	Basic Scientific Research		27,111	· -
efense, Department of	Direct		W911NF-15-1-0114	12.431	Basic Scientific Research		35,183	-
efense, Department of	Direct		W911NF-15-1-0158	12.431	Basic Scientific Research		22,978	-
fense, Department of	Direct		W911NF-15-1-0185	12.431	Basic Scientific Research		(1,348)	-
fense, Department of	Direct		W911NF-15-1-0354	12.431	Basic Scientific Research		74,986	-
efense, Department of	Direct		W911NF-15-1-0554	12.431	Basic Scientific Research		36,344	-
fense, Department of	Direct		W911NF-15-1-0625	12.431	Basic Scientific Research)6,195	-
fense, Department of	Direct		W911NF-16-1-0044	12.431	Basic Scientific Research		52,132	-
Sense, Department of	Direct		W911NF-16-1-0147	12.431	Basic Scientific Research		79,981	
	Direct		W911NF-16-1-0229	12.431	Basic Scientific Research		38,946	-
ense Department of	Direct		W911NF-16-1-0229	12.431	Basic Scientific Research		30,617	43,403
	Direct			12.431	Basic Scientific Research)6,090	45,403
fense, Department of	Direct				Basic Scientific Research	20	(1,834)	-
fense, Department of fense, Department of	Direct		W911NF-17-1-0109 W911NE 17 1 0235		Basic Scientific Besearch			-
ense, Department of ense, Department of ense, Department of	Direct		W911NF-17-1-0235	12.431	Basic Scientific Research			
ense, Department of ense, Department of ense, Department of ense, Department of	Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243	12.431 12.431	Basic Scientific Research	1	23,864	-
iense, Department of iense, Department of iense, Department of iense, Department of iense, Department of	Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292	12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	-	23,864 10,574	-
fense, Department of fense, Department of fense, Department of fense, Department of fense, Department of fense, Department of	Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312	12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research Basic Scientific Research	1,4	23,864 10,574 11,918	609,173
fense, Department of fense, Department of fense, Department of fense, Department of fense, Department of fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388	12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research	1,4	23,864 10,574 11,918 (3,329)	609,173
iense, Department of iense, Department of iense, Department of iense, Department of iense, Department of iense, Department of iense, Department of	Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526	12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research	1,4	23,864 10,574 11,918 (3,329) 1,816	609,173
fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526 W911NF-18-1-0004	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research	1,4	23,864 10,574 11,918 (3,329) 1,816 78,852	609,173
fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526 W911NF-18-1-0004 W911NF-18-1-0001	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research Basic Scientific Research	1,4 2' 1	23,864 10,574 11,918 (3,329) 1,816 78,852 48,944	609,173 - - - -
fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526 W911NF-18-1-0004 W911NF-18-1-00061 W911NF-18-1-0119	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	1,4 2 1 1	23,864 10,574 11,918 (3,329) 1,816 78,852 48,944 52,146	- 609,173 - - - -
fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526 W911NF-18-1-0004 W911NF-18-1-0010 W911NF-18-1-0119 W911NF18-10162	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	1,4 2 1 1 1 1 1 1	23,864 10,574 11,918 (3,329) 1,816 78,852 48,944 52,146 14,249	- 609,17: - - - - -
fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-18-1-0064 W911NF-18-1-0061 W911NF-18-1-0019 W911NF1810162 W911NF1810167	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	1,4 2: 1- 1- 10 11 11	23,864 10,574 11,918 (3,329) 1,816 78,852 48,944 52,146 14,249 17,636	- 609,17: - - - - - -
Fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526 W911NF-18-1-0004 W911NF-18-1-0010 W911NF-18-1-0119 W911NF18-10162	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	2 1,4 1 1 1 1 1 1 2	23,864 10,574 11,918 (3,329) 1,816 78,852 18,944 52,146 14,249 17,636 49,500	
Fense, Department of Fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-18-1-0064 W911NF-18-1-0061 W911NF-18-1-0019 W911NF1810162 W911NF1810167	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	2 1,4 1 1 1 1 1 1 2	23,864 10,574 11,918 (3,329) 1,816 78,852 48,944 52,146 14,249 17,636	
fense, Department of fense, Department of fenses, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0223 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526 W911NF-18-1-0004 W911NF-18-1-0010 W911NF-18-1-0119 W911NF1810162 W911NF1810167 W911NF1810202	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	1,4 2' 1- 1- 1- 1 1 2- 4	23,864 10,574 11,918 (3,329) 1,816 78,852 18,944 52,146 14,249 17,636 49,500	
fense, Department of fense, Department of	Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0388 W911NF-18-1-0004 W911NF-18-1-0004 W911NF-18-1-0109 W911NF1810162 W911NF1810167 W911NF1810202 W911NF1810208	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	1,4 2: 14 10 11 11 2: 44 2:	23,864 10,574 11,918 (3,329) 1,816 78,852 48,944 52,146 44,249 17,636 49,500 99,780	
fense, Department of fense, Department of fenses, Department of fense, Department of	Direct Direct		W911NF-17-1-0235 W911NF-17-1-0243 W911NF-17-1-0292 W911NF-17-1-0312 W911NF-17-1-0388 W911NF-17-1-0526 W911NF-18-1-0061 W911NF-18-1-0061 W911NF-18-1-0019 W911NF1810167 W911NF1810202 W911NF1810208 W911NF1810242	12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431 12.431	Basic Scientific Research Basic Scientific Research	2 14 14 11 1 1 1 2 2 44 2 2 1 1	33,864 10,574 11,918 (3,329) 1,816 78,852 48,944 52,146 14,249 17,636 49,500 99,780 21,207	- 609,173 - - - - - - - - - - - - - - - - - - -

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Direct		W911NF-18-1-0397	12.431	Basic Scientific Research	113,822	-
efense, Department of	Direct		W911NF1910027	12.431	Basic Scientific Research	31,307	-
efense, Department of	Direct		W911NF1910114	12.431	Basic Scientific Research	15,315	-
efense, Department of	Direct		W911NF1920045	12.431	Basic Scientific Research	60,334	-
efense, Department of	Pass-Through	Arizona State University	13-949	12.431	Basic Scientific Research	(2,662)	-
efense, Department of	Pass-Through	George Mason University	E2030471	12.431	Basic Scientific Research	190,403	-
efense, Department of	Pass-Through	Georgia Institute of Technology	Subcontract No. RH541-G6	12.431	Basic Scientific Research	70,535	-
fense, Department of	Pass-Through	Stanford University	61074263-119754	12.431	Basic Scientific Research	44,885	
fense, Department of	Pass-Through	University of California - Santa Barbara	KK1811	12.431	Basic Scientific Research	303,286	_
efense, Department of	Pass-Through	University of Maryland, The	26236-Z8401001	12.431	Basic Scientific Research	47,263	
		University of Minnesota	A006827501	12.431	Basic Scientific Research	109,037	-
efense, Department of	Pass-Through						-
fense, Department of	Pass-Through	University of Missouri	C00045065-6	12.431	Basic Scientific Research	170,622	-
fense, Department of	Pass-Through	University of Southern California	PO 10567853	12.431	Basic Scientific Research	75,054	-
fense, Department of	Pass-Through	University of Wisconsin	623K070	12.431	Basic Scientific Research	169,078	-
					DOD, NDEP, DOTC-STEM Education Outreach	\$ 7,885,855 5	1,627,223
Surge Demonstration of	Discot		EA0452 17 2 0010	12.560	Implementation	£ 00.00C \$	
ense, Department of	Direct		FA9453-17-2-0010	12.300		\$ 99,096 5	
			07714004600	10.000	Community Economic Adjustment Assistance for Reductions		
ense, Department of	Direct		ST1409-16-03	12.611	in Defense Industry Employment	\$ 789,149 5	\$ 170,358.0
					Community Economic Adjustment Assistance for Reductions		
fense, Department of	Pass-Through	Michigan, State of, Economic Development Corporation	CASE-220868	12.611	in Defense Industry Employment	111,977	-
						\$ 901,126 \$	
fense, Department of	Direct		ST1409-18-03	12.617	Economic Adjustment Assistance for State Governments	\$ 714,482 \$	402,488
					Basic, Applied, and Advanced Research in Science and		
fense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0004C-5	12.630	Engineering	\$ 72,185 5	s -
	0	5 5 5			Basic, Applied, and Advanced Research in Science and		
fense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0004D-8	12.630	Engineering	22,583	-
tense, separanent er	russ rinougn	intereal Eight reight traterials manufacturing into tation institute	000120	121050	Basic, Applied, and Advanced Research in Science and	22,000	
fense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0004F-4	12.630	Engineering	162,040	_
ense, Department of	1 ass-1 mough	Anterean Eightweight Materials Manufacturing innovation institute	00041-4	12.050	Lightering	\$ 256,808 \$	-
former Demonstrate of	Deve Theresh	Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc (HJF)	2879	12.750	Uniforme d.Commission University Medical Descende Designet	\$ 3,279,329	
ense, Department of	Pass-Through				Uniformed Services University Medical Research Projects	• •,=,•=.	- •
ense, Department of	Pass-Through	Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc (HJF)	Subaward #3156 PO#856388	12.750	Uniformed Services University Medical Research Projects	141,796	-
						\$ 3,421,125 \$	
fense, Department of	Direct		FA2386-18-1-4086	12.800	Air Force Defense Research Sciences Program	\$ 104,807 \$	
fense, Department of	Direct		FA8650-17-2-2208	12.800	Air Force Defense Research Sciences Program	503,582	113,515
fense, Department of	Direct		FA8650-18-1-5411	12.800	Air Force Defense Research Sciences Program	41,177	-
ense, Department of	Direct		FA8750-19-2-0006	12.800	Air Force Defense Research Sciences Program	710,071	353,206
fense, Department of	Direct		FA9453-16-1-0069	12.800	Air Force Defense Research Sciences Program	9,683	-
fense, Department of	Direct		FA9453-18-1-0010	12.800	Air Force Defense Research Sciences Program	80,527	-
fense, Department of	Direct		FA9453-19-1-0079	12.800	Air Force Defense Research Sciences Program	34,343	-
ense, Department of	Direct		FA9550-12-1-0435	12.800	Air Force Defense Research Sciences Program	32,219	
fense, Department of	Direct		FA9550-14-1-0040	12.800	Air Force Defense Research Sciences Program	1,824,391	669,950
ense, Department of	Direct		FA9550-14-1-0245	12.800	Air Force Defense Research Sciences Program	(4)	00,,,,,
ense, Department of	Direct		FA9550-14-1-0246	12.800	Air Force Defense Research Sciences Program	135,132	-
				12.800			-
ense, Department of	Direct		FA9550-14-1-0249		Air Force Defense Research Sciences Program	431,794	70,470
ense, Department of	Direct		FA9550-14-1-0380	12.800	Air Force Defense Research Sciences Program	218,878	-
ense, Department of	Direct		FA9550-15-1-0039	12.800	Air Force Defense Research Sciences Program	226,131	-
ense, Department of	Direct		FA9550-15-1-0097	12.800	Air Force Defense Research Sciences Program	256,762	-
ense, Department of	Direct		FA9550-15-1-0101	12.800	Air Force Defense Research Sciences Program	(2,408)	-
ense, Department of	Direct		FA9550-15-1-0157	12.800	Air Force Defense Research Sciences Program	(139)	-
nse, Department of	Direct		FA9550-15-1-0210	12.800	Air Force Defense Research Sciences Program	(7,068)	-
nse, Department of	Direct		FA9550-15-1-0240	12.800	Air Force Defense Research Sciences Program	1,296	-
nse, Department of	Direct		FA9550-15-1-0329	12.800	Air Force Defense Research Sciences Program	(15,104)	-
nse, Department of	Direct		FA9550-15-1-0378	12.800	Air Force Defense Research Sciences Program	36,900	28,14
nse, Department of	Direct		FA9550-16-1-0028	12.800	Air Force Defense Research Sciences Program	157,210	-
nse, Department of	Direct		FA9550-16-1-0071	12.800	Air Force Defense Research Sciences Program	229,008	-
nse, Department of	Direct		FA9550-16-1-0087	12.800	Air Force Defense Research Sciences Program	947,266	478,30
ense, Department of	Direct		FA9550-16-1-0265	12.800	Air Force Defense Research Sciences Program	51,955	470,50
ense, Department of	Direct		FA9550-16-1-0272	12.800	Air Force Defense Research Sciences Program	78,746	-
				12.800			221.70
nse, Department of	Direct		FA9550-16-1-0291		Air Force Defense Research Sciences Program	420,641	221,79
nse, Department of	Direct		FA9550-16-1-0309	12.800	Air Force Defense Research Sciences Program	142,484	-
nse, Department of	Direct		FA9550-16-1-0312	12.800	Air Force Defense Research Sciences Program	272,831	-
nse, Department of	Direct		FA9550-16-1-0313	12.800	Air Force Defense Research Sciences Program	117,740	-
nse, Department of	Direct		FA9550-17-1-0035	12.800	Air Force Defense Research Sciences Program	361,132	-
nse, Department of	Direct		FA9550-17-1-0172	12.800	Air Force Defense Research Sciences Program	135,058	-
ense, Department of	Direct		FA9550-17-1-0195	12.800	Air Force Defense Research Sciences Program	714,380	436,72
nse, Department of	Direct		FA9550-17-1-0208	12.800	Air Force Defense Research Sciences Program	147,768	-
ense, Department of	Direct		FA9550-17-1-0284	12.800	Air Force Defense Research Sciences Program	79,931	-
nse, Department of	Direct		FA9550-17-1-0408	12.800	Air Force Defense Research Sciences Program	51,757	-
ense, Department of	Direct		FA9550-17-1-0457	12.800	Air Force Defense Research Sciences Program	123,071	_
nse, Department of	Direct		FA9550-17-1-0437 FA9550-18-1-0028	12.800		220,134	55,79
					Air Force Defense Research Sciences Program		55,15
ense, Department of	Direct		FA9550-18-1-0091	12.800	Air Force Defense Research Sciences Program	126,502	-
ense, Department of	Direct		FA9550-18-1-0124	12.800	Air Force Defense Research Sciences Program	173,390	-
ense, Department of	Direct		FA9550-18-1-0131	12.800	Air Force Defense Research Sciences Program	112,985	-
	Discot		FA9550-18-1-0153	12.800	Air Force Defense Research Sciences Program	129,829	-
fense, Department of fense, Department of	Direct Direct		FA9550-18-1-0155	12.800	Air Force Defense Research Sciences Program	138,763	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Direct		FA9550-18-1-0168	12.800	Air Force Defense Research Sciences Program	164,853	-
Defense, Department of	Direct		FA9550-18-1-0171	12.800	Air Force Defense Research Sciences Program	84,774	-
Defense, Department of	Direct		FA9550-18-1-0180	12.800	Air Force Defense Research Sciences Program	210,725	44,001
Defense, Department of	Direct		FA9550-18-1-0315	12.800	Air Force Defense Research Sciences Program	106,976	-
Defense, Department of	Direct		FA9550-18-1-0343	12.800	Air Force Defense Research Sciences Program	97,289	-
Defense, Department of	Direct		FA9550-18-1-0434	12.800	Air Force Defense Research Sciences Program	11,881	
Defense, Department of	Direct		FA9550-18-1-0466	12.800	Air Force Defense Research Sciences Program	58,278	-
Defense, Department of	Direct		FA9550-18-1-0476	12.800	Air Force Defense Research Sciences Program	102,274	-
Defense, Department of	Direct		FA9550-19-1-0013	12.800	Air Force Defense Research Sciences Program	8,601	
Defense, Department of	Direct		FA9550-19-1-0022	12.800	Air Force Defense Research Sciences Program	71,103	_
Defense, Department of	Direct		FA9550-19-1-0022	12.800	Air Force Defense Research Sciences Program	25,419	-
Defense, Department of	Direct		FA9550-19-1-0020	12.800	Air Force Defense Research Sciences Program	17,819	
Defense, Department of	Direct		FA9550-19-1-0029	12.800		58,990	-
					Air Force Defense Research Sciences Program		-
Defense, Department of	Direct		FA9550-19-1-0186	12.800	Air Force Defense Research Sciences Program	3,076	-
Defense, Department of	Pass-Through	Columbia University	1(GG010953-01)	12.800	Air Force Defense Research Sciences Program	42,850	-
Defense, Department of	Pass-Through	Columbia University	FA9550-15-1-0439	12.800	Air Force Defense Research Sciences Program	52,590	-
Defense, Department of	Pass-Through	Lehigh University	543255-78001	12.800	Air Force Defense Research Sciences Program	72,648	-
Defense, Department of	Pass-Through	Massachusetts Institute of Technology	5710003831	12.800	Air Force Defense Research Sciences Program	187,015	-
Defense, Department of	Pass-Through	Michigan State University	RC108022UM	12.800	Air Force Defense Research Sciences Program	216,616	-
Defense, Department of	Pass-Through	Ohio State University, The	60041047	12.800	Air Force Defense Research Sciences Program	49,957	-
Defense, Department of	Pass-Through	The City University of New York (CUNY)	CM00001530-00	12.800	Air Force Defense Research Sciences Program	209,752	-
Defense, Department of	Pass-Through	University of Colorado Boulder	1553899	12.800	Air Force Defense Research Sciences Program	260,231	
Defense, Department of	Pass-Through	University of Illinois-Urbana-Champaign	065435-13890	12.800	Air Force Defense Research Sciences Program	(3,287)	_
Defense, Department of	Pass-Through	University of Illinois-Urbana-Champaign	084272-16074	12.800	Air Force Defense Research Sciences Program	243,615	-
							-
Defense, Department of	Pass-Through	University of Maryland, The	58333-Z8143003	12.800	Air Force Defense Research Sciences Program	122,599	-
Defense, Department of	Pass-Through	University of Maryland, The	Q2412001	12.800	Air Force Defense Research Sciences Program	26,503	-
Defense, Department of	Pass-Through	University of Texas San Antonio	1000002216	12.800	Air Force Defense Research Sciences Program	78,221	-
Defense, Department of	Direct		FA8650-19-1-7997	12.901	Mathematical Sciences Grants	\$ 12,136,919 \$ 136,855	
							s -
Defense, Department of	Direct		H98230-18-1-0045	12.901	Mathematical Sciences Grants	43,988	-
Defense, Department of	Direct		H98230-19-1-0117	12.901	Mathematical Sciences Grants	14,814	-
						\$ 195,657	
Defense, Department of	Direct		D14AP00086	12.910	Research and Technology Development	\$ (1,080)	s -
Defense, Department of	Direct		D16AP00004	12.910	Research and Technology Development	(3,858)	-
Defense, Department of	Direct		D18AP00076	12.910	Research and Technology Development	165,801	-
Defense, Department of	Direct		HR0011-17-2-0018	12.910	Research and Technology Development	(4,118)	
Defense, Department of	Direct		HR00111720067	12.910	Research and Technology Development	992,340	-
Defense, Department of	Direct		N66001-14-1-4014	12.910	Research and Technology Development	43,118	
Defense, Department of	Direct		N66001-14-1-4045	12.910	Research and Technology Development	18,625	
Defense, Department of	Direct		N66001-14-1-4046	12.910	Research and Technology Development	113,624	
Defense, Department of							1 (2 479
	Direct		N66001-16-1-4006	12.910	Research and Technology Development	350,777	163,478
Defense, Department of	Direct		N66001-16-1-4029	12.910	Research and Technology Development	877,428	
Defense, Department of	Direct		W56HZV-14-2-0001	12.910	Research and Technology Development	4,686,461	1,386,486
Defense, Department of	Direct		W56HZV-19-2-0001	12.910	Research and Technology Development	313,578	-
Defense, Department of	Direct		W911NF-16-1-0383	12.910	Research and Technology Development	148,851	-
Defense, Department of	Direct		W911NF-17-1-0060	12.910	Research and Technology Development	179,806	40,638
Defense, Department of	Direct		W911NF-18-2-0266	12.910	Research and Technology Development	204,167	47,529
Defense, Department of	Pass-Through	Arizona State University	ASUB0000087	12.910	Research and Technology Development	1,049,855	-
Defense, Department of	Pass-Through	Defense, Department of Air Force, Department of the	FA8650-18-2-7844	12.910	Research and Technology Development	762,401	73,720
Defense, Department of	Pass-Through	Defense, Department of-Air Force, Department of the	FA8650-18-2-7864	12.910	Research and Technology Development	1,208,638	143,341
Defense, Department of	Pass-Through	Duke University	3130628	12.910	Research and Technology Development	12,915	
Defense, Department of	Pass-Through	Duke University	3130713	12.910	Research and Technology Development	45,151	-
							-
Defense, Department of	Pass-Through	Georgia Institute of Technology	RK448-G2	12.910	Research and Technology Development	129,082	-
Defense, Department of	Pass-Through	Interior, Department of the	D18AP00066	12.910	Research and Technology Development	207,950	-
Defense, Department of	Pass-Through	Interior, Department of the	D18AP00071	12.910	Research and Technology Development	245,595	-
Defense, Department of	Pass-Through	Oregon State University	X0212A-A	12.910	Research and Technology Development	59,511	-
Defense, Department of	Pass-Through	University of California-San Diego	104629610	12.910	Research and Technology Development	367,791	-
Defense, Department of	Pass-Through	University of Pennsylvania	574468	12.910	Research and Technology Development	154,877	-
						\$ 12,329,286	
			Total Defense, Department of			\$ 80,951,508	\$ 8,912,376
Housing and Urban Development, Department of	Pass-Through	Johns Hopkins University	JHU Grant 19740/Task Order #7	14.506	General Research and Technology Activity	\$ 111,886	s -
			Total Housing and Urban Development	nt, Department of		\$ 111,886	s -
Interior, Department of the	Direct		Josh Miller IPA	15.RD		\$ 106,673	s -
Interior, Department of the	Direct		Award F18AC00010	15.676	Youth Engagement, Education, and Employment	\$ 3,332	\$ -
Interior, Department of the	Direct		G17AP00088	15.807	Earthquake Hazards Program Assistance	\$ 62,461	s -
Interior, Department of the	Direct		G13AC00085	15.808	U.S. Geological Survey Research and Data Collection	\$ 111,950	\$ 420
Interior, Department of the	Direct		G16AC00418	15.808	U.S. Geological Survey Research and Data Collection	(17,053)	-
Interior, Department of the	Direct		G18AC00367	15.808	U.S. Geological Survey Research and Data Collection	17,446	-
interior, Department of the	Direct		010/1000007	15.000	c.s. seeisgiva survey research and para contention	\$ 112,343	\$ 420
Interior Department of the	Direct		P18AC00009	15.944	Natural Resource Stewardship	\$ 57,978	
Interior, Department of the	Direct			10.944	ivatural Resource Stewardship		
			Total Interior, Department of the			\$ 342,787	\$ 420
	D :		0011 DID (555			e	0
Justice, Department of	Direct Direct		2011 BJ R 6565 2013 JJR 1168	16.RD 16.RD		\$ (6) (42)	s -
Justice, Department of							

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Justice, Department of	Direct		DJO-BJS-17-RO-0253	16.RD		2,043,792	
ustice, Department of	Pass-Through	City of Battle Creek	FY 16 (BCJI)	16.RD		97,642	
ustice, Department of	Pass-Through	Hamilton Community Health Network	2017-AJ-BX-0007	16.RD		<u>41,522</u> \$ 2,182,908	
institut Development of	Deve Thomas	Caluation Amount	2015 VT DV 1017	16 220	Comisso for Tarffelling Missing	\$ (2,125	
Justice, Department of	Pass-Through	Salvation Army	2015-VT-BX-K017 2013-MU-R-6018	16.320	Services for Trafficking Victims		
Justice, Department of Justice, Department of	Direct Direct		2015-MU-R-6018 2016-WL-AX-0029	16.523 16.524	Juvenile Accountability Block Grants Legal Assistance for Victims	\$ 221,110	
Justice, Department of	Direct		2010-WE-AA-0029	10.524	National Institute of Justice Research, Evaluation, and	\$ 221,110	3 49,050
Justice, Department of	Direct		2017-CK-BX-0002	16.560	Development Project Grants	\$ 286,922	\$
Justice, Department of	Direct		2017-CR-DA-0002	10.500	National Institute of Justice Research, Evaluation, and	\$ 200,722	φ -
Justice, Department of	Direct		2019-MU-MU-0004	16.560	Development Project Grants	16,220	_
Justice, Department of	Direct		2019-100-0004	10.500	National Institute of Justice Research, Evaluation, and	10,220	
Justice, Department of	Pass-Through	Michigan State University	RC105817 UM	16.560	Development Project Grants	129,097	
· ·····, - · · · · ·		········g ····· - ······,			National Institute of Justice Research, Evaluation, and		
Justice, Department of	Pass-Through	Michigan State University	RC105837 UM	16.560	Development Project Grants	114,188	-
	0				National Institute of Justice Research, Evaluation, and		
Justice, Department of	Pass-Through	University of Pennsylvania	570342	16.560	Development Project Grants	34,364	-
· •	0				National Institute of Justice Research, Evaluation, and		
Justice, Department of	Pass-Through	University of Pittsburgh Medical Center (UPMC)	112104031-7848943	16.560	Development Project Grants	188,729	-
						\$ 769,520	\$ -
Justice, Department of	Direct		2011-MU-MU-K075	16.734	Special Data Collections and Statistical Studies	\$ (8,458	
Justice, Department of	Direct		2016-FA-BX-0002	16.746	Capital Case Litigation Initiative	\$ 43,367	\$ -
Justice, Department of	Pass-Through	Michigan, State of, State Police	COAP-18-01	16.754	Harold Rogers Prescription Drug Monitoring Program	\$ 12,097	s -
Justice, Department of	Pass-Through	Kettering University	5301095AA	16.817	Innovations in Community-Based Crime Reduction	\$ 13,706	
Justice, Department of	Direct	5	2017-BC-BX-0050	16.835	Body Worn Camera Policy and Implementation	\$ 52,500	
- A	-		Total Justice, Department of		, , <u>, , , , , , , , , , , , , , , , , </u>	\$ 3,284,623	
			· · · · · · · · · · · · · · · · · · ·				
Labor, Department of	Pass-Through	UnidosUS	Counsultant Agreement	17.270	Reentry Employment Opportunities	\$ 51,691	s -
Labor, Department of	Direct		EO-30276-17-60-5-26	17.791	Department of Labor Chief Evaluation Office	\$ 71,898	\$ -
			Total Labor, Department of		*	\$ 123,589	\$-
State, Department of	Pass-Through	Alion Science and Technology	SUBI 138240 TO 001	19.RD		\$ 191,344	\$ -
State, Department of	Pass-Through	Partners of the Americas Foundation	CBG-2016-R2-09	19.009	Academic Exchange Programs - Undergraduate Programs	\$ 19,216	\$-
* *	0				International Programs to Support Democracy, Human Right		
State, Department of	Direct		S-LMAQM-15-GR-1129	19.345	and Labor	\$ 892,471	\$ 658,192
State, Department of	Pass-Through	Princeton University	SUB0000247	19.500	Middle East Partnership Initiative	\$ 92,854	ş -
			Total State, Department of			\$ 1,195,885	\$ 658,192
Transportation, Department of	Direct		DTFH6116C00006	20.RD		\$ 308,578	\$ 178,204
Transportation, Department of	Direct		DTNH22-14-00329	20.RD		214,348	-
Transportation, Department of	Direct		DTNH2214D00329L693JJ918F000224	20.RD		431,272	
Transportation, Department of	Direct		DTNH2214D00329L693JJ918F000226	20.RD		115,587	
Transportation, Department of	Direct		DTNH2214D00329L693JJ918F000236	20.RD		352,039	
Transportation, Department of	Direct		DTNH2215D00017	20.RD		65,718	
Transportation, Department of	Direct		DTNH2215D00017/693JJ918F000100	20.RD		100,355	
Transportation, Department of	Direct		DTNH2215D00017/693JJ918F000124	20.RD		65,500	
	Direct		DTNH2215D00017/693JJ918F000124	20.RD		173,075	
Transportation, Department of				20.RD		733	
Transportation, Department of	Direct		DTNH2217D00041				
Transportation, Department of	Direct		DTRT5716C10014L	20.RD		84,196	
Transportation, Department of	Pass-Through	Crash Avoidance Metrics Partnership (CAMP)	PO# CAMP0000166	20.RD		313,478	
Transportation, Department of	Pass-Through	Economic Development Research Group, Inc.	EDRG Project #800	20.RD		9,967	
Transportation, Department of	Pass-Through	Emory University	T937114	20.RD		18,575	
Transportation, Department of	Pass-Through	Michigan, State of, Transportation, Department of	2016-0068 Z2	20.RD		122,141	
Transportation, Department of	Pass-Through	Michigan, State of, Transportation, Department of	2018-0593	20.RD		53,608	
Transportation, Department of	Pass-Through	National Academy of Sciences	HR 10-93, Activity 163512-1030	20.RD		1,761	
Transportation, Department of	Pass-Through	Soar Technology, Inc.	SC-17-007	20.RD		88,947	
Transportation, Department of	Pass-Through	Texas A & M University	M1802886/Task Order M1803048	20.RD		1,956	
						\$ 2,521,834	
Transportation, Department of	Direct		14-G-011	20.108	Aviation Research Grants	\$ 180,022	
Transportation, Department of	Pass-Through	University of California - Davis	201302812-01	20.108	Aviation Research Grants	3,259	
						\$ 183,281	
Transportation, Department of	Direct		DTFH6115H00005	20.200	Highway Research and Development Program	\$ 2,112,481	
Transportation, Department of	Pass-Through	National Academy of Sciences	HR 20-110	20.200	Highway Research and Development Program	1,958	
						\$ 2,114,439	\$ 426,490
					Metropolitan Transportation Planning and State and Non-		
Transportation, Department of	Pass-Through	Michigan, State of, Transportation, Department of	2016-0068 Authorization & Revi	20.505	Metropolitan Planning and Research	\$ 59,792	\$ -
					National Highway Traffic Safety Administration (NHTSA)		
Transportation, Department of	Pass-Through	National Safety Council	Innovation Grant Agreement	20.614	Discretionary Safety Grants and Cooperative Agreements	\$ (102)\$-
					National Highway Traffic Safety Administration (NHTSA)		
Transportation, Department of	Pass-Through	National Safety Council	Subaward Agreement	20.614	Discretionary Safety Grants and Cooperative Agreements	80,549	
						\$ 80,447	
Fransportation, Department of	Direct		69A3551747105	20.701	University Transportation Centers Program	\$ 2,360,852	
Transportation, Department of	Direct		DTRT13-G-UTC54	20.701	University Transportation Centers Program	76,572	6,410
Transportation, Department of	Pass-Through	San Jose State University	21-1100-5726-UM	20.701	University Transportation Centers Program	1,663	
Transportation, Department of	Pass-Through	University of Florida, The	Subaward No. UFDSP00011771/Pro	20.701	University Transportation Centers Program	60,283	
	Pass-Through	University of Florida, The	UFDSP00012169	20.701	University Transportation Centers Program	72,277	
Transportation, Department of	rass-rmough					12.211	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Ex		Pass-Through
Transportation, Department of	Pass-Through	University of Maryland, The	07525729 PO3884	20.819	Ballast Water Treatment Technologies	\$	2,571,647 5	<u>\$ 1,260,498</u> \$ -
			Total Transportation, Department of			\$	7,550,872	\$ 1,931,360
Treasury, Department of the	Direct		18-LITC0343-01-00	21.008	Low Income Taxpayer Clinics	\$	48,366 \$	ŝ -
Treasury, Department of the	Direct		19-LITC0343-02-00 Total Treasury, Department of the	21.008	Low Income Taxpayer Clinics	\$	71,744 120,110 5	- \$-
Federal Trade Commission	Direct		29TFC117P0007/CLIN0001	36.RD		\$	4,900	
			Total Federal Trade Commission			\$	4,900 \$	
Library of Congress	Direct		GA16C0089 Total Library of Congress	42.RD		\$ \$	191,159 5 191,159 5	
National Aeronautics and Space Administration	Direct		80GSFC18C0009	43.RD		\$	67,432	ŝ -
National Aeronautics and Space Administration	Direct		Hansen IPA- NNH18IA58P	43.RD			154,327	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct		Janet Kozyra IPA-NNH17IA42P NNG12CR34C	43.RD 43.RD			213,892 179,933	-
National Aeronautics and Space Administration	Direct		NNL13AQ00C	43.RD			4,602,553	549,283
National Aeronautics and Space Administration	Direct		NNX16AH47G	43.RD			53,911	-
National Aeronautics and Space Administration	Pass-Through	California Institute of Technology	\$386188	43.RD			209,490	-
National Aeronautics and Space Administration	Pass-Through	Catholic University of America	361361 Sub 1	43.RD			(205)	-
National Aeronautics and Space Administration	Pass-Through	Catholic University of America	361361 Sub 3	43.RD			332,874	-
National Aeronautics and Space Administration	Pass-Through	Catholic University of America	361361 Sub 4	43.RD			28,487	-
National Aeronautics and Space Administration	Pass-Through	Colorado School of Mines	400637	43.RD			52,843	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory Jet Propulsion Laboratory	1266313 1266314	43.RD 43.RD			377,068 33,159	-
National Aeronautics and Space Administration	Pass-Through Pass-Through	Jet Propulsion Laboratory	1409449	43.RD			320,293	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1416974	43.RD			17,615	
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1449038	43.RD			288,941	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1486489	43.RD			29,895	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1514747	43.RD			3,356	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1515850	43.RD			41,462	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1532308	43.RD			63,870	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1534436	43.RD			25,699	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1564409	43.RD			(16)	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory Jet Propulsion Laboratory	1574620 1579208	43.RD 43.RD			279,099 (3,276)	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Jet Propulsion Laboratory	1593522	43.RD			323,866	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1607998	43.RD			60,000	
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1610475	43.RD			26,063	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1621759	43.RD			58,268	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1631492	43.RD			20,691	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	561416972	43.RD			41,725	-
National Aeronautics and Space Administration	Pass-Through	Johns Hopkins University	117613	43.RD			17,558	-
National Aeronautics and Space Administration	Pass-Through	Johns Hopkins University	141617	43.RD			51,845	-
National Aeronautics and Space Administration	Pass-Through	Johns Hopkins University	141617 143448	43.RD 43.RD			27,022 301,125	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Johns Hopkins University Johns Hopkins University	143448	43.RD 43.RD			172,414	-
National Aeronautics and Space Administration	Pass-Through	Michigan Engineering Services	1025	43.RD			10,554	-
National Aeronautics and Space Administration	Pass-Through	National Institute of Aerospace	T18-601046-UMICH	43.RD			57,952	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	SV4-84016	43.RD			126,717	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	699056KC	43.RD			297,762	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	A99201MO	43.RD			456,123	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	E99061MO	43.RD			155,531	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	H99061MO	43.RD			(26,264)	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	K99067CT	43.RD 43.RD			37,827	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-AR-13881.001-A HST-AR-13884.001-A	43.RD 43.RD			51,802 3,846	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-AR-14279.001-A	43.RD			42,999	
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-AR-15047.001-A	43.RD			72,208	
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-AR-15051.001-A	43.RD			21,063	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13639.003-A	43.RD			(27)	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13642.004-A	43.RD			45,129	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13696.002-A	43.RD			4,371	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13827.001-A	43.RD			1,375	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScI)	HST-GO-13841.006-A	43.RD			8,638	-
National Aeronautics and Space Administration	Pass-Through Pass Through	Space Telescope Institute (STScl)	HST-GO-13939.003-A	43.RD			5,967	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-GO-14046.007-A HST-GO-14080.002-A	43.RD 43.RD			(355) 18,599	-
National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScI)	HST-GO-14080.002-A HST-GO-14096.005-A	43.RD 43.RD			(1,187)	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14050.003-A HST-GO-14151.002-A	43.RD			4,111	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14170.004-A	43.RD			5,288	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14187.001-A	43.RD			29,081	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14190.001-A	43.RD			28,457	-
National Actonautics and Space Administration	Pass-Through							

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Throu
lational Aeronautics and Space Administration lational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-GO-14229.001-A HST-GO-14230.002-A	43.RD 43.RD		11,280 16,005	
tional Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl)	HST-GO-14230.002-A HST-GO-14232.001-A	43.RD 43.RD		9,123	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14252.001-A	43.RD		11,470	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14622.003-A	43.RD		4,001	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14711.004-A	43.RD		4,463	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14729.001-A	43.RD		1,552	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14765.001-A	43.RD		17,362	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14896.004-A	43.RD		4,912	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14933.002-A	43.RD		2,960	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15101.004-A	43.RD		19,002	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15117.033-A	43.RD		47,511	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15230.002-A	43.RD		23,313	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15307.004-A	43.RD		60,454	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15352.002-A	43.RD		4,398	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15378.003-A	43.RD		19,002	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-HF2-51401.001-A	43.RD		91,326	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	JWST-ERS-01364.002-A	43.RD		1,928	
ational Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	JWST-ERS-01386.039-A	43.RD		17,085	
ational Aeronautics and Space Administration	Pass-Through	Universities Space Research Association (USRA)	20180863/06816-03	43.RD		23,450	
ational Aeronautics and Space Administration	Pass-Through	University of Arizona	344641	43.RD		94,270	
ational Aeronautics and Space Administration	Pass-Through	University of Colorado	1546525	43.RD		32,150	
ational Aeronautics and Space Administration	Pass-Through	University of Colorado	1546525/PO 1000106275	43.RD		236,271	
ational Aeronautics and Space Administration	Pass-Through	University of Washington	16-PAF02071	43.RD		3,551	
						\$ 10,697,875	
ational Aeronautics and Space Administration	Direct		80NSSC17K0015		Science	\$ 205,786	\$ 24,81
ational Aeronautics and Space Administration	Direct		80NSSC17K0116	43.001	Science	33,137	24
ational Aeronautics and Space Administration	Direct		80NSSC17K0212	43.001	Science	106,849	20
ational Aeronautics and Space Administration	Direct		80NSSC17K0323	43.001	Science	45,089	
ational Aeronautics and Space Administration	Direct		80NSSC17K0380	43.001	Science	28,339	
ational Aeronautics and Space Administration	Direct		80NSSC17K0381	43.001	Science	64,807	
ational Aeronautics and Space Administration	Direct		80NSSC17K0382	43.001	Science	40,284	
ational Aeronautics and Space Administration	Direct		80NSSC17K0453	43.001	Science	44,885 38,803	
ational Aeronautics and Space Administration	Direct		80NSSC17K0464	43.001	Science		
ational Aeronautics and Space Administration	Direct		80NSSC17K0493	43.001	Science	44,786	
ational Aeronautics and Space Administration	Direct		80NSSC17K0604 80NSSC17K0628	43.001 43.001	Science	45,683 18,550	
lational Aeronautics and Space Administration	Direct			43.001	Science		
lational Aeronautics and Space Administration	Direct Direct		80NSSC17K0629 80NSSC17K0630	43.001	Science	21,519 11,043	
ational Aeronautics and Space Administration	Direct		80NSSC17K0681	43.001	Science	189,951	15
lational Aeronautics and Space Administration	Direct		80NSSC17K0686	43.001	Science	118,750	11
ational Aeronautics and Space Administration	Direct		80NSSC17K0728	43.001	Science	158,736	40
ational Aeronautics and Space Administration	Direct		80NSSC18K0275	43.001	Science	16,363	-10
ational Aeronautics and Space Administration	Direct		80NSSC18K0376	43.001	Science	32,631	
ational Aeronautics and Space Administration	Direct		80NSSC18K0377	43.001	Science	10,392	
lational Aeronautics and Space Administration	Direct		80NSSC18K0536	43.001	Science	87,894	
ational Aeronautics and Space Administration	Direct		80NSSC18K0551	43.001	Science	20,914	
ational Aeronautics and Space Administration	Direct		80NSSC18K0647	43.001	Science	14,917	
ational Aeronautics and Space Administration	Direct		80NSSC18K0653	43.001	Science	45,928	
ational Aeronautics and Space Administration	Direct		80NSSC18K0717	43.001	Science	55,889	
ational Aeronautics and Space Administration	Direct		80NSSC18K0802	43.001	Science	18,793	
lational Aeronautics and Space Administration	Direct		80NSSC18K0882	43.001	Science	83,730	
ational Aeronautics and Space Administration	Direct		80NSSC18K0900	43.001	Science	56,576	
ational Aeronautics and Space Administration	Direct		80NSSC18K0978	43.001	Science	10,944	
ational Aeronautics and Space Administration	Direct		80NSSC18K0986	43.001	Science	114,415	
ational Aeronautics and Space Administration	Direct		80NSSC18K0999	43.001	Science	37,395	
ational Aeronautics and Space Administration	Direct		80NSSC18K1000	43.001	Science	48,921	
ational Aeronautics and Space Administration	Direct		80NSSC18K1005	43.001	Science	66,683	
ational Aeronautics and Space Administration	Direct		80NSSC18K1033	43.001	Science	97,413	1
ational Aeronautics and Space Administration	Direct		80NSSC18K1049	43.001	Science	30,389	
ational Aeronautics and Space Administration	Direct		80NSSC18K1060	43.001	Science	115,272	
ational Aeronautics and Space Administration	Direct		80NSSC18K1120	43.001	Science	35,729	
tional Aeronautics and Space Administration	Direct		80NSSC18K1121	43.001	Science	37,594	
tional Aeronautics and Space Administration	Direct		80NSSC18K1137	43.001	Science	104,336	
tional Aeronautics and Space Administration	Direct		80NSSC18K1208	43.001	Science	157,810	5
tional Aeronautics and Space Administration	Direct		80NSSC18K1238	43.001	Science	36,628	
ational Aeronautics and Space Administration	Direct		80NSSC18K1240	43.001	Science	81,926	
ational Aeronautics and Space Administration	Direct		80NSSC18K1280	43.001	Science	111,232	
ational Aeronautics and Space Administration	Direct		80NSSC18K1344	43.001	Science	25,513	
ational Aeronautics and Space Administration	Direct		80NSSC18K1363	43.001	Science	142,187	
ational Aeronautics and Space Administration	Direct		80NSSC18K1454	43.001	Science	72,478	
ational Aeronautics and Space Administration	Direct		80NSSC18K1553	43.001	Science	61,082	
ational Aeronautics and Space Administration	Direct		80NSSC18K1596	43.001	Science	106,215	
	Direct		80NSSC18K1641	43.001	Science	13,675	
ational Aeronautics and Space Administration							
ational Aeronautics and Space Administration ational Aeronautics and Space Administration	Direct		80NSSC19K0003	43.001	Science	131,335	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Aeronautics and Space Administration	Direct		80NSSC19K0168		ience	7,853	-
Vational Aeronautics and Space Administration	Direct		80NSSC19K0204 80NSSC19K0373		ience	4,374 90,253	-
ational Aeronautics and Space Administration	Direct Direct		80NSSC19K0564		ience ience	24,321	-
ational Aeronautics and Space Administration	Direct		80NSSC19K0608		ience	17,779	_
Jational Aeronautics and Space Administration	Direct		80NSSC19K0640		ience	13,851	-
Vational Aeronautics and Space Administration	Direct		80NSSC19K0747		ience	836	-
ational Aeronautics and Space Administration	Direct		NNX11AJ19G		ience	(17,551)	-
National Aeronautics and Space Administration	Direct		NNX12AR53G		ience	14,654	-
ational Aeronautics and Space Administration	Direct		NNX13AE56G	43.001 Sc	ience	(318)	(318)
Vational Aeronautics and Space Administration	Direct		NNX13AP36G	43.001 Sc	ience	60,501	-
National Aeronautics and Space Administration	Direct		NNX14AB39G		ience	(3,615)	-
lational Aeronautics and Space Administration	Direct		NNX14AC82G		ience	38,720	-
National Aeronautics and Space Administration	Direct		NNX14AE75G		ience	39,478	-
National Aeronautics and Space Administration	Direct		NNX14AF31G		ience	39,714	-
lational Aeronautics and Space Administration	Direct		NNX14AF34G		ience	(87) 82,297	-
lational Aeronautics and Space Administration lational Aeronautics and Space Administration	Direct Direct		NNX14AF90G NNX14AG68G		ience ience	3,141	-
ational Aeronautics and Space Administration	Direct		NNX14AG08G		ience	80,674	-
ational Aeronautics and Space Administration	Direct		NNX14AI40G		ience	(13,669)	
lational Aeronautics and Space Administration	Direct		NNX14AI87G		ience	(15,005) (688)	_
lational Aeronautics and Space Administration	Direct		NNX14AP44G		ience	(4,825)	-
ational Aeronautics and Space Administration	Direct		NNX14AR78G		ience	6,332	-
ational Aeronautics and Space Administration	Direct		NNX15AB36G		ience	14,125	-
ational Aeronautics and Space Administration	Direct		NNX15AB73G		ience	48,877	-
lational Aeronautics and Space Administration	Direct		NNX15AC25G		ience	56,656	-
Vational Aeronautics and Space Administration	Direct		NNX15AD40G	43.001 Sc	ience	199,188	80,038
National Aeronautics and Space Administration	Direct		NNX15AE34G	43.001 Sc	ience	36,429	-
National Aeronautics and Space Administration	Direct		NNX15AE77G		ience	32,213	-
National Aeronautics and Space Administration	Direct		NNX15AF33G		ience	7,404	-
National Aeronautics and Space Administration	Direct		NNX15AH13G		ience	167,431	115,950
National Aeronautics and Space Administration	Direct		NNX15AH28G		ience	182,114	-
National Aeronautics and Space Administration	Direct		NNX15AH30G		ience	21,941	-
lational Aeronautics and Space Administration	Direct		NNX15AH37G		ience	17,813	-
ational Aeronautics and Space Administration	Direct		NNX15AI39G		ience	33,350	-
Jational Aeronautics and Space Administration	Direct		NNX15AI42G		ience	113,684	-
lational Aeronautics and Space Administration lational Aeronautics and Space Administration	Direct Direct		NNX15AJ68G NNX15AK79G		ience ience	54,900 160,260	-
Vational Aeronautics and Space Administration	Direct		NNX15AK89G		ience	80,551	-
Jational Aeronautics and Space Administration	Direct		NNX15AL01G		ience	165,469	
lational Aeronautics and Space Administration	Direct		NNX15AL78G		ience	(267)	-
National Aeronautics and Space Administration	Direct		NNX15AM53G		ience	45,333	-
lational Aeronautics and Space Administration	Direct		NNX15AM93G		ience	52,368	6,078
lational Aeronautics and Space Administration	Direct		NNX15AQ16G		ience	110,978	· -
ational Aeronautics and Space Administration	Direct		NNX15AR36G	43.001 Sc	ience	1,550	-
ational Aeronautics and Space Administration	Direct		NNX15AT87G	43.001 Sc	ience	84,457	-
lational Aeronautics and Space Administration	Direct		NNX15AU15G		ience	5,160	-
lational Aeronautics and Space Administration	Direct		NNX15AW08G		ience	10,421	-
National Aeronautics and Space Administration	Direct		NNX16AB37G		ience	143,606	-
lational Aeronautics and Space Administration	Direct		NNX16AB46G		ience	53,237	17,011
ational Aeronautics and Space Administration	Direct		NNX16AB47G		ience	7,194	-
lational Aeronautics and Space Administration	Direct		NNX16AB48G		ience	112,388	23,842
lational Aeronautics and Space Administration	Direct		NNX16AC01G		ience	233,349 1,294,255	-
ational Aeronautics and Space Administration	Direct		NNX16AC66A NNX16AC74G		ience ience	21,472	-
ational Aeronautics and Space Administration ational Aeronautics and Space Administration	Direct Direct		NNX16AD43G		ience	185,922	-
ational Aeronautics and Space Administration	Direct		NNX16AE38G		ience	30,633	-
ational Aeronautics and Space Administration	Direct		NNX16AF23G		ience	112,611	_
ational Aeronautics and Space Administration	Direct		NNX16AH01G		ience	51,037	_
ational Aeronautics and Space Administration	Direct		NNX16AH79G		ience	42,116	
ational Aeronautics and Space Administration	Direct		NNX16AI19G		ience	122,019	-
ational Aeronautics and Space Administration	Direct		NNX16AI41G		ience	147,196	-
ational Aeronautics and Space Administration	Direct		NNX16AJ54G		ience	191,532	45,899
ational Aeronautics and Space Administration	Direct		NNX16AJ67G		ience	235,333	25,192
ational Aeronautics and Space Administration	Direct		NNX16AL12G		ience	172,468	14,670
ational Aeronautics and Space Administration	Direct		NNX16AM23G	43.001 Sc	ience	25,920	12,564
lational Aeronautics and Space Administration	Direct		NNX16AM99G		ience	183,589	-
ational Aeronautics and Space Administration	Direct		NNX16AN86G		ience	17,410	-
ational Aeronautics and Space Administration	Direct		NNX16AP03H		ience	5,868	-
lational Aeronautics and Space Administration	Direct		NNX16AP04H		ience	46,439	-
ational Aeronautics and Space Administration	Direct		NNX16AP32G		ience	54,788	-
lational Aeronautics and Space Administration	Direct		NNX16AQ04G		ience	177,371	-
ational Aeronautics and Space Administration	Direct		NNX17AB38G		ience	53,297	-
ational Aeronautics and Space Administration	Direct		NNX17AB87G		ience	134,013	-
ational Aeronautics and Space Administration	Direct		NNX17AC36G NNX17AD37G		ience	41,477 73,290	- 32,974
lational Aeronautics and Space Administration	Direct				ience		

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	0	Federal Expenditures	Pass-Through
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct		NNX17AD57G NNX17AD58G	43.001 43.001	Science Science	2,866 1,472	
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct		NNX17AD60G	43.001	Science	37,827	-
National Aeronautics and Space Administration	Direct		NNX17AD66G	43.001	Science	319,769	-
National Aeronautics and Space Administration	Direct		NNX17AE31G	43.001	Science	72,519	-
National Aeronautics and Space Administration	Direct		NNX17AE57G	43.001	Science	36,371	-
National Aeronautics and Space Administration	Direct		NNX17AE63G	43.001	Science	29,805	-
National Aeronautics and Space Administration	Direct		NNX17AF21G	43.001	Science	196,229	-
National Aeronautics and Space Administration	Direct		NNX17AG25G	43.001	Science	149,376	8,908
National Aeronautics and Space Administration	Direct		NNX17AH55G	43.001	Science	202,770	34,899
National Aeronautics and Space Administration	Direct		NNX17AH97G	43.001	Science	301,419	-
National Aeronautics and Space Administration	Direct		NNX17AI48G	43.001	Science	100,192 20,055	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct		NNX17AI90G NNX17AK19G	43.001 43.001	Science Science	20,035 290,377	164,090
National Aeronautics and Space Administration	Direct		NNX17AL23G	43.001	Science	138,911	-
National Aeronautics and Space Administration	Pass-Through	Bay Area Environmental Research Institute	Subcontract	43.001	Science	80,962	
National Aeronautics and Space Administration	Pass-Through	California Institute of Technology	44A-1093998	43.001	Science	232	-
National Aeronautics and Space Administration	Pass-Through	California Institute of Technology	\$380136	43.001	Science	29,112	-
National Aeronautics and Space Administration	Pass-Through	George Mason University	E2034731	43.001	Science	52,159	-
National Aeronautics and Space Administration	Pass-Through	Michigan Technological University	1609082Z2	43.001	Science	123,690	-
National Aeronautics and Space Administration	Pass-Through	National Institute of Aerospace	X13-7142-UM	43.001	Science	131	-
National Aeronautics and Space Administration	Pass-Through	Ohio State University, The	60062085	43.001	Science	107,116	-
National Aeronautics and Space Administration	Pass-Through	Ohio State University, The	60066837	43.001	Science	36,030	-
National Aeronautics and Space Administration	Pass-Through	Predictive Science Inc.	Research Agrmt dtd 12/1/17	43.001	Science	233	-
National Aeronautics and Space Administration	Pass-Through	Princeton University	SUB0000306	43.001	Science	6,332	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	AR5-16002X	43.001	Science	43,105	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	AR8-19017X	43.001	Science	1,309	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	AR9-20006X	43.001	Science	12,855	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	DD4-15073X DD8-19103X	43.001 43.001	Science	11,443 4,697	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Smithsonian Institution Smithsonian Institution	G05-16034X	43.001	Science Science	4,697	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G05-10034X G06-17031A	43.001	Science	10,306	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G06-17079X	43.001	Science	12,902	_
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO5-16035X	43.001	Science	50,428	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO5-16045X	43.001	Science	4,411	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO6-17082X	43.001	Science	21,763	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO6-17085X	43.001	Science	62,793	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO7-18042X	43.001	Science	3,883	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO7-18072X	43.001	Science	26,975	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO7-18073X	43.001	Science	26,115	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO7-18087X	43.001	Science	19,054	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO8-19019X	43.001	Science	6,832	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO8-19021X	43.001	Science	3,188	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO8-19027A	43.001	Science	6,272	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO8-19078X	43.001	Science	27,852	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Smithsonian Institution Smithsonian Institution	GO8-19107B SP8-19003X	43.001 43.001	Science Science	13,463 43,217	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	SV6-86010	43.001	Science	45,217 82,753	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	TM8-19007X	43.001	Science	66,485	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	TM9-20006X	43.001	Science	25,131	
National Aeronautics and Space Administration	Pass-Through	Space Science Institute	Subaward no. 000799	43.001	Science	33,976	
National Aeronautics and Space Administration	Pass-Through	SRI International	119-000260	43.001	Science	(5,732)	-
National Aeronautics and Space Administration	Pass-Through	University Corporation for Atmospheric Research	SUBAWD000669	43.001	Science	17,608	-
National Aeronautics and Space Administration	Pass-Through	University of California - Berkeley	00009760	43.001	Science	49,808	-
National Aeronautics and Space Administration	Pass-Through	University of California - Berkeley	00009823 / 80NSSC18K0645	43.001	Science	2,171	-
National Aeronautics and Space Administration	Pass-Through	University of California - Davis	201403446-01	43.001	Science	55,738	-
National Aeronautics and Space Administration	Pass-Through	University of California - Los Angeles	2090 G TA481	43.001	Science	3,923	-
National Aeronautics and Space Administration	Pass-Through	University of Colorado	1554008	43.001	Science	34,570	-
National Aeronautics and Space Administration	Pass-Through	University of Colorado	1554484	43.001	Science	13,373	-
National Aeronautics and Space Administration	Pass-Through	University of Colorado Boulder	1555980	43.001	Science	11,186	-
National Aeronautics and Space Administration	Pass-Through	University of Maryland, The	65304-Z6144201	43.001	Science	32,302	-
National Aeronautics and Space Administration	Pass-Through	University of Maryland, The	Z6054002	43.001	Science	74,725	-
National Aeronautics and Space Administration	Pass-Through Pass Through	University of Maryland-Baltimore County (UMBC)	0000014591 PG15-26860-01	43.001 43.001	Science	(792)	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	University of Montana University of New Hampshire	17-013	43.001	Science Science	(91) 4,209	-
National Aeronautics and Space Administration	Pass-Through	University of New Hampshire	Subaward # 18-013	43.001	Science	4,209	-
National Aeronautics and Space Administration	Pass-Through	University of Texas at Austin	UTA18-001589	43.001	Science	13,270	-
National Aeronautics and Space Administration	Pass-Through	University of Wisconsin	849K951	43.001	Science	14,443	-
National Aeronautics and Space Administration	Pass-Through	William Marsh Rice University	R53461	43.001	Science	12,477	-
National Aeronautics and Space Administration	Pass-Through	Woods Hole Oceanographic Institute	A101330, WHOI Project 23143700	43.001	Science	76,927	-
National Aeronautics and Space Administration	Pass-Through	Woods Hole Research Center	Subcontract Agreement No. WHRC	43.001	Science	128,979	-
	3					\$ 13,110,018	\$ 763,019
N C 14 C 10 41 11 C	Direct		80NSSC18K1735	43.002	Aeronautics	\$ 48,137	\$ -
National Aeronautics and Space Administration							
National Aeronautics and Space Administration	Direct		80NSSC18M0149	43.002	Aeronautics	37,681	-
National Aeronautics and Space Administration National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct Direct		80NSSC18M0149 NNX16AH81A NNX16AP90A	43.002 43.002 43.002	Aeronautics Aeronautics	37,681 290,657 112,017	46,247

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Throug
Vational Aeronautics and Space Administration	Pass-Through	Georgia Institute of Technology	RK588-G1/AWD-102526-G1	43.002	Aeronautics	19,164	
dianal Association and Course A devicit duration	Direct		NNX16A074G	43.003	Exploration	\$ 507,656 \$ 25,914	
ational Aeronautics and Space Administration				43.003			\$ -
ational Aeronautics and Space Administration	Direct		NNX16AO73G		Exploration	22,649	
ational Aeronautics and Space Administration	Pass-Through	University of Colorado Boulder	1555631	43.003	Exploration	130,996	
						\$ 179,559	
ational Aeronautics and Space Administration	Direct		NNX15AW42A	43.007	Space Operations	\$ 8,109	
ational Aeronautics and Space Administration	Direct		NNX15AJ20H	43.008	Education	\$ 627,362	\$ 293,5
ational Aeronautics and Space Administration	Direct		NNX16AI92A	43.008	Education	24,027	
ational Aeronautics and Space Administration	Direct		NNX16AT21H	43.008	Education	66,022	
ational Aeronautics and Space Administration	Pass-Through	University of Alabama, Huntsville	2015-059	43.008	Education	4,727	
						\$ 722,138	\$ 293,5
ational Aeronautics and Space Administration	Direct		NNX14AL65H	43.009	Cross Agency Support	\$ 6,743	\$
ational Aeronautics and Space Administration	Direct		NNX14AL67H	43.009	Cross Agency Support	(3,836)	
ational Aeronautics and Space Administration	Direct		NNX17AD24G	43.009	Cross Agency Support	1,727,566	279,
1					5 J II	\$ 1,730,473	
tional Aeronautics and Space Administration	Direct		80NSSC17K0152	43.012	Space Technology	\$ 42,746	
tional Aeronautics and Space Administration	Direct		80NSSC17K0156	43.012	Space Technology	73,117	9
tional Aeronautics and Space Administration	Direct		80NSSC17K0150	43.012	Space Technology	73,762	
tional Aeronautics and Space Administration	Direct		80NSSC18K1151	43.012	Space Technology	54,012	
ional Aeronautics and Space Administration	Direct		80NSSC18K1161	43.012	Space Technology	56,199	
ional Aeronautics and Space Administration	Direct		80NSSC18K1190	43.012	Space Technology	82,832	
ional Aeronautics and Space Administration	Direct		80NSSC19K0219	43.012	Space Technology	22,884	
ional Aeronautics and Space Administration	Direct		NNX15AP46H	43.012	Space Technology	8,700	
ional Aeronautics and Space Administration	Direct		NNX15AQ37H	43.012	Space Technology	56,167	
ional Aeronautics and Space Administration	Direct		NNX15AQ43H	43.012	Space Technology	66,211	
onal Aeronautics and Space Administration	Direct		NNX16AM55H	43.012	Space Technology	4,924	
onal Aeronautics and Space Administration	Direct		NNX16AM61H	43.012	Space Technology	67,551	
ional Aeronautics and Space Administration	Direct		NNX16AM62H	43.012	Space Technology	69,904	
ional Aeronautics and Space Administration	Direct		NNX16AM92H	43.012	Space Technology	79,541	
ional Aeronautics and Space Administration	Direct		NNX16AR65G	43.012	Space Technology	169,044	
onal Aeronautics and Space Administration	Direct		NNX16AT35A	43.012	Space Technology	53,400	
ional Aeronautics and Space Administration	Direct		NNX16AT43G	43.012	Space Technology	240,633	
					1 65	\$ 1,221,627	\$
			Total National Aeronautics and Space	e Administration		\$ 28,177,455	\$ 1,932,
itute of Museum and Library Services	Pass-Through	Chicago Zoological Society	Agreement	45.RD		\$ 2.881	s
titute of Museum and Library Services	Direct		MA-30-16-0527-16	45.301	Museums for America	\$ 67,552	
itute of Museum and Library Services	Direct		MA-30-18-0240-18	45.301	Museums for America	55,961	3
itute of Museum and Library Services	Direct		MA-30-18-0240-18	45.501	Museums for America		0
			17 00 10 0000 10			\$ 123,513 \$ 99	3
itute of Museum and Library Services	Direct		AL-00-19-0002-19	45.312	National Leadership Grants		\$
itute of Museum and Library Services	Direct		LG-06-14-0122-14	45.312	National Leadership Grants	88,581	11
itute of Museum and Library Services	Direct		LG-96-18-0040-18	45.312	National Leadership Grants	157,244	
itute of Museum and Library Services	Pass-Through	Arizona State University	17-092	45.312	National Leadership Grants	24,560	
tute of Museum and Library Services	Pass-Through	Chicago Zoological Society	Indep Contractor Agrmt	45.312	National Leadership Grants	85,884	
	U					\$ 356,368	\$ 1
itute of Museum and Library Services	Direct		RE-00-15-0113-15	45.313	Laura Bush 21st Century Librarian Program	\$ 30,931	
itute of Museum and Library Services	Direct		RE-01-15-0086-15	45.313	Laura Bush 21st Century Librarian Program	58,561	φ
tute of Museum and Library Services	Direct		RE-05-15-0021-15			93,354	
tute of Museum and Library Services				45.313	Laura Bush 21st Century Librarian Program		
tute of Museum and Library Services	Direct		RE-07-18-0118-18	45.313	Laura Bush 21st Century Librarian Program	43,183	
tute of Museum and Library Services	Direct		RE-73-18-0059-18	45.313	Laura Bush 21st Century Librarian Program	147	
tute of Museum and Library Services	Direct		RE-95-17-0104-17	45.313	Laura Bush 21st Century Librarian Program	149,405	
						\$ 375,581	
			Total Institute of Museum and Library	y Services		\$ 858,343	\$ 11
					Promotion of the Arts Grants to Organizations and		
ional Endowment for the Arts	Direct		16-4200-7024	45.024	Individuals	\$ 19,713	\$
					Promotion of the Arts Grants to Organizations and		
ional Endowment for the Arts	Direct		17-4100-7142	45.024	Individuals	10,461	
					Promotion of the Arts Grants to Organizations and		
ional Endowment for the Arts	Direct		17-4400-7112	45.024	Individuals	24,955	
					Promotion of the Arts Grants to Organizations and		
ional Endowment for the Arts	Direct		1807845-44-18	45.024	Individuals Promotion of the Arts Grants to Organizations and	36,013	
onal Endowment for the Arts	Direct		1809973-38-18	45.024	Individuals	20,137	
	Direct		1000000 10	101021	individual.	\$ 111,279	\$
	Pass-Through	Michigan, State of, Council for Arts and Cultural Affairs	19PS4891ED	45.025	Promotion of the Arts Partnership Agreements	\$ 10,211	
onal Endowment for the Arts	1 ass-1110ugi	Whengan, State of, Council for Arts and Cultural Atlants	Total National Endowment for the Art		rionotion of the Arts rarticiship Agreements	\$ 121,490	
ional Endowment for the Arts			Total Pational Endowment for the All			- 121,490	~
ional Endowment for the Arts				45.RD		\$ 8,964	s
	Pass-Through	American Musicological Society	Grant Agreement				~
ional Endowment for the Humanities	Pass-Through Pass-Through	American Musicological Society	Grant Agreement RO-260882-18				
ional Endowment for the Humanities	Pass-Through Pass-Through	American Musicological Society American Musicological Society	Grant Agreement RQ-260882-18	45.RD		70,431	
onal Endowment for the Humanities onal Endowment for the Humanities	Pass-Through		RQ-260882-18	45.RD		70,431 \$ 79,395	\$
ional Endowment for the Humanities ional Endowment for the Humanities					Promotion of the Humanities Challenge Grants	70,431	\$ \$
tional Endowment for the Arts tional Endowment for the Humanities tional Endowment for the Humanities tional Endowment for the Humanities	Pass-Through		RQ-260882-18	45.RD	Promotion of the Humanities Challenge Grants Promotion of the Humanities Division of Preservation and Access	70,431 \$ 79,395	\$

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Jational Endowment for the Humanities	Direct		PW-234665-16	45.149	Promotion of the Humanities Division of Preservation and Access	(3,827) -
vational Endowment for the Humanities	Direct		1 W-254005-10	45.149	Promotion of the Humanities Division of Preservation and	(3,827	, -
National Endowment for the Humanities	Direct		PW-234763-16	45.149	Access	(1,320	
National Endowment for the Humanities	Direct		FA-251067-17	45.160	Promotion of the Humanities Fellowships and Stipends	\$ (5,620 \$ 39,143	
National Endowment for the Humanities	Direct		FA-251067-17 FA-251469-17	45.160	Promotion of the Humanities Fellowships and Stipends	5 59,143	
					· · · · · · · · · · · · · · · · · · ·	\$ (22,577	
National Endowment for the Humanities	Direct		RQ-249784-16	45.161	Promotion of the Humanities Research	\$ 144,791	
National Endowment for the Humanities National Endowment for the Humanities	Direct Direct		RZ-249792-16 RZ-260848-18	45.161 45.161	Promotion of the Humanities Research Promotion of the Humanities Research	133,706	
National Endowment for the Humanities	Pass-Through	American Musicological Society	Award Letter Dated 11/12/14	45.161	Promotion of the Humanities Research	(820	
	0	6 ,				\$ 277,696	
National Endowment for the Humanities	Direct		HZ-259485-18	45.169	Promotion of the Humanities Office of Digital Humanities	\$ 64,473	
National Endowment for the Humanities	Pass-Through	Gallaudet University	HAA-258756-18	45.169	Promotion of the Humanities Office of Digital Humanities	20,917 \$ 85,390	
			Total National Endowment for the Hu	manities		\$ 499,365	
National Science Foundation	Direct		1903736	47.RD		\$ 174,579	¢
National Science Foundation	Direct		IPA Agreement	47.RD		331,558	
National Science Foundation	Direct		IPA Agreement	47.RD		278,938	
National Science Foundation	Pass-Through	American Educational Research Association	Agreement	47.RD		11,906	
National Science Foundation	Pass-Through	Antora Energy, Inc	Roundtable Research Agreement	47.RD		103,809	
National Science Foundation National Science Foundation	Pass-Through Pass-Through	Indiana University Princeton University	BL-4843252-UM SUB0000275	47.RD 47.RD		38,728 76,049	
National Science Foundation	Pass-Through	Sassafras Tech Collective	1842949	47.RD		39,758	
	U					\$ 1,055,325	s -
National Science Foundation	Direct		1240264	47.041	Engineering	\$ 142,868	
National Science Foundation National Science Foundation	Direct Direct		1454188 1462060	47.041 47.041	Engineering	163,391 97,686	
National Science Foundation	Direct		1462084	47.041	Engineering Engineering	91,763	
National Science Foundation	Direct		1462267	47.041	Engineering	29,359	
National Science Foundation	Direct		1462292	47.041	Engineering	(1,324	
National Science Foundation	Direct		1462910	47.041	Engineering	22,363	
National Science Foundation National Science Foundation	Direct Direct		1463474 1500095	47.041 47.041	Engineering Engineering	(1,485) (26,591	
National Science Foundation	Direct		1500124	47.041	Engineering	50,234	
National Science Foundation	Direct		1500377	47.041	Engineering	22,241	-
National Science Foundation	Direct		1507192	47.041	Engineering	83,254	
National Science Foundation National Science Foundation	Direct		1507928	47.041	Engineering	122,276	
National Science Foundation	Direct Direct		1508943 1509354	47.041 47.041	Engineering Engineering	141,620 99,083	
National Science Foundation	Direct		1509691	47.041	Engineering	(18,256	
National Science Foundation	Direct		1511720	47.041	Engineering	20,711	-
National Science Foundation	Direct		1511834	47.041	Engineering	159,877	-
National Science Foundation National Science Foundation	Direct Direct		1523287 1531533	47.041 47.041	Engineering Engineering	10,701 207,288	- 68,071
National Science Foundation	Direct		1533557	47.041	Engineering	100,245	
National Science Foundation	Direct		1534003	47.041	Engineering	246,552	
National Science Foundation	Direct		1536087	47.041	Engineering	563	
National Science Foundation	Direct		1536188 1536444	47.041	Engineering	57,253	
National Science Foundation National Science Foundation	Direct Direct		1536603	47.041 47.041	Engineering Engineering	2,302 9,537	
National Science Foundation	Direct		1536834	47.041	Engineering	109,463	
National Science Foundation	Direct		1536924	47.041	Engineering	28,391	-
National Science Foundation	Direct		1537222	47.041	Engineering	94,737	
National Science Foundation National Science Foundation	Direct Direct		1537360 1537440	47.041 47.041	Engineering Engineering	(68,704 115,736	
National Science Foundation	Direct		1537582	47.041	Engineering	44,460	
National Science Foundation	Direct		1537711	47.041	Engineering	16,921	-
National Science Foundation	Direct		1538180	47.041	Engineering	(9,104	
National Science Foundation	Direct		1547073	47.041	Engineering	8,814	
National Science Foundation National Science Foundation	Direct Direct		1547091 1547987	47.041 47.041	Engineering Engineering	26,984 65,422	
National Science Foundation	Direct		1548201	47.041	Engineering	8,350	
National Science Foundation	Direct		1549670	47.041	Engineering	11,339	-
National Science Foundation	Direct		1552534	47.041	Engineering	1,199,761	-
National Science Foundation National Science Foundation	Direct Direct		1552545 1552580	47.041 47.041	Engineering	64,005 136,905	
National Science Foundation	Direct		1552580	47.041	Engineering Engineering	136,903	-
National Science Foundation	Direct		1553860	47.041	Engineering	70,645	-
National Science Foundation	Direct		1553873	47.041	Engineering	22,132	-
National Science Foundation	Direct		1554349	47.041	Engineering	93,597	
National Science Foundation	Direct Direct		1561791 1561794	47.041 47.041	Engineering Engineering	51,724 143,350	
National Science Foundation							

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		CFDA Program Title	Federal Expenditures	Pass-Throug
ational Science Foundation ational Science Foundation	Direct		1562254 1562297	47.041	Engineering		89,456 (295)	-
ional Science Foundation	Direct Direct		1562388	47.041 47.041	Engineering Engineering		52,942	-
ional Science Foundation	Direct		1562612	47.041	Engineering		66,610	-
onal Science Foundation	Direct		1565355	47.041	Engineering		98,745	-
ional Science Foundation	Direct		1565863	47.041	Engineering		70,720	-
ional Science Foundation	Direct		1602183	47.041	Engineering		16,524	-
ional Science Foundation	Direct		1604069	47.041	Engineering		36,523	-
ional Science Foundation	Direct		1604903	47.041	Engineering		74,732	-
ional Science Foundation	Direct		1605202	47.041	Engineering		121,175	-
ional Science Foundation	Direct		1607250	47.041	Engineering		89,256	24,5
ional Science Foundation	Direct		1608338	47.041	Engineering		128,550	-
ional Science Foundation	Direct		1608361	47.041	Engineering		96,171	
ional Science Foundation	Direct		1623572	47.041	Engineering		(382)	
ional Science Foundation	Direct		1634505	47.041	Engineering		142,136	
onal Science Foundation	Direct		1634545 1634676	47.041	Engineering		99,483 71,059	
ional Science Foundation ional Science Foundation	Direct Direct		1634680	47.041 47.041	Engineering		96,351	
ional Science Foundation	Direct		1634694	47.041	Engineering Engineering		69,573	
onal Science Foundation	Direct		1634824	47.041	Engineering		27,138	
ional Science Foundation	Direct		1636132	47.041	Engineering		75,459	
ional Science Foundation	Direct		1636876	47.041	Engineering		6,628	
ional Science Foundation	Direct		1638199	47.041	Engineering		13,844	
onal Science Foundation	Direct		1639244	47.041	Engineering		776,685	263,
onal Science Foundation	Direct		1640417	47.041	Engineering		62,827	
ional Science Foundation	Direct		1640633	47.041	Engineering		56,348	
onal Science Foundation	Direct		1643280	47.041	Engineering		1,209,339	737,
ional Science Foundation	Direct		1645229	47.041	Engineering		31,131	
ional Science Foundation	Direct		1648870	47.041	Engineering		53,326	
ional Science Foundation	Direct		1653339	47.041	Engineering		(1,952)	
ional Science Foundation	Direct		1661568	47.041	Engineering		98,472	
onal Science Foundation	Direct		1662553	47.041	Engineering		56,249	
onal Science Foundation	Direct		1662774	47.041	Engineering		81,365	
onal Science Foundation	Direct		1663288	47.041	Engineering		92,491	
onal Science Foundation	Direct		1700848	47.041	Engineering		80,718	
onal Science Foundation	Direct		1701057	47.041	Engineering		83,585	
ional Science Foundation	Direct		1701343 1702418	47.041 47.041	Engineering		159,442	
ional Science Foundation	Direct Direct		1702418 1703435	47.041	Engineering		97,867 107,185	
ional Science Foundation	Direct		1703543	47.041	Engineering Engineering		68,595	
ional Science Foundation	Direct		1705273	47.041	Engineering		72,649	
onal Science Foundation	Direct		1707232	47.041	Engineering		4,357	
ional Science Foundation	Direct		1708700	47.041	Engineering		25,815	
ional Science Foundation	Direct		1708706	47.041	Engineering		241,658	
ional Science Foundation	Direct		1709094	47.041	Engineering		34,135	
ional Science Foundation	Direct		1709207	47.041	Engineering		81,914	
onal Science Foundation	Direct		1710940	47.041	Engineering		72,500	
onal Science Foundation	Direct		1724168	47.041	Engineering		13,859	
ional Science Foundation	Direct		1726524	47.041	Engineering		260,592	
ional Science Foundation	Direct		1727371	47.041	Engineering		46,634	
onal Science Foundation	Direct		1727618	47.041	Engineering		114,197	
onal Science Foundation	Direct		1727918	47.041	Engineering		417,917	
onal Science Foundation	Direct		1730549	47.041	Engineering		94,596	
onal Science Foundation	Direct		1733665	47.041	Engineering		119,620	
onal Science Foundation	Direct		1740497	47.041	Engineering		704	
onal Science Foundation	Direct		1740865	47.041	Engineering		4,198	
onal Science Foundation onal Science Foundation	Direct		1741618	47.041	Engineering		356,740	221
	Direct		1745710 1745866	47.041	Engineering		3 32,581	
onal Science Foundation onal Science Foundation	Direct		1743866	47.041	Engineering		32,381 36,890	
	Direct			47.041	Engineering			
nal Science Foundation nal Science Foundation	Direct Direct		1748414 1750339	47.041 47.041	Engineering Engineering		8,014 19,619	
nal Science Foundation	Direct		1750339 1750744	47.041	Engineering		2,645	
nal Science Foundation	Direct		1751093	47.041	Engineering		37,432	
nal Science Foundation	Direct		1751426	47.041	Engineering		34,291	
nal Science Foundation	Direct		1751590	47.041	Engineering		78,546	
nal Science Foundation	Direct		1757522	47.041	Engineering		37,269	
onal Science Foundation	Direct		1760247	47.041	Engineering		169,623	
onal Science Foundation	Direct		1760291	47.041	Engineering		42,896	
onal Science Foundation	Direct		1761300	47.041	Engineering		70,340	
onal Science Foundation	Direct		1762247	47.041	Engineering		19,550	
onal Science Foundation	Direct		1762369	47.041	Engineering		8,763	
ional Science Foundation	Direct		1762657	47.041	Engineering		109,494	
ional Science Foundation	Direct		1802390	47.041	Engineering		24,080	
onal Science Foundation	Direct		1803730	47.041	Engineering		88,602	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation National Science Foundation	Direct		1803983 1804053	47.041	Engineering		109,105 23,280	-
National Science Foundation	Direct Direct		1804033 1804287	47.041 47.041	Engineering Engineering		49,127	-
National Science Foundation	Direct		1804237	47.041	Engineering		45,964	-
National Science Foundation	Direct		1804458	47.041	Engineering		39,885	
National Science Foundation	Direct		1804945	47.041	Engineering		64,990	-
National Science Foundation	Direct		1805085	47.041	Engineering		129,986	42,881
National Science Foundation	Direct		1807940	47.041	Engineering		65,014	-
National Science Foundation	Direct		1809365	47.041	Engineering		12,397	-
National Science Foundation	Direct		1810144	47.041	Engineering		160,743	-
National Science Foundation	Direct		1813963	47.041	Engineering		83,887	-
National Science Foundation	Direct		1817353	47.041	Engineering		44,735	-
National Science Foundation National Science Foundation	Direct Direct		1824635 1825133	47.041 47.041	Engineering		10,062 92,483	-
National Science Foundation	Direct		1825669	47.041	Engineering Engineering		50,998	
National Science Foundation	Direct		1825918	47.041	Engineering		57,371	_
National Science Foundation	Direct		1825931	47.041	Engineering		61,584	-
National Science Foundation	Direct		1825945	47.041	Engineering		60,869	-
National Science Foundation	Direct		1826621	47.041	Engineering		130,636	-
National Science Foundation	Direct		1827123	47.041	Engineering		115,916	-
National Science Foundation	Direct		1830338	47.041	Engineering		77,341	-
National Science Foundation	Direct		1832591	47.041	Engineering		11,435	-
National Science Foundation	Direct		1840433	47.041	Engineering		78,148	-
National Science Foundation	Direct		1840492	47.041	Engineering		59,887	3,410
National Science Foundation	Direct		1840559	47.041	Engineering		62,073	-
National Science Foundation	Direct		1841755	47.041	Engineering		57,343	-
National Science Foundation National Science Foundation	Direct		1844132 1845093	47.041	Engineering		113,210 2,386	-
National Science Foundation National Science Foundation	Direct Direct		1845093 1846969	47.041 47.041	Engineering Engineering		2,386	-
National Science Foundation	Direct		1855354	47.041	Engineering		9,529	
National Science Foundation	Direct		1901582	47.041	Engineering		28,569	_
National Science Foundation	Direct		1903449	47.041	Engineering		38,719	-
National Science Foundation	Direct		1910283	47.041	Engineering		20,372	-
National Science Foundation	Direct		CBET 0644639	47.041	Engineering		(132,352)	-
National Science Foundation	Direct		CBET 1036672	47.041	Engineering		(2,635)	-
National Science Foundation	Direct		CBET 1253157	47.041	Engineering		26,052	-
National Science Foundation	Direct		CBET 1349921	47.041	Engineering		170,993	-
National Science Foundation	Direct		CBET 1351188	47.041	Engineering		21,557	-
National Science Foundation	Direct		CBET 1351482	47.041	Engineering		55,423	-
National Science Foundation	Direct		CBET 1402845	47.041	Engineering		54,577	-
National Science Foundation	Direct		CBET 1435269 CBET 1436056	47.041 47.041	Engineering		10,057 240,663	-
National Science Foundation National Science Foundation	Direct Direct		CBET 1430030 CBET 1437601	47.041	Engineering Engineering		15,017	-
National Science Foundation	Direct		CBET 1437601 CBET 1438560	47.041	Engineering		(13,301)	
National Science Foundation	Direct		CBET-1402707	47.041	Engineering		16,009	
National Science Foundation	Direct		CBET-1403339	47.041	Engineering		61,861	-
National Science Foundation	Direct		CBET-1553028	47.041	Engineering		93,012	-
National Science Foundation	Direct		CBET-1604087	47.041	Engineering		170,418	-
National Science Foundation	Direct		CBET-1653080	47.041	Engineering		171,663	-
National Science Foundation	Direct		CBET-1653611	47.041	Engineering		128,544	-
National Science Foundation	Direct		CMMI 1253440	47.041	Engineering		(1,849)	-
National Science Foundation	Direct		CMMI 1300010	47.041	Engineering		80,937	-
National Science Foundation	Direct		CMMI 1327316	47.041	Engineering		61,026	-
National Science Foundation	Direct		CMMI 1350202	47.041	Engineering		(39,351)	-
National Science Foundation National Science Foundation	Direct Direct		CMMI 1351403 CMMI 1351412	47.041 47.041	Engineering		36,348 98,675	-
National Science Foundation	Direct		CMMI 1351412 CMMI 1362003	47.041	Engineering Engineering		98,675 84,405	-
National Science Foundation	Direct		CMMI 1362503	47.041	Engineering		(756)	-
National Science Foundation	Direct		CMMI 1362547	47.041	Engineering		19,746	-
National Science Foundation	Direct		CMMI 1362754	47.041	Engineering		35,658	-
National Science Foundation	Direct		CMMI 1362975	47.041	Engineering		1,311	-
National Science Foundation	Direct		CMMI 1404747	47.041	Engineering		2,880	-
National Science Foundation	Direct		CMMI 1433066	47.041	Engineering		(597)	-
National Science Foundation	Direct		CMMI 1434693	47.041	Engineering		(6,049)	-
National Science Foundation	Direct		CMMI 1435188	47.041	Engineering		3,090	-
National Science Foundation	Direct		CMMI 1436631	47.041	Engineering		25,379	-
National Science Foundation	Direct		CMMI 1634709	47.041	Engineering		131,056	-
National Science Foundation	Direct		CMMI 1638197 CMMI 1350605	47.041	Engineering		96,726	-
National Science Foundation National Science Foundation	Direct Direct		CMMI-1350605 CMMI-1351456	47.041 47.041	Engineering Engineering		86,632 (2,492)	-
National Science Foundation	Direct		CMMI-1351456 CMMI-1351469	47.041	Engineering		(2,492) 67,470	-
National Science Foundation	Direct		CMMI-1453346	47.041	Engineering		109,374	-
National Science Foundation	Direct		CNS 1253172	47.041	Engineering		70,550	-
National Science Foundation	Direct		ECCS 1227879	47.041	Engineering		35,291	-
National Science Foundation	Direct		ECCS 1404814	47.041	Engineering		5,073	-
National Science Foundation	Direct		ECCS 1407967	47.041	Engineering		(4,253)	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
National Science Foundation National Science Foundation	Direct Direct		ECCS 1428069 ECCS 1446521	47.041 47.041	Engineering Engineering	15,191 81,836	-
National Science Foundation	Direct		ECCS 1607796	47.041	Engineering	81,856	-
National Science Foundation	Direct		ECCS-1452916	47.041	Engineering	81,854 88,473	-
National Science Foundation	Direct		ECCS-1610362	47.041	Engineering	106,967	-
National Science Foundation	Direct		ECCS-1644731	47.041	Engineering	17,965	-
National Science Foundation	Direct		EEC-1329217	47.041	Engineering	(4,632)	_
National Science Foundation	Direct		EECCS 1407977	47.041	Engineering	(4,274)	-
National Science Foundation	Direct		EFRI 1332342	47.041	Engineering	17,345	-
National Science Foundation	Direct		IIP 1134676	47.041	Engineering	(2,153)	-
National Science Foundation	Direct		IIP-1340372	47.041	Engineering	(6,603)	-
National Science Foundation	Pass-Through	Alligant Scientific	Research Agreement	47.041	Engineering	50,000	
National Science Foundation	Pass-Through	Boston University	4500002851	47.041	Engineering	276,277	-
National Science Foundation	Pass-Through	Boston University	4500002858	47.041	Engineering	7,300	-
National Science Foundation	Pass-Through	Boston University	4500002489/4500002490	47.041	Engineering	251,044	-
National Science Foundation	Pass-Through	Care Progress LLC	Roundtable Research Agreeement	47.041	Engineering	15,723	-
National Science Foundation	Pass-Through	Iowa State University of Science and Technology (aka Iowa State University)	420-72-34/19 69672 23	47.041	Engineering	43,783	-
National Science Foundation	Pass-Through	Iowa State University of Science and Technology (aka Iowa State University)	4207275B	47.041	Engineering	43,449	-
National Science Foundation	Pass-Through	Kettering University	531098A/PO#P0036341	47.041	Engineering	28,392	-
National Science Foundation	Pass-Through	North Carolina State University	2012-1067-04	47.041	Engineering	193,779	-
National Science Foundation	Pass-Through	North Carolina State University	2015-0995-01	47.041	Engineering	(12,501)	-
National Science Foundation	Pass-Through	North Carolina State University	2018-0906-01	47.041	Engineering	8,012	-
National Science Foundation	Pass-Through	Ohio State University, The	60061807	47.041	Engineering	252,290	-
National Science Foundation	Pass-Through	Oklahoma State University	1-565747-MICH	47.041	Engineering	112,937	-
National Science Foundation	Pass-Through	Otzi Bio LLC	Research Agreement	47.041	Engineering	44,537	-
National Science Foundation	Pass-Through	Taza Aya LLC	Roundtable Research Agrm	47.041	Engineering	82,023	-
National Science Foundation National Science Foundation	Pass-Through Pass-Through	Texas A & M University University of California - Santa Barbara	C8321 KK1822	47.041 47.041	Engineering Engineering	2,262 7,195	-
National Science Foundation	Pass-Through Pass-Through	University of California - Santa Barbara	KK1822 KK1850	47.041	Engineering	92,873	-
National Science Foundation	Pass-Through	University of Colorado	1549958 PO#1000175809	47.041	Engineering	(435)	-
National Science Foundation	Pass-Through	University of Florida, The	UFDSP00011776	47.041	Engineering	(433)	-
National Science Foundation	Pass-Through	University of Minnesota	A0005262101	47.041	Engineering	231,940	
National Science Foundation	Pass-Through	University of Minnesota	A007037601	47.041	Engineering	74,532	_
National Science Foundation	Pass-Through	University of Southern California	88868935	47.041	Engineering	73,287	-
National Science Foundation	Pass-Through	University of Southern California	91665631	47.041	Engineering	354,374	162,090
National Science Foundation	Pass-Through	University of Washington	UWSC9408	47.041	Engineering	39,323	-
National Science Foundation	Pass-Through	Vanderbilt University	UNIV59840	47.041	Engineering	25,143	-
National Science Foundation	Pass-Through	Venturewell	Agreement for Services	47.041	Engineering	8,000	-
National Science Foundation	Pass-Through	Virginia Polytechnic Institute and State University	480039-19337	47.041	Engineering	3,305	-
National Science Foundation	Pass-Through	Washington University in St. Louis	WU-19-152	47.041	Engineering	9,922 \$ 18,599,450	\$ 1,557,696
National Science Foundation	Direct		1452392	47.049	Mathematical and Physical Sciences	\$ 104,520	
National Science Foundation	Direct		1452636	47.049	Mathematical and Physical Sciences	109,027	·
National Science Foundation	Direct		1453893	47.049	Mathematical and Physical Sciences	110,672	-
National Science Foundation	Direct		1453894	47.049	Mathematical and Physical Sciences	51,673	-
National Science Foundation	Direct		1454010	47.049	Mathematical and Physical Sciences	47,445	-
National Science Foundation	Direct		1460331	47.049	Mathematical and Physical Sciences	17,852	-
National Science Foundation	Direct		1460990	47.049	Mathematical and Physical Sciences	53,460	-
National Science Foundation	Direct		1462368	47.049	Mathematical and Physical Sciences	(316)	-
National Science Foundation	Direct		1464477	47.049	Mathematical and Physical Sciences	40,495	-
National Science Foundation	Direct		1464514	47.049	Mathematical and Physical Sciences	59,305	-
National Science Foundation	Direct		1464584	47.049	Mathematical and Physical Sciences	103,556	-
National Science Foundation	Direct		1464693	47.049	Mathematical and Physical Sciences	77,318	-
National Science Foundation	Direct		1464696	47.049	Mathematical and Physical Sciences	4,989	-
National Science Foundation	Direct		1500126	47.049	Mathematical and Physical Sciences	(1,128)	-
National Science Foundation	Direct		1500142	47.049	Mathematical and Physical Sciences	98,281	-
National Science Foundation	Direct		1501461	47.049	Mathematical and Physical Sciences	2,554	-
National Science Foundation	Direct		1501625	47.049	Mathematical and Physical Sciences	90,254	-
National Science Foundation	Direct		1505385	47.049 47.049	Mathematical and Physical Sciences	160,463 99,359	-
National Science Foundation National Science Foundation	Direct Direct		1505458 1505635	47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	99,359 61,276	-
National Science Foundation National Science Foundation	Direct		1505635 1505932	47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	61,276	
National Science Foundation	Direct		1506932	47.049	Mathematical and Physical Sciences	11,412	-
National Science Foundation	Direct		1506055	47.049	Mathematical and Physical Sciences	178,678	
National Science Foundation	Direct		1506093	47.049	Mathematical and Physical Sciences	122,679	-
National Science Foundation	Direct		1506035	47.049	Mathematical and Physical Sciences	59,475	-
National Science Foundation	Direct		1506273	47.049	Mathematical and Physical Sciences	133,156	-
National Science Foundation	Direct		1506540	47.049	Mathematical and Physical Sciences	352,696	-
National Science Foundation	Direct		1507033	47.049	Mathematical and Physical Sciences	292,233	188,498
National Science Foundation	Direct		1508485	47.049	Mathematical and Physical Sciences	144,817	-
National Science Foundation	Direct		1508492	47.049	Mathematical and Physical Sciences	(12,023)	4,748
National Science Foundation	Direct		1510429	47.049	Mathematical and Physical Sciences	105,435	-
National Science Foundation	Direct		1513054	47.049	Mathematical and Physical Sciences	7,117	-
National Science Foundation	Direct		1513379	47.049	Mathematical and Physical Sciences	278,816	-
National Science Foundation	Direct		1513595	47.049	Mathematical and Physical Sciences	8,367	-
National Science Foundation	Direct		1514670	47.049	Mathematical and Physical Sciences	47,199	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Thro
ional Science Foundation ional Science Foundation	Direct Direct		1514835 1514838	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	23,277 93,209	
onal Science Foundation	Direct		1515001	47.049	Mathematical and Physical Sciences	84,241	
onal Science Foundation	Direct		1515161	47.049	Mathematical and Physical Sciences	46,331	
onal Science Foundation	Direct		1516075	47.049	Mathematical and Physical Sciences	50,831	
onal Science Foundation	Direct		1519117	47.049	Mathematical and Physical Sciences	(19,004)	
nal Science Foundation	Direct		1521158	47.049	Mathematical and Physical Sciences	23,193	
onal Science Foundation	Direct		1521551	47.049	Mathematical and Physical Sciences	14,123	
onal Science Foundation	Direct		1534221	47.049	Mathematical and Physical Sciences	101,739	
nal Science Foundation	Direct		1535628	47.049	Mathematical and Physical Sciences	70,669	
nal Science Foundation	Direct		1539709	47.049	Mathematical and Physical Sciences	(551)	
nal Science Foundation	Direct		1551994	47.049	Mathematical and Physical Sciences	102,539	
nal Science Foundation nal Science Foundation	Direct Direct		1564457 1565795	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	104,612 160,321	
nal Science Foundation	Direct		1565837	47.049	Mathematical and Physical Sciences	121,408	
al Science Foundation	Direct		1600138	47.049	Mathematical and Physical Sciences	53,643	
al Science Foundation	Direct		1600223	47.049	Mathematical and Physical Sciences	89,251	
al Science Foundation	Direct		1606348	47.049	Mathematical and Physical Sciences	126,734	
nal Science Foundation	Direct		1606553	47.049	Mathematical and Physical Sciences	135,943	
al Science Foundation	Direct		1607260	47.049	Mathematical and Physical Sciences	102,230	
al Science Foundation	Direct		1607570	47.049	Mathematical and Physical Sciences	198,373	
al Science Foundation	Direct		1607779	47.049	Mathematical and Physical Sciences	144,680	
al Science Foundation	Direct		1608331	47.049	Mathematical and Physical Sciences	132,544	
al Science Foundation	Direct		1609051	47.049	Mathematical and Physical Sciences	62,146	
al Science Foundation	Direct		1609840	47.049	Mathematical and Physical Sciences	110,216	
al Science Foundation	Direct		1610344	47.049	Mathematical and Physical Sciences	78,180	
al Science Foundation	Direct		1610742	47.049	Mathematical and Physical Sciences	112,789	
al Science Foundation	Direct		1613536	47.049	Mathematical and Physical Sciences	79,430	
al Science Foundation	Direct		1622768	47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	(34,965)	
al Science Foundation al Science Foundation	Direct		1641065 1649873	47.049 47.049	Mathematical and Physical Sciences	(132)	
al Science Foundation	Direct Direct		1653433	47.049	Mathematical and Physical Sciences	108,324 81,419	
al Science Foundation	Direct		1654149	47.049	Mathematical and Physical Sciences	136,570	
I Science Foundation	Direct		1659393	47.049	Mathematical and Physical Sciences	193,819	
al Science Foundation	Direct		1664531	47.049	Mathematical and Physical Sciences	57,694	
al Science Foundation	Direct		1701622	47.049	Mathematical and Physical Sciences	149,572	
al Science Foundation	Direct		1705418	47.049	Mathematical and Physical Sciences	153,028	
al Science Foundation	Direct		1707260	47.049	Mathematical and Physical Sciences	243,020	
al Science Foundation	Direct		1707377	47.049	Mathematical and Physical Sciences	142,655	
nal Science Foundation	Direct		1707620	47.049	Mathematical and Physical Sciences	165,330	
al Science Foundation	Direct		1707640	47.049	Mathematical and Physical Sciences	269,462	
nal Science Foundation	Direct		1708043	47.049	Mathematical and Physical Sciences	111,764	
al Science Foundation	Direct		1708062	47.049	Mathematical and Physical Sciences	145,563	
nal Science Foundation	Direct		1709163	47.049	Mathematical and Physical Sciences	76,862	
al Science Foundation	Direct		1710848	47.049	Mathematical and Physical Sciences	138,684	
al Science Foundation	Direct		1712933	47.049	Mathematical and Physical Sciences	53,065	
al Science Foundation	Direct		1715140	47.049	Mathematical and Physical Sciences	207,003	
nal Science Foundation nal Science Foundation	Direct		1719727 1725482	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	37,071 29,825	
al Science Foundation	Direct Direct		1725482 1726457	47.049	Mathematical and Physical Sciences	102,090	
al Science Foundation	Direct		1743665	47.049	Mathematical and Physical Sciences	49,781	
al Science Foundation	Direct		1745005	47.049	Mathematical and Physical Sciences	136,104	
al Science Foundation	Direct		1748529	47.049	Mathematical and Physical Sciences	177,141	
al Science Foundation	Direct		1749774	47.049	Mathematical and Physical Sciences	69,237	
al Science Foundation	Direct		1751462	47.049	Mathematical and Physical Sciences	86,470	
al Science Foundation	Direct		1751791	47.049	Mathematical and Physical Sciences	111,801	
al Science Foundation	Direct		1757523	47.049	Mathematical and Physical Sciences	112,696	
al Science Foundation	Direct		1757574	47.049	Mathematical and Physical Sciences	53,496	
al Science Foundation	Direct		1761603	47.049	Mathematical and Physical Sciences	14,004	
al Science Foundation	Direct		1764112	47.049	Mathematical and Physical Sciences	56,280	
al Science Foundation	Direct		1800197	47.049	Mathematical and Physical Sciences	1,491	
al Science Foundation	Direct		1800325	47.049	Mathematical and Physical Sciences	134,203	
Il Science Foundation	Direct		1801687	47.049	Mathematical and Physical Sciences	51,989	
al Science Foundation	Direct		1801689	47.049	Mathematical and Physical Sciences	79,500	
al Science Foundation	Direct		1801697	47.049	Mathematical and Physical Sciences	2,337	
al Science Foundation	Direct		1802234	47.049	Mathematical and Physical Sciences	28,707	
al Science Foundation	Direct		1804463	47.049	Mathematical and Physical Sciences	96,315	
al Science Foundation al Science Foundation	Direct		1806577 1806809	47.049 47.049	Mathematical and Physical Sciences	215,228	
	Direct				Mathematical and Physical Sciences Mathematical and Physical Sciences	82,035	
al Science Foundation al Science Foundation	Direct		1807079 1807316	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	59,049 38,832	
nal Science Foundation	Direct Direct		1807316 1807338	47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	38,832 298,738	
nal Science Foundation	Direct		1807538	47.049	Mathematical and Physical Sciences	65,908	
al Science Foundation	Direct		1807687	47.049	Mathematical and Physical Sciences	53,261	
						112,672	
al Science Foundation	Direct		1807755	47.049	Mathematical and Physical Sciences		

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Thre
tional Science Foundation	Direct Direct		1808342 1808541	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	9,802 73,406	
tional Science Foundation	Direct		1810119	47.049	Mathematical and Physical Sciences	159,599	
ional Science Foundation	Direct		1810280	47.049	Mathematical and Physical Sciences	59,512	
onal Science Foundation	Direct		1811083	47.049	Mathematical and Physical Sciences	23,328	
onal Science Foundation	Direct		1811734	47.049	Mathematical and Physical Sciences	46,024	
onal Science Foundation	Direct		1811819	47.049	Mathematical and Physical Sciences	28,000	
onal Science Foundation	Direct		1811889	47.049	Mathematical and Physical Sciences	31,153	
onal Science Foundation	Direct		1812314	47.049	Mathematical and Physical Sciences	314,630	
onal Science Foundation	Direct		1812625	47.049	Mathematical and Physical Sciences	67,516	
onal Science Foundation	Direct		1812739	47.049	Mathematical and Physical Sciences	128,297	
onal Science Foundation	Direct		1812831	47.049	Mathematical and Physical Sciences	40,508	
nal Science Foundation	Direct		1812961	47.049	Mathematical and Physical Sciences	27,314	
nal Science Foundation	Direct		1813003	47.049	Mathematical and Physical Sciences	122,191	
nal Science Foundation	Direct		1815403	47.049	Mathematical and Physical Sciences	23,042	
nal Science Foundation nal Science Foundation	Direct		1818766 1819094	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	28,671	
nal Science Foundation	Direct			47.049	Mathematical and Physical Sciences	83,795 17,918	
nal Science Foundation	Direct Direct		1821243 1825533	47.049	Mathematical and Physical Sciences	39,964	
nal Science Foundation	Direct		1825555	47.049	Mathematical and Physical Sciences	13,682	
nal Science Foundation	Direct		1830293	47.049	Mathematical and Physical Sciences	53,698	
al Science Foundation	Direct		1830235	47.049	Mathematical and Physical Sciences	31,899	
al Science Foundation	Direct		1836374	47.049	Mathematical and Physical Sciences	1,872	
al Science Foundation	Direct		1836435	47.049	Mathematical and Physical Sciences	42,103	
al Science Foundation	Direct		1836529	47.049	Mathematical and Physical Sciences	58,375	
al Science Foundation	Direct		1836530	47.049	Mathematical and Physical Sciences	39,388	
al Science Foundation	Direct		1840278	47.049	Mathematical and Physical Sciences	150,046	
al Science Foundation	Direct		1841149	47.049	Mathematical and Physical Sciences	10,500	
al Science Foundation	Direct		1847837	47.049	Mathematical and Physical Sciences	16,707	
al Science Foundation	Direct		1847847	47.049	Mathematical and Physical Sciences	17,286	
al Science Foundation	Direct		1847855	47.049	Mathematical and Physical Sciences	53,679	
al Science Foundation	Direct		1852239	47.049	Mathematical and Physical Sciences	52,800	
al Science Foundation	Direct		1852749	47.049	Mathematical and Physical Sciences	46,379	
al Science Foundation	Direct		1900266	47.049	Mathematical and Physical Sciences	19,339	
al Science Foundation	Direct		1905421	47.049	Mathematical and Physical Sciences	1,560	
al Science Foundation	Direct		1922567	47.049	Mathematical and Physical Sciences	20,716	
al Science Foundation	Direct		AST 1312997	47.049	Mathematical and Physical Sciences	38	
al Science Foundation	Direct		AST 1412144	47.049	Mathematical and Physical Sciences	77,580	
nal Science Foundation	Direct		AST1411154	47.049	Mathematical and Physical Sciences	56,801	
nal Science Foundation	Direct		CHE 1062654	47.049	Mathematical and Physical Sciences	(851)	
al Science Foundation	Direct		CHE 1230236	47.049	Mathematical and Physical Sciences	(29,090)	
nal Science Foundation	Direct		CHE 1252322	47.049	Mathematical and Physical Sciences	(3,563)	
al Science Foundation	Direct		CHE 1253384	47.049	Mathematical and Physical Sciences	30,736	
al Science Foundation	Direct		CHE 1350060	47.049	Mathematical and Physical Sciences	38,352	
al Science Foundation	Direct		CHE 1350877	47.049	Mathematical and Physical Sciences	186,962	
nal Science Foundation	Direct		CHE 1362120	47.049	Mathematical and Physical Sciences	45,941	
al Science Foundation	Direct		CHE 1428479	47.049	Mathematical and Physical Sciences	61,575	
nal Science Foundation	Direct		CHE 1565782	47.049	Mathematical and Physical Sciences	106,658	
al Science Foundation	Direct		CHE 1565840	47.049	Mathematical and Physical Sciences	201,836	
nal Science Foundation	Direct		CHE-1607949	47.049	Mathematical and Physical Sciences	49,090	
al Science Foundation	Direct		CHE-1608553	47.049	Mathematical and Physical Sciences	68,180	
al Science Foundation	Direct		CHE-1654223	47.049	Mathematical and Physical Sciences	159,899	
al Science Foundation	Direct		CHE-1664961	47.049	Mathematical and Physical Sciences	116,478	
al Science Foundation	Direct		CHE-1664964	47.049	Mathematical and Physical Sciences	141,120	
al Science Foundation	Direct		DMR 0906909	47.049	Mathematical and Physical Sciences	(303)	
al Science Foundation	Direct		DMR 1054303	47.049	Mathematical and Physical Sciences	(1,000)	
al Science Foundation	Direct		DMR 1120923	47.049	Mathematical and Physical Sciences	199,754	
al Science Foundation	Direct		DMR 1254314	47.049	Mathematical and Physical Sciences	(43,158)	
al Science Foundation	Direct		DMR 1307884	47.049	Mathematical and Physical Sciences	(146)	
al Science Foundation	Direct		DMR 1352157	47.049	Mathematical and Physical Sciences	235,167	
al Science Foundation	Direct		DMR 1408817	47.049	Mathematical and Physical Sciences	(12,005)	
al Science Foundation	Direct		DMR 1409529	47.049	Mathematical and Physical Sciences	(6,029)	
I Science Foundation	Direct		DMR 1409620	47.049	Mathematical and Physical Sciences	(2,893)	
Il Science Foundation	Direct		DMR 1410282	47.049	Mathematical and Physical Sciences	89,122	
al Science Foundation	Direct		DMR 1410461	47.049	Mathematical and Physical Sciences	55,268	
al Science Foundation	Direct		DMR-1253347	47.049	Mathematical and Physical Sciences	(494)	
al Science Foundation	Direct		DMR-1435965	47.049	Mathematical and Physical Sciences	(25,570)	
nal Science Foundation	Direct		DMR-1561008	47.049	Mathematical and Physical Sciences	71,447	
nal Science Foundation	Direct		DMR-1607854	47.049	Mathematical and Physical Sciences	35,014	
nal Science Foundation	Direct		DMR-1625671	47.049	Mathematical and Physical Sciences	74,281	
al Science Foundation	Direct		DMR-1709005	47.049	Mathematical and Physical Sciences	104,552	
nal Science Foundation	Direct		DMS 1045119	47.049	Mathematical and Physical Sciences	32,325	
al Science Foundation	Direct		DMS 1253149	47.049	Mathematical and Physical Sciences	81,953	
nal Science Foundation	Direct		DMS 1351362	47.049	Mathematical and Physical Sciences	36,143	
al Science Foundation	Direct		DMS 1361541	47.049	Mathematical and Physical Sciences	77,351	
nal Science Foundation	Direct		DMS 1401384	47.049	Mathematical and Physical Sciences	68,378	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
National Science Foundation National Science Foundation	Direct Direct		DMS 1405245 DMS 1407698	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	41,569 11,917	-
National Science Foundation	Direct		DMS 1417053	47.049	Mathematical and Physical Sciences	45,701	
National Science Foundation	Direct		DMS 1418966	47.049	Mathematical and Physical Sciences	(6,957)	_
National Science Foundation	Direct		DMS 1601229	47.049	Mathematical and Physical Sciences	82,317	-
National Science Foundation	Direct		DMS 1613819	47.049	Mathematical and Physical Sciences	38,326	-
National Science Foundation	Direct		DMS 1839609	47.049	Mathematical and Physical Sciences	4,858	-
National Science Foundation	Direct		DMS-1361791	47.049	Mathematical and Physical Sciences	35,032	-
National Science Foundation	Direct		DMS-1564362	47.049	Mathematical and Physical Sciences	77,495	-
National Science Foundation	Direct		DMS1600011	47.049	Mathematical and Physical Sciences	124,068	-
National Science Foundation	Direct		DMS-1600494	47.049	Mathematical and Physical Sciences	48,902	-
National Science Foundation	Direct		DMS-1601844	47.049	Mathematical and Physical Sciences	82,375	-
National Science Foundation	Direct		DMS-1607840	47.049	Mathematical and Physical Sciences	112,817	-
National Science Foundation	Direct		DMS-1612549	47.049	Mathematical and Physical Sciences	32,237	-
National Science Foundation	Direct		DMS-1613170	47.049	Mathematical and Physical Sciences	93,286	-
National Science Foundation National Science Foundation	Direct Direct		DMS-1619907 DMS-1646108	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	39,620 550,015	-
National Science Foundation	Direct		DMS-1640108	47.049	Mathematical and Physical Sciences	31,860	-
National Science Foundation	Direct		DMS-1659203	47.049	Mathematical and Physical Sciences	80,611	-
National Science Foundation	Direct		DMS-1664692	47.049	Mathematical and Physical Sciences	67,087	
National Science Foundation	Direct		DMS-1664722	47.049	Mathematical and Physical Sciences	39,165	
National Science Foundation	Direct		DMS-1701437	47.049	Mathematical and Physical Sciences	58,611	_
National Science Foundation	Direct		DMS-1701576	47.049	Mathematical and Physical Sciences	68,124	
National Science Foundation	Direct		DMS-1701570	47.049	Mathematical and Physical Sciences	16,152	-
National Science Foundation	Direct		DMS-1712717	47.049	Mathematical and Physical Sciences	22,631	-
National Science Foundation	Direct		DMS1712962	47.049	Mathematical and Physical Sciences	158,682	-
National Science Foundation	Direct		DMS-1714094	47.049	Mathematical and Physical Sciences	99,336	-
National Science Foundation	Direct		DMS1719834	47.049	Mathematical and Physical Sciences	21,306	-
National Science Foundation	Direct		PHY 1205254	47.049	Mathematical and Physical Sciences	11,213	-
National Science Foundation	Direct		PHY 1360546	47.049	Mathematical and Physical Sciences	37,238	-
National Science Foundation	Direct		PHY 1401242	47.049	Mathematical and Physical Sciences	627	-
National Science Foundation	Direct		PHY 1402971	47.049	Mathematical and Physical Sciences	(3,076)	-
National Science Foundation	Direct		PHY 1413821	47.049	Mathematical and Physical Sciences	(3,200)	-
National Science Foundation	Direct		PHY 1417059	47.049	Mathematical and Physical Sciences	375,640	-
National Science Foundation	Direct		PHY 1559988	47.049	Mathematical and Physical Sciences	60,916	-
National Science Foundation	Pass-Through	American Physical Society	INC-005-2016	47.049	Mathematical and Physical Sciences	1,800	-
National Science Foundation	Pass-Through	Ball State University	G1108-UMD	47.049	Mathematical and Physical Sciences	80,147	-
National Science Foundation	Pass-Through	Boston University	4500002895	47.049	Mathematical and Physical Sciences	28,137	-
National Science Foundation	Pass-Through	Emory University	A022507	47.049	Mathematical and Physical Sciences	230,455	-
National Science Foundation	Pass-Through	Emory University	T439661	47.049	Mathematical and Physical Sciences	(53)	-
National Science Foundation	Pass-Through	Emory University	T849744	47.049	Mathematical and Physical Sciences	92,623	-
National Science Foundation	Pass-Through	National Radio Astronomy Observatory	SOSPA4-004	47.049	Mathematical and Physical Sciences	(907)	-
National Science Foundation	Pass-Through	National Radio Astronomy Observatory	SOSPA6-001 SP0024290-PROJ0009185/00933AST	47.049	Mathematical and Physical Sciences	5,908	-
National Science Foundation National Science Foundation	Pass-Through	Northwestern University	SUB0000031	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	20,998 92,317	-
National Science Foundation	Pass-Through Pass-Through	Princeton University Stony Brook University	76749/1136652/2/R&D	47.049	Mathematical and Physical Sciences	486,912	-
National Science Foundation	Pass-Through	Stony Brook University	76749/1136652/2/Tier2	47.049	Mathematical and Physical Sciences	649,694	250,210
National Science Foundation	Pass-Through	University of Arizona	1655677	47.049	Mathematical and Physical Sciences	21,254	250,210
National Science Foundation	Pass-Through	University of California - Santa Barbara	KK1516	47.049	Mathematical and Physical Sciences	(87)	_
National Science Foundation	Pass-Through	University of Massachusetts	17-009589B	47.049	Mathematical and Physical Sciences	28,883	-
National Science Foundation	Pass-Through	University of Massachusetts	18-010023 B	47.049	Mathematical and Physical Sciences	150,595	-
National Science Foundation	Pass-Through	University of Pennsylvania	574799	47.049	Mathematical and Physical Sciences	25,794	-
National Science Foundation	Pass-Through	University of Toledo	F-2015-102	47.049	Mathematical and Physical Sciences	27,935	-
National Science Foundation	Pass-Through	University of Washington	UWSC6733	47.049	Mathematical and Physical Sciences	(20,812)	-
National Science Foundation	Pass-Through	University of Wisconsin	420K976	47.049	Mathematical and Physical Sciences	13,299	-
	6	-			•	\$ 19,170,664	\$ 528,921
National Science Foundation	Direct		1400998	47.050	Geosciences	\$ 54,352	s -
National Science Foundation	Direct		1408789	47.050	Geosciences	160,563	1,843
National Science Foundation	Direct		1415543	47.050	Geosciences	91,559	-
National Science Foundation	Direct		1450512	47.050	Geosciences	128,386	73,886
National Science Foundation	Direct		1451372	47.050	Geosciences	34,536	-
National Science Foundation	Direct		1452097	47.050	Geosciences	71,753	-
National Science Foundation	Direct		1459862	47.050	Geosciences	56	-
National Science Foundation	Direct		1460170	47.050	Geosciences	133,552	-
National Science Foundation	Direct		1501292	47.050	Geosciences	(492)	-
National Science Foundation	Direct		1502478	47.050	Geosciences	3,765	-
National Science Foundation	Direct		1503917	47.050	Geosciences	108,616	-
National Science Foundation	Direct		1504006	47.050	Geosciences	58,615	-
National Science Foundation	Direct		1524304	47.050	Geosciences	68,863	-
National Science Foundation	Direct		1524394	47.050	Geosciences	103,737	38,490
National Science Foundation	Direct		1524473	47.050	Geosciences	57,652	-
National Science Foundation National Science Foundation	Direct		1526444	47.050	Geosciences	57,767	-
	Direct		1528576	47.050	Geosciences	83,981 48 216	-
National Science Foundation	Direct Direct		1536242 1540589	47.050	Geosciences	48,216 38,367	-
			1340389	47.050	Geosciences	58,50/	-
National Science Foundation National Science Foundation	Direct		1540954	47.050	Geosciences	170,326	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation	Direct	rass-ranough Grantor	1621686	47.050	Geosciences	76,251	rass-rinrougn
National Science Foundation	Direct		1629805	47.050	Geosciences	361	-
National Science Foundation	Direct		1637066	47.050	Geosciences	71,188	-
National Science Foundation	Direct		1639640	47.050	Geosciences	47,450	-
National Science Foundation National Science Foundation	Direct Direct		1650682 1654044	47.050 47.050	Geosciences Geosciences	157,620 118,308	-
National Science Foundation	Direct		1659248	47.050	Geosciences	71,159	-
National Science Foundation	Direct		1659338	47.050	Geosciences	130,353	-
National Science Foundation	Direct		1663770	47.050	Geosciences	232,065	-
National Science Foundation	Direct		1663800	47.050	Geosciences	297,553	-
National Science Foundation National Science Foundation	Direct Direct		1703019 1712695	47.050 47.050	Geosciences	72,303 19,080	-
National Science Foundation	Direct		1722994	47.050	Geosciences Geosciences	30,546	-
National Science Foundation	Direct		1724744	47.050	Geosciences	122,423	-
National Science Foundation	Direct		1725654	47.050	Geosciences	63,643	-
National Science Foundation	Direct		1736606	47.050	Geosciences	47,711	-
National Science Foundation National Science Foundation	Direct Direct		1736629 1738896	47.050 47.050	Geosciences	182,641 134,417	-
National Science Foundation	Direct		1758590	47.050	Geosciences Geosciences	71,045	34,860
National Science Foundation	Direct		1763189	47.050	Geosciences	167,215	-
National Science Foundation	Direct		1812949	47.050	Geosciences	22,999	-
National Science Foundation	Direct		1813996	47.050	Geosciences	90,102	-
National Science Foundation National Science Foundation	Direct		1821173	47.050	Geosciences	15,089	-
National Science Foundation	Direct Direct		1829336 1829613	47.050 47.050	Geosciences Geosciences	1,332 31,684	-
National Science Foundation	Direct		1829627	47.050	Geosciences	14,359	_
National Science Foundation	Direct		1829822	47.050	Geosciences	115,507	-
National Science Foundation	Direct		1832214	47.050	Geosciences	39,849	-
National Science Foundation	Direct		1838095	47.050	Geosciences	10,790	-
National Science Foundation National Science Foundation	Direct		1851164	47.050	Geosciences	10,650	-
National Science Foundation	Direct Direct		1851587 1855751	47.050 47.050	Geosciences Geosciences	25,400 34,396	-
National Science Foundation	Direct		1923568	47.050	Geosciences	14,719	-
National Science Foundation	Direct		AGS 1242839	47.050	Geosciences	(1,345)	-
National Science Foundation	Direct		AGS 1322543	47.050	Geosciences	139,250	-
National Science Foundation	Direct		AGS 1342968 AGS 1344835	47.050	Geosciences	(19,324)	-
National Science Foundation National Science Foundation	Direct Direct		AGS 1344835 AGS 1358268	47.050 47.050	Geosciences Geosciences	(243) 6,882	-
National Science Foundation	Direct		AGS-1602956	47.050	Geosciences	131,940	-
National Science Foundation	Direct		AGS-1738588	47.050	Geosciences	69,854	-
National Science Foundation	Direct		EAR 1023729	47.050	Geosciences	(29,674)	-
National Science Foundation	Direct		EAR 1151247	47.050	Geosciences	1,000	-
National Science Foundation National Science Foundation	Direct Direct		EAR 1249788 EAR 1337440	47.050 47.050	Geosciences Geosciences	(41) 6,812	
National Science Foundation	Direct		EAR 1338200	47.050	Geosciences	67,066	_
National Science Foundation	Direct		EAR 1550101	47.050	Geosciences	20,706	-
National Science Foundation	Direct		EAR 1551344	47.050	Geosciences	23,831	-
National Science Foundation	Direct		EAR 1565511	47.050	Geosciences	74,043	-
National Science Foundation National Science Foundation	Direct Direct		EAR 1640797 EAR 1644829	47.050 47.050	Geosciences Geosciences	74,883 18,467	-
National Science Foundation	Direct		EAR 1719496	47.050	Geosciences	10,813	-
National Science Foundation	Direct		EAR-1338295	47.050	Geosciences	18,532	-
National Science Foundation	Direct		EAR1725025	47.050	Geosciences	57,775	-
National Science Foundation	Direct		ICER-1663769	47.050	Geosciences	91,088	-
National Science Foundation National Science Foundation	Direct Direct		OCE 1304327 OCE 1334727	47.050 47.050	Geosciences Geosciences	(420) (315)	-
National Science Foundation	Direct		OCE 1354/27 OCE 1351837	47.050	Geosciences	(315) 68,193	-
National Science Foundation	Direct		OCE 1433710	47.050	Geosciences	23,354	-
National Science Foundation	Direct		OCE-1600012	47.050	Geosciences	558,880	272,488
National Science Foundation	Direct		OPP-1724585	47.050	Geosciences	96,693	-
National Science Foundation National Science Foundation	Direct Direct		PLR 1351745 PLR 1417668	47.050 47.050	Geosciences	72,543	-
National Science Foundation		Bowling Green State University	10010192-UM05	47.050	Geosciences Geosciences	(39) 16,321	-
National Science Foundation		Duke University	14-NSF-1028	47.050	Geosciences	234,243	-
National Science Foundation	Pass-Through	Georgia Institute of Technology	RG098-G2	47.050	Geosciences	179,426	-
National Science Foundation	Pass-Through	University of Arizona	125163	47.050	Geosciences	9,413	-
National Science Foundation		University of Arizona University of California Darkalay	482274	47.050	Geosciences	20,080	-
National Science Foundation National Science Foundation		University of California - Berkeley University of Illinois-Urbana-Champaign	00009256 087882-16531	47.050 47.050	Geosciences Geosciences	13,117 33,223	-
National Science Foundation		University of Southern California	91265930	47.050	Geosciences	8,966	-
National Science Foundation		Virginia Polytechnic Institute and State University	480012-19337	47.050	Geosciences	436,668	-
						\$ 6,547,039	\$ 421,567
National Science Foundation National Science Foundation	Direct		1452099	47.070	Computer and Information Science and Engineering	\$ 72,106 50,225	s -
National Science Foundation National Science Foundation	Direct Direct		1452793 1452915	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	50,225 4,799	-
National Science Foundation	Direct		1453651	47.070	Computer and Information Science and Engineering	92,512	-

Cluster Title/Federal Grantor/Program ational Science Foundation	Type	Pass-Through Grantor	Award Identifier 1505785	CFDA Number 47.070	CFDA Program Title Computer and Information Science and Engineering	Federal Expenditures 40,523	Pass-Through
ational Science Foundation	Direct Direct		1505785	47.070	Computer and Information Science and Engineering	40,523 35,279	-
ational Science Foundation	Direct		1513718	47.070	Computer and Information Science and Engineering	149,474	-
tional Science Foundation	Direct		1514371	47.070	Computer and Information Science and Engineering	150,383	-
ional Science Foundation	Direct		1514383	47.070	Computer and Information Science and Engineering	149,582	-
ional Science Foundation	Direct		1518888	47.070	Computer and Information Science and Engineering	109,243	-
tional Science Foundation	Direct		1522904	47.070	Computer and Information Science and Engineering	99,002	-
tional Science Foundation	Direct		1525006	47.070	Computer and Information Science and Engineering	110,378	-
tional Science Foundation	Direct		1525372	47.070	Computer and Information Science and Engineering	120,968	-
tional Science Foundation	Direct		1526059	47.070	Computer and Information Science and Engineering	150,331	-
tional Science Foundation	Direct		1526455	47.070	Computer and Information Science and Engineering	58,047	-
tional Science Foundation	Direct		1526928	47.070	Computer and Information Science and Engineering	15,723	-
tional Science Foundation	Direct		1527301	47.070	Computer and Information Science and Engineering	177,414	-
tional Science Foundation	Direct		1535912	47.070	Computer and Information Science and Engineering	60,021	-
tional Science Foundation	Direct		1539011	47.070	Computer and Information Science and Engineering	107,471	32,25
tional Science Foundation	Direct		1539722	47.070	Computer and Information Science and Engineering	13,856	-
tional Science Foundation	Direct		1539991	47.070	Computer and Information Science and Engineering	298,785	-
tional Science Foundation	Direct		1541335	47.070	Computer and Information Science and Engineering	743,539	435,49
tional Science Foundation	Direct		1544678	47.070	Computer and Information Science and Engineering	303,691	-
tional Science Foundation	Direct		1544844	47.070	Computer and Information Science and Engineering	128,173	-
tional Science Foundation	Direct		1546036	47.070	Computer and Information Science and Engineering	(3,374)	-
tional Science Foundation	Direct		1550103	47.070	Computer and Information Science and Engineering	4,928	-
tional Science Foundation	Direct		1552503	47.070	Computer and Information Science and Engineering	77,312	-
ional Science Foundation	Direct		1553146	47.070	Computer and Information Science and Engineering	46,199	-
ional Science Foundation	Direct		1553169	47.070	Computer and Information Science and Engineering	317,515	-
tional Science Foundation	Direct		1553485	47.070	Computer and Information Science and Engineering	29,729	-
tional Science Foundation	Direct		1563095	47.070	Computer and Information Science and Engineering	81,336	-
ional Science Foundation	Direct		1563849	47.070	Computer and Information Science and Engineering	57,003	-
tional Science Foundation	Direct		1606362	47.070	Computer and Information Science and Engineering	(2,078)	-
ional Science Foundation	Direct		1607251	47.070	Computer and Information Science and Engineering	27,773	-
ional Science Foundation	Direct		1616575	47.070	Computer and Information Science and Engineering	81,095	-
onal Science Foundation	Direct		1617315	47.070	Computer and Information Science and Engineering	2,007	
ional Science Foundation	Direct		1617319	47.070	Computer and Information Science and Engineering	278,591	
ional Science Foundation	Direct		1617767	47.070	Computer and Information Science and Engineering	834	
ional Science Foundation	Direct		1617773	47.070	Computer and Information Science and Engineering	93,045	-
ional Science Foundation	Direct		1617820	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	130,301	-
ional Science Foundation	Direct		1617898	47.070	1 8 8	71,148	-
tional Science Foundation tional Science Foundation	Direct		1618187 1622831	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	24,394	-
tional Science Foundation	Direct Direct		1622831	47.070 47.070	Computer and Information Science and Engineering	(742) 413	-
ional Science Foundation				47.070	Computer and Information Science and Engineering	171,222	-
tional Science Foundation	Direct Direct		1628991 1629397	47.070	Computer and Information Science and Engineering	355,454	-
tional Science Foundation	Direct		1629763	47.070	Computer and Information Science and Engineering	33,725	-
ional Science Foundation	Direct		1636840	47.070	Computer and Information Science and Engineering	56,115	-
ional Science Foundation	Direct		1637232	47.070	Computer and Information Science and Engineering	99,362	-
ional Science Foundation	Direct		1637546	47.070	Computer and Information Science and Engineering	44,936	-
ional Science Foundation	Direct		1638047	47.070	Computer and Information Science and Engineering	116,493	
ional Science Foundation	Direct		1638186	47.070	Computer and Information Science and Engineering	567,849	99,7
ional Science Foundation	Direct		1640510	47.070	Computer and Information Science and Engineering	4,973	
ional Science Foundation	Direct		1640575	47.070	Computer and Information Science and Engineering	814,918	
ional Science Foundation	Direct		1646019	47.070	Computer and Information Science and Engineering	180,949	
ional Science Foundation	Direct		1646130	47.070	Computer and Information Science and Engineering	40,663	
ional Science Foundation	Direct		1646392	47.070	Computer and Information Science and Engineering	86,373	
ional Science Foundation	Direct		1651653	47.070	Computer and Information Science and Engineering	97,788	-
onal Science Foundation	Direct		1651740	47.070	Computer and Information Science and Engineering	198,230	
onal Science Foundation	Direct		1652294	47.070	Computer and Information Science and Engineering	26,010	
onal Science Foundation	Direct		1656101	47.070	Computer and Information Science and Engineering	173,516	
onal Science Foundation	Direct		1665049	47.070	Computer and Information Science and Engineering	11,967	
onal Science Foundation	Direct		1703931	47.070	Computer and Information Science and Engineering	145,098	
onal Science Foundation	Direct		1717064	47.070	Computer and Information Science and Engineering	111,573	
onal Science Foundation	Direct		1717186	47.070	Computer and Information Science and Engineering	116,345	
onal Science Foundation	Direct		1717299	47.070	Computer and Information Science and Engineering	155,596	
onal Science Foundation	Direct		1717523	47.070	Computer and Information Science and Engineering	60,458	
onal Science Foundation	Direct		1717688	47.070	Computer and Information Science and Engineering	185,853	
onal Science Foundation	Direct		1722801	47.070	Computer and Information Science and Engineering	172,521	
onal Science Foundation	Direct		1727610	47.070	Computer and Information Science and Engineering	229,182	
onal Science Foundation	Direct		1734014	47.070	Computer and Information Science and Engineering	14,554	
onal Science Foundation	Direct		1734266	47.070	Computer and Information Science and Engineering	200,631	23,
onal Science Foundation	Direct		1734871	47.070	Computer and Information Science and Engineering	80,004	23,
ional Science Foundation	Direct		1737432	47.070	Computer and Information Science and Engineering	468,138	296,
onal Science Foundation	Direct		1738103	47.070	Computer and Information Science and Engineering	148,907	290,
onal Science Foundation	Direct		1738714	47.070	Computer and Information Science and Engineering	66,716	34,
ional Science Foundation	Direct		1739517	47.070	Computer and Information Science and Engineering	51,916	54,
ional Science Foundation	Direct		1739517 1739525	47.070	Computer and Information Science and Engineering	260,673	
ional Science Foundation	Direct		1739525 1739577	47.070	Computer and Information Science and Engineering	200,673 44,410	
	Direct		1/395// 1740897	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	44,410 72,929	
ional Science Foundation							

Cluster Title/Federal Grantor/Program National Science Foundation	Type	Pass-Through Grantor	Award Identifier 1741022	CFDA Numbe 47.070	r CFDA Program Title Computer and Information Science and Engineering	Federal Expenditures	Pass-Through
National Science Foundation National Science Foundation	Direct Direct		1741022 1741166	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	76,922 100,144	-
National Science Foundation	Direct		1741190	47.070	Computer and Information Science and Engineering	237,536	_
National Science Foundation	Direct		1741435	47.070	Computer and Information Science and Engineering	104,041	-
National Science Foundation	Direct		1742808	47.070	Computer and Information Science and Engineering	(20)	-
National Science Foundation	Direct		1743088	47.070	Computer and Information Science and Engineering	1,590	-
National Science Foundation	Direct		1748047	47.070	Computer and Information Science and Engineering	4,812	-
National Science Foundation	Direct		1750127	47.070	Computer and Information Science and Engineering	228,540	-
National Science Foundation	Direct		1755841	47.070	Computer and Information Science and Engineering	133,398	-
National Science Foundation	Direct		1755908	47.070	Computer and Information Science and Engineering	4,801	-
National Science Foundation	Direct		1763297	47.070	Computer and Information Science and Engineering	47,662	-
National Science Foundation	Direct		1763348	47.070	Computer and Information Science and Engineering	108,533	-
National Science Foundation	Direct		1763674	47.070	Computer and Information Science and Engineering	59,165	-
National Science Foundation	Direct		1763918	47.070	Computer and Information Science and Engineering	52,928	-
National Science Foundation	Direct		1800771	47.070	Computer and Information Science and Engineering	4,361	-
National Science Foundation	Direct		1801342	47.070	Computer and Information Science and Engineering	21,399	-
National Science Foundation	Direct		1814507	47.070	Computer and Information Science and Engineering	71,890	-
National Science Foundation	Direct		1815291	47.070	Computer and Information Science and Engineering	25,899	-
National Science Foundation	Direct		1815760	47.070	Computer and Information Science and Engineering	56,690	-
National Science Foundation	Direct		1815790	47.070	Computer and Information Science and Engineering	44,303	-
National Science Foundation	Direct		1815875	47.070	Computer and Information Science and Engineering	32,922	-
National Science Foundation	Direct		1816019	47.070	Computer and Information Science and Engineering	12,771	-
National Science Foundation	Direct		1822228	47.070	Computer and Information Science and Engineering	151,326	-
National Science Foundation	Direct		1829724	47.070	Computer and Information Science and Engineering	80,485	-
National Science Foundation	Direct		1830345	47.070	Computer and Information Science and Engineering	66,488	-
National Science Foundation	Direct		1830615	47.070	Computer and Information Science and Engineering	152,706	-
National Science Foundation	Direct		1832811	47.070	Computer and Information Science and Engineering	107,566	36,88
National Science Foundation	Direct		1835284	47.070	Computer and Information Science and Engineering	3,888	-
National Science Foundation	Direct		1835612	47.070	Computer and Information Science and Engineering	45,541	-
National Science Foundation	Direct		1835747	47.070	Computer and Information Science and Engineering	13,915	-
National Science Foundation	Direct		1837245	47.070	Computer and Information Science and Engineering	62,835	-
National Science Foundation	Direct		1837680	47.070	Computer and Information Science and Engineering	49,363	-
National Science Foundation	Direct		1837985	47.070	Computer and Information Science and Engineering	65,446	-
National Science Foundation	Direct		1838179	47.070	Computer and Information Science and Engineering	162,703	76,568
National Science Foundation	Direct		1838994	47.070	Computer and Information Science and Engineering	58,796	-
National Science Foundation	Direct		1839868	47.070	Computer and Information Science and Engineering	143,716	-
National Science Foundation	Direct		1841148	47.070	Computer and Information Science and Engineering	3,300	-
National Science Foundation	Direct		1845076	47.070	Computer and Information Science and Engineering	22,755	-
National Science Foundation	Direct		1845491	47.070	Computer and Information Science and Engineering	8,407	-
National Science Foundation	Direct		1850221	47.070	Computer and Information Science and Engineering	12,863	-
National Science Foundation	Direct		1851362	47.070	Computer and Information Science and Engineering	32,279	-
National Science Foundation	Direct		1917868	47.070	Computer and Information Science and Engineering	5,092	-
National Science Foundation	Direct		CCF 1149773	47.070	Computer and Information Science and Engineering	(8)	-
National Science Foundation	Direct		CCF 1421467	47.070	Computer and Information Science and Engineering	107,076	-
National Science Foundation	Direct		CCF 1422157	47.070	Computer and Information Science and Engineering	(507)	-
National Science Foundation	Direct		CCF 1422284	47.070	Computer and Information Science and Engineering	(512)	-
National Science Foundation	Direct		CCF 1438996	47.070	Computer and Information Science and Engineering	40,651	-
National Science Foundation	Direct		CCF 1442777	47.070	Computer and Information Science and Engineering	145,798	-
National Science Foundation	Direct		CCF-1406739	47.070	Computer and Information Science and Engineering	209,665	-
National Science Foundation	Direct		CCF1442773	47.070	Computer and Information Science and Engineering	257,190	-
National Science Foundation	Direct		CNS 1317411	47.070	Computer and Information Science and Engineering	54,884	-
National Science Foundation	Direct		CNS 1317411 CNS 1318306	47.070	Computer and Information Science and Engineering	45,498	-
National Science Foundation	Direct		CNS 1319784	47.070	Computer and Information Science and Engineering	7,335	_
National Science Foundation	Direct		CNS 1329539	47.070	Computer and Information Science and Engineering	39,233	-
National Science Foundation	Direct		CNS 1329702	47.070	Computer and Information Science and Engineering	70,266	-
National Science Foundation	Direct		CNS 1320702 CNS 1330142	47.070	Computer and Information Science and Engineering	314,080	_
National Science Foundation	Direct		CNS 1409303	47.070	Computer and Information Science and Engineering	20,561	_
National Science Foundation	Direct		CNS 1409505	47.070	Computer and Information Science and Engineering	33,646	-
National Science Foundation	Direct		CNS 1421122	47.070	Computer and Information Science and Engineering	50,326	_
National Science Foundation	Direct		CNS 1421122 CNS 1421441	47.070	Computer and Information Science and Engineering	(1,093)	-
National Science Foundation	Direct		CNS 1421441 CNS 1422078	47.070	Computer and Information Science and Engineering	(47,313)	1,124
National Science Foundation	Direct		CNS 1422211	47.070	Computer and Information Science and Engineering	22,813	
National Science Foundation	Direct		CNS 1446117	47.070	Computer and Information Science and Engineering	251,590	-
National Science Foundation	Direct		CNS 1446298	47.070	Computer and Information Science and Engineering	134,280	-
National Science Foundation	Direct		CNS 1455719	47.070	Computer and Information Science and Engineering	2,415	-
National Science Foundation	Direct		CNS 1463126	47.070	Computer and Information Science and Engineering	(7,864)	-
National Science Foundation	Direct		CNS-1238962	47.070	Computer and Information Science and Engineering	85,941	-
National Science Foundation	Direct		CNS-1345226	47.070	Computer and Information Science and Engineering	(1,659)	-
National Science Foundation	Direct		CNS-1343220 CNS-1425485	47.070	Computer and Information Science and Engineering	21,481	-
National Science Foundation	Direct		CNS1823192	47.070	Computer and Information Science and Engineering	135,920	115,23
National Science Foundation				47.070	Computer and Information Science and Engineering		115,25
National Science Foundation National Science Foundation	Direct Direct		IIS 1149601 IIS 1250880	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	(1,236) 57,632	-
					Computer and Information Science and Engineering Computer and Information Science and Engineering		-
National Science Foundation	Direct		IIS 1319365	47.070		11,154	-
National Science Foundation	Direct		IIS 1319922	47.070	Computer and Information Science and Engineering	19,583	-
National Science Foundation	Direct		IIS 1344257	47.070	Computer and Information Science and Engineering	(6,341)	17,454
National Science Foundation	Direct		IIS 1421168	47.070	Computer and Information Science and Engineering	139,074	

Cluster Title/Federal Grantor/Program tional Science Foundation	Type Direct	Pass-Through Grantor	Award Identifier IIS 1421391	CFDA Number 47.070	CFDA Program Title Computer and Information Science and Engineering	Federal Expenditures	Pass-Throu
tional Science Foundation	Direct		IIS 1421391 IIS 1633370	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	(2,225) 99,063	
onal Science Foundation	Direct		IIS-1318143	47.070	Computer and Information Science and Engineering	22,786	
onal Science Foundation	Direct		IIS1320078	47.070	Computer and Information Science and Engineering	8,532	
onal Science Foundation	Direct		IIS-1516204	47.070	Computer and Information Science and Engineering	12,579	
onal Science Foundation	Direct		IIS-1564079	47.070	Computer and Information Science and Engineering	123,200	
nal Science Foundation	Direct		IIS-1636919	47.070	Computer and Information Science and Engineering	12,164	
nal Science Foundation	Direct		IIS-1657411	47.070	Computer and Information Science and Engineering	67,806	
nal Science Foundation	Direct		LOL1537483	47.070	Computer and Information Science and Engineering	5,909	
onal Science Foundation	Direct		SES-1760133	47.070	Computer and Information Science and Engineering	94,584	
onal Science Foundation		Carnegie-Mellon University	1121941-372179	47.070	Computer and Information Science and Engineering	7,730	
onal Science Foundation		Stony Brook University	79217/1142110/2	47.070	Computer and Information Science and Engineering	17,307	
onal Science Foundation		Syracuse University	30492-05064-S01	47.070	Computer and Information Science and Engineering	23,438	
onal Science Foundation		University of California-San Diego	77845292	47.070	Computer and Information Science and Engineering	237,109	
nal Science Foundation		University of Chicago	FP066185-A	47.070	Computer and Information Science and Engineering	178,278	
nal Science Foundation		University of Illinois-Urbana-Champaign	15746	47.070	Computer and Information Science and Engineering	33,030	
nal Science Foundation		University of Nebraska-Lincoln	25-0511-0183-003	47.070	Computer and Information Science and Engineering	29,042	
nal Science Foundation		University of Texas-Arlington	126100536610	47.070	Computer and Information Science and Engineering	(2,961)	
nal Science Foundation		University of Virginia	GA11194.158509	47.070	Computer and Information Science and Engineering	41,948	
al Science Foundation		University of Virginia	GA11206.158282	47.070	Computer and Information Science and Engineering	72,531	
nal Science Foundation		University of Washington	UWSC9862	47.070	Computer and Information Science and Engineering	7,108	
nal Science Foundation		William Marsh Rice University	R76523	47.070	Computer and Information Science and Engineering	9,224	
har Science Foundation	1 ass=1 litough	winani warsh Rice Oniversity	R70525	47.070	Computer and information science and Englicering	\$ 16,214,499 \$	5 1,16
nal Science Foundation	Direct		1444400	47.074	Biological Sciences	\$ 291,409	
al Science Foundation	Direct		1451127	47.074	Biological Sciences	18,811	~
al Science Foundation	Direct		1451127 1452656	47.074	Biological Sciences	180,898	
al Science Foundation	Direct		1452656	47.074	Biological Sciences	116,611	
al Science Foundation							
	Direct		1458002	47.074	Biological Sciences	110,500	
al Science Foundation	Direct		1458466	47.074	Biological Sciences	152,998	
al Science Foundation	Direct		1502703	47.074	Biological Sciences	(1,347)	
al Science Foundation	Direct		1556585	47.074	Biological Sciences	47,602	
al Science Foundation	Direct		1557564	47.074	Biological Sciences	81,121	-
al Science Foundation	Direct		1557831	47.074	Biological Sciences	85,504	1
al Science Foundation	Direct		1557850	47.074	Biological Sciences	258,595	
al Science Foundation	Direct		1560096	47.074	Biological Sciences	33,175	
al Science Foundation	Direct		1564756	47.074	Biological Sciences	160,135	
al Science Foundation	Direct		1601248	47.074	Biological Sciences	10,877	
al Science Foundation	Direct		1601259	47.074	Biological Sciences	13	
al Science Foundation	Direct		1601260	47.074	Biological Sciences	(1,767)	
al Science Foundation	Direct		1601389	47.074	Biological Sciences	(401)	
al Science Foundation	Direct		1601455	47.074	Biological Sciences	(159)	
al Science Foundation	Direct		1612917	47.074	Biological Sciences	208,771	
al Science Foundation	Direct		1615338	47.074	Biological Sciences	106,659	
al Science Foundation	Direct		1615586	47.074	Biological Sciences	173,986	
al Science Foundation	Direct		1624205	47.074	Biological Sciences	37,800	
al Science Foundation	Direct		1651614	47.074	Biological Sciences	168,478	
al Science Foundation	Direct		1655720	47.074	Biological Sciences	52,655	
				47.074			
al Science Foundation al Science Foundation	Direct		1655856 1701450	47.074	Biological Sciences	145,006 412	
	Direct				Biological Sciences		
Il Science Foundation	Direct		1701459	47.074	Biological Sciences	10,366	
al Science Foundation	Direct		1701645	47.074	Biological Sciences	2,757	
Il Science Foundation	Direct		1701713	47.074	Biological Sciences	35,405	
l Science Foundation	Direct		1707316	47.074	Biological Sciences	1,602,021	2
al Science Foundation	Direct		1716403	47.074	Biological Sciences	11,415	
l Science Foundation	Direct		1737680	47.074	Biological Sciences	56,542	
l Science Foundation	Direct		1748729	47.074	Biological Sciences	92,658	
I Science Foundation	Direct		1749627	47.074	Biological Sciences	154,256	
al Science Foundation	Direct		1753731	47.074	Biological Sciences	10,705	
l Science Foundation	Direct		1754163	47.074	Biological Sciences	39,512	
al Science Foundation	Direct		1754369	47.074	Biological Sciences	157,736	
Science Foundation	Direct		1754398	47.074	Biological Sciences	104,447	
al Science Foundation	Direct		1755268	47.074	Biological Sciences	99,385	
Science Foundation	Direct		1755482	47.074	Biological Sciences	210,967	
I Science Foundation	Direct		1756202	47.074	Biological Sciences	67,290	
l Science Foundation	Direct		1759826	47.074	Biological Sciences	104,897	
al Science Foundation	Direct		1802033	47.074	Biological Sciences	22.859	
al Science Foundation	Direct		1813069	47.074	Biological Sciences	96,731	
al Science Foundation	Direct		1817478	47.074	Biological Sciences	369,120	
al Science Foundation	Direct		181/4/8 1817697	47.074	Biological Sciences	218,676	
al Science Foundation	Direct		1817909	47.074	Biological Sciences	5,222	
al Science Foundation	Direct		1834497	47.074	Biological Sciences	34,234	
al Science Foundation	Direct		1834688	47.074	Biological Sciences	27,983	
al Science Foundation	Direct		1845012	47.074	Biological Sciences	67,519	
al Science Foundation	Direct		1851985	47.074	Biological Sciences	70,933	
			1050051	47.074	D:1 : 10:		
al Science Foundation	Direct		1852074	47.074	Biological Sciences Biological Sciences	62,893	

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Match Start ParkinDateBits 1991/247.50HoleHole1.10Match Start ParkinDateBits 2000/2Bits 200								-
Matche WardenHarHall 1989/Off HBarge MarceJ.1.3Matche Sam WardenDeDEDEHall 1989/DEHall 1989/Hall 1								-
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National Science FoundationDirect17288247.075Social, Behavioral, and Economic Sciences48,985National Science FoundationDirect172895947.075Social, Behavioral, and Economic Sciences147,456National Science FoundationDirect172916547,075Social, Behavioral, and Economic Sciences18National Science FoundationDirect174406547,075Social, Behavioral, and Economic Sciences132,726	National Science Foundation	Direct		1708480	47.075	Social, Behavioral, and Economic Sciences	895	-
National Science FoundationDirect172895947.075Social, Behavioral, and Economic Sciences147,456National Science FoundationDirect172916547.075Social, Behavioral, and Economic Sciences18National Science FoundationDirect174406547.075Social, Behavioral, and Economic Sciences18132,726		Direct						-
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National Gamma Example in J. D. Barret Discotton 057.001								- 42.125
National Science Foundation Direct Direct 257,801	ivational Science Foundation	Direct		1/44/24	47.075	Social, Dellavioral, and Economic Sciences	257,801	43,125

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Numbe		Federal Expenditures	Pass-Through
Vational Science Foundation	Direct		1747397 1747446	47.075 47.075	Social, Behavioral, and Economic Sciences	15,600 665	-
lational Science Foundation lational Science Foundation	Direct Direct		1747446 1755025	47.075	Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	6,715	-
Jational Science Foundation	Direct		1753025	47.075	Social, Behavioral, and Economic Sciences	883	-
lational Science Foundation	Direct		1757147	47.075	Social, Behavioral, and Economic Sciences	102,364	
lational Science Foundation	Direct		1759199	47.075	Social, Behavioral, and Economic Sciences	61,083	
ational Science Foundation	Direct		1760058	47.075	Social, Behavioral, and Economic Sciences	222,778	_
ational Science Foundation	Direct		1760238	47.075	Social, Behavioral, and Economic Sciences	99,847	
ational Science Foundation	Direct		1760644	47.075	Social, Behavioral, and Economic Sciences	28,828	
ational Science Foundation	Direct		1762420	47.075	Social, Behavioral, and Economic Sciences	63,902	
ational Science Foundation	Direct		1801902	47.075	Social, Behavioral, and Economic Sciences	6,473	
ational Science Foundation	Direct		1824290	47.075	Social, Behavioral, and Economic Sciences	1,898	
ational Science Foundation	Direct		1824839	47.075	Social, Behavioral, and Economic Sciences	4,066	
ational Science Foundation	Direct		1825113	47.075	Social, Behavioral, and Economic Sciences	275,805	-
ational Science Foundation	Direct		1830705	47.075	Social, Behavioral, and Economic Sciences	10,165	-
ational Science Foundation	Direct		1831347	47.075	Social, Behavioral, and Economic Sciences	84,753	
ational Science Foundation	Direct		1835971	47.075	Social, Behavioral, and Economic Sciences	420,171	33,872
ational Science Foundation	Direct		1851418	47.075	Social, Behavioral, and Economic Sciences	2,490	-
ational Science Foundation	Direct		1901661	47.075	Social, Behavioral, and Economic Sciences	16,114	-
ational Science Foundation	Direct		BCS 0827316	47.075	Social, Behavioral, and Economic Sciences	(8,568)	-
ational Science Foundation	Direct		BCS 1241811	47.075	Social, Behavioral, and Economic Sciences	16,655	
ational Science Foundation	Direct		BCS 1259122	47.075	Social, Behavioral, and Economic Sciences	(2,242)	_
ational Science Foundation	Direct		BCS 1263150	47.075	Social, Behavioral, and Economic Sciences	18,335	-
ational Science Foundation	Direct		BCS 1203130 BCS 1348013	47.075	Social, Behavioral, and Economic Sciences	12,373	-
ational Science Foundation	Direct		BCS 1348013 BCS 1348150	47.075	Social, Behavioral, and Economic Sciences	1,393	-
ational Science Foundation	Direct		BCS 1348150 BCS 1348957	47.075	Social, Behavioral, and Economic Sciences	96,976	
ational Science Foundation	Direct		BCS 1430391	47.075	Social, Behavioral, and Economic Sciences	14,664	
ational Science Foundation	Direct		BCS1356118	47.075	Social, Behavioral, and Economic Sciences	(3,589)	-
ational Science Foundation	Direct		BCS-1749430	47.075	Social, Behavioral, and Economic Sciences	(5,589) 169,291	-
ational Science Foundation	Direct		SES 0518943	47.075	Social, Behavioral, and Economic Sciences	(3,108)	-
ational Science Foundation	Direct		SES 1157698	47.075	Social, Behavioral, and Economic Sciences	1,530,905	-
ational Science Foundation	Direct		SES 1137098 SES 1420973	47.075	Social, Behavioral, and Economic Sciences	(71,186)	-
ational Science Foundation			SES 1420975 SES 1444721	47.075	Social, Behavioral, and Economic Sciences	543,545	-
ational Science Foundation	Direct						-
	Direct		SES 1523355	47.075	Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	196,676	-
ational Science Foundation	Direct		SES-1623684	47.075	· · · · ·	2,950,792	-
ational Science Foundation	Direct		SES-1627464	47.075	Social, Behavioral, and Economic Sciences	12,194	-
ational Science Foundation	Direct		SES-1636754	47.075	Social, Behavioral, and Economic Sciences	17,603	16,020
ational Science Foundation	Direct		SES-1654645	47.075	Social, Behavioral, and Economic Sciences	172,642	-
ational Science Foundation	Direct		SES-1658336	47.075	Social, Behavioral, and Economic Sciences	128,783	-
ational Science Foundation	Direct		SES-1659328	47.075	Social, Behavioral, and Economic Sciences	50,157	8,532
ational Science Foundation	Direct		SES-1659776	47.075	Social, Behavioral, and Economic Sciences	(1)	-
lational Science Foundation	Direct		SES-1724436	47.075	Social, Behavioral, and Economic Sciences	22,521	16,152
ational Science Foundation	Direct		SES-1727491	47.075	Social, Behavioral, and Economic Sciences	85,652	-
ational Science Foundation	Direct		SES-1728792	47.075	Social, Behavioral, and Economic Sciences	16,983	-
ational Science Foundation	Direct		SES-1729115	47.075	Social, Behavioral, and Economic Sciences	29,170	-
ational Science Foundation	Direct		SES-1733546	47.075	Social, Behavioral, and Economic Sciences	123,951	-
lational Science Foundation	Direct		SMA-1539228	47.075	Social, Behavioral, and Economic Sciences	182,188	-
ational Science Foundation	Pass-Through American Ge	eographers, Association of	F7034-UMICH	47.075	Social, Behavioral, and Economic Sciences	24,506	-
ational Science Foundation	Pass-Through Carnegie-Me	llon University	1122455-370028	47.075	Social, Behavioral, and Economic Sciences	80,144	-
ational Science Foundation	Pass-Through Cornell Univ	ersity	64184 9947	47.075	Social, Behavioral, and Economic Sciences	47,915	-
ational Science Foundation	Pass-Through Decision Res	search	17-01	47.075	Social, Behavioral, and Economic Sciences	82,360	-
tional Science Foundation	Pass-Through Decision Res	search	18-01	47.075	Social, Behavioral, and Economic Sciences	20,230	-
tional Science Foundation	Pass-Through Indiana Univ	ersity	BL-4831222-UM	47.075	Social, Behavioral, and Economic Sciences	12,743	-
ational Science Foundation	Pass-Through Johns Hopkin	ns University	PO 2003171568	47.075	Social, Behavioral, and Economic Sciences	32,482	-
tional Science Foundation	Pass-Through Michigan Sta	ate University	RC104160UM	47.075	Social, Behavioral, and Economic Sciences	44,913	-
tional Science Foundation	Pass-Through National End	lowment for the Humanities	PD-255909-17	47.075	Social, Behavioral, and Economic Sciences	78,299	-
ational Science Foundation	Pass-Through Pennsylvania	a State University	5574-UM-NSF-8209	47.075	Social, Behavioral, and Economic Sciences	(159)	-
ational Science Foundation	Pass-Through University of	Virginia	GA11260.156640	47.075	Social, Behavioral, and Economic Sciences	56,849	-
tional Science Foundation	Pass-Through Western Mic	higan University	UoM9558	47.075	Social, Behavioral, and Economic Sciences	26,490	-
	-					\$ 10,490,582	\$ 513,197
tional Science Foundation	Direct		1458375	47.076	Education and Human Resources	\$ 121,989	\$ -
tional Science Foundation	Direct		1502711	47.076	Education and Human Resources	30,355	-
tional Science Foundation	Direct		1502778	47.076	Education and Human Resources	434,186	-
ional Science Foundation	Direct		1504257	47.076	Education and Human Resources	(856)	131
ional Science Foundation	Direct		1504721	47.076	Education and Human Resources	29	-
ional Science Foundation	Direct		1524967	47.076	Education and Human Resources	112,863	-
tional Science Foundation	Direct		1535370	47.076	Education and Human Resources	441,376	-
tional Science Foundation	Direct		1535389	47.076	Education and Human Resources	450,981	-
tional Science Foundation	Direct		1544337	47.076	Education and Human Resources	49,383	-
itional Science Foundation	Direct		1545851	47.076	Education and Human Resources	(121)	
tional Science Foundation	Direct		1609204	47.076	Education and Human Resources	72,448	-
tional Science Foundation	Direct		1611687	47.076	Education and Human Resources	122,078	-
ional Science Foundation	Direct		1621104	47.076	Education and Human Resources	559,066	-
ional Science Foundation	Direct		1624634	47.076	Education and Human Resources	31,356	-
					Education and Human Resources	156,486	-
	Direct						
ational Science Foundation ational Science Foundation	Direct Direct		1625387 1625397	47.076 47.076	Education and Human Resources	268,144	

Cluster Title/Federal Grantor/Program Jational Science Foundation	Type Direct	Pass-Through Grantor	Award Identifier 1711533	CFDA Number 47.076	CFDA Program Title Education and Human Resources	Federal Ex	penditures I 158,941	Pass-Through
lational Science Foundation	Direct		1725837	47.076	Education and Human Resources		217,286	-
ational Science Foundation	Direct		1744359	47.076	Education and Human Resources		49,611	
ational Science Foundation	Direct		1744407	47.076	Education and Human Resources		69,010	15,501
ational Science Foundation	Direct		1760609	47.076	Education and Human Resources		156,144	-
ational Science Foundation	Direct		1760788	47.076	Education and Human Resources		97,443	-
ational Science Foundation	Direct		1761129	47.076	Education and Human Resources		41,674	-
ational Science Foundation	Direct		1821488	47.076	Education and Human Resources		23,371	-
ational Science Foundation	Direct		1821509	47.076	Education and Human Resources		52,058	-
ational Science Foundation	Direct		1821574	47.076	Education and Human Resources		50,446	-
ational Science Foundation	Direct		1821884	47.076	Education and Human Resources		52,929	-
ational Science Foundation	Direct		1824998	47.076	Education and Human Resources		53,761	-
ational Science Foundation	Direct		1841052	47.076	Education and Human Resources		8,046,697	-
ational Science Foundation ational Science Foundation	Direct		1930072 DGE 1256260	47.076 47.076	Education and Human Resources Education and Human Resources		278,181 1,120,144	-
ational Science Foundation	Direct Direct		DGE 1236260 DGE 1439520	47.076	Education and Human Resources		3,686	-
itional Science Foundation	Direct		DRL 0918425	47.076	Education and Human Resources		13,058	-
tional Science Foundation	Direct		DRL 1118745	47.076	Education and Human Resources		147.096	77,240
tional Science Foundation	Direct		DRL 1251862	47.076	Education and Human Resources		58,346	-
tional Science Foundation	Direct		DRL 1420102	47.076	Education and Human Resources		129,717	
tional Science Foundation	Direct		DRL 1420168	47.076	Education and Human Resources		47,901	7,535
tional Science Foundation	Direct		DRL1665117	47.076	Education and Human Resources		75,831	-
tional Science Foundation	Direct		DRL1743150	47.076	Education and Human Resources		114,505	34,807
tional Science Foundation	Direct		DUE 1161121	47.076	Education and Human Resources		322,116	38,424
tional Science Foundation	Direct		DUE 1322552	47.076	Education and Human Resources		2,252	-
tional Science Foundation	Direct		DUE 1347697	47.076	Education and Human Resources		213,227	-
tional Science Foundation	Direct		HRD 1038099	47.076	Education and Human Resources		(43,676)	-
tional Science Foundation	Direct		HRD 1619681	47.076	Education and Human Resources		790,723	329,716
tional Science Foundation	Pass-Through	American Educational Research Association	Award Letter	47.076	Education and Human Resources		599	-
tional Science Foundation	Pass-Through	Bowling Green State University	10008257-UM.Karabenick	47.076	Education and Human Resources		26,122	-
tional Science Foundation	Pass-Through	Harvard University	108144-5097698	47.076	Education and Human Resources		17,921	-
tional Science Foundation	Pass-Through	Harvard University	108144-5097698	47.076	Education and Human Resources		16,810	-
tional Science Foundation	Pass-Through	Iowa State University of Science and Technology (aka Iowa State University)	4202507A	47.076	Education and Human Resources		3,488	-
tional Science Foundation	Pass-Through	Iowa State University of Science and Technology (aka Iowa State University)	4202541A	47.076	Education and Human Resources		396	-
tional Science Foundation	Pass-Through	Maricopa County Community College District	Agreement	47.076	Education and Human Resources		148,994	-
tional Science Foundation	Pass-Through	Michigan State University	RC107563UM	47.076	Education and Human Resources		60,110	-
tional Science Foundation	Pass-Through	Northwestern University	SP0024546	47.076	Education and Human Resources		4,045	-
ational Science Foundation ational Science Foundation	Pass-Through	Rutgers University	5920 2015-3266	47.076 47.076	Education and Human Resources Education and Human Resources		278,521	-
ational Science Foundation	Pass-Through	University of California - Irvine	Z411102	47.076	Education and Human Resources		79,906 33,832	-
ational Science Foundation	Pass-Through	University of Maryland, The University of Wisconsin	830K642	47.076	Education and Human Resources		43.813	-
ational Science Foundation	Pass-Through	University of wisconsin	830K642	47.076	Education and Human Resources	\$	15,906,798 \$	503,354
tional Science Foundation	Direct		ANT 1149085	47.078	Polar Programs	\$	42,482 \$	505,554
tional Science Foundation	Direct		ARC 1253154	47.078	Polar Programs	ψ	73,905	_
	Direct		1110 1255151	11.070	rom riogiano	\$	116.387 \$	
tional Science Foundation	Direct		1459911	47.079	Office of International Science and Engineering	s	42,358 \$	
tional Science Foundation	Direct		1515015	47.079	Office of International Science and Engineering	Ŧ	935	-
tional Science Foundation	Direct		1658650	47.079	Office of International Science and Engineering		87,947	-
tional Science Foundation	Direct		1827075	47.079	Office of International Science and Engineering		70,190	-
tional Science Foundation	Pass-Through	Virginia Polytechnic Institute and State University	479477-19337	47.079	Office of International Science and Engineering		101,021	-
						\$	302,451 \$	-
tional Science Foundation	Direct		OCI 0948113	47.080	Office of Cyberinfrastructure	\$	(3,923) \$	-
tional Science Foundation	Direct		OCI 0941386	47.082	Trans-NSF Recovery Act Reasearch Support	\$	(5,207) \$	-
tional Science Foundation	Direct		1545858	47.083	Integrative Activities	\$	795,386 \$	178,368
			Total National Science Foundation			\$	97,760,518 \$	5,393,524
erans Affairs, Department of	Direct		36C25018C0241	64.RD		\$	47,607 \$	-
erans Affairs, Department of	Direct		36C25018C0267	64.RD			8,939	-
erans Affairs, Department of	Direct		36C25019C0139/PO 506C90190	64.RD			6,925	-
erans Affairs, Department of	Direct		506-D85011	64.RD			1,294	-
erans Affairs, Department of	Direct		D85024 Gross,Colin	64.RD 64.RD			2,709 5,227	-
erans Affairs, Department of erans Affairs, Department of	Direct Direct		IPA - Chen, Jenny	64.RD			5,227	-
rans Affairs, Department of rans Affairs, Department of	Direct		IPA - Chen, Jenny IPA - DeSantis, Angela	64.RD			1,902	-
rans Affairs, Department of	Direct		IPA - DeVries, Raymond	64.RD			4,897	-
erans Affairs, Department of	Direct		IPA - Guo, Chiao	64.RD			15,339	-
erans Affairs, Department of	Direct		IPA - Kerry Ryan	64.RD			7,014	
erans Affairs, Department of	Direct		IPA - Krenz, Chris	64.RD			(87)	-
erans Affairs, Department of	Direct		IPA - Lorraine Buis	64.RD			21,582	-
erans Affairs, Department of	Direct		IPA - Lorraine Buis	64.RD			2,037	_
erans Affairs, Department of	Direct		IPA - Niharika Chalpe	64.RD			9,828	_
	Direct		IPA - Patel, Nina	64.RD			4,464	-
erans Affairs, Department of			IPA - VA - Ann Arbor - Yihao Z	64.RD			59,212	
	Direct		IPA - VA - Ann Arbor - Yinao Z	04.KD				
erans Affairs, Department of	Direct Direct		IPA - VA - Ann Arbor - Yinao Z IPA - Wang, Jintao	64.RD			18,631	-
terans Affairs, Department of terans Affairs, Department of terans Affairs, Department of terans Affairs, Department of								-

Cluster Title/Federal Grantor/Program terans Affairs, Department of	Type Direct	Pass-Through Grantor	Award Identifier IPA Agreement Ashley Szpara FY	CFDA Number 64.RD	CFDA Program Title	Federal Expenditures 6,871	Pass-Through
terans Affairs, Department of	Direct		IPA Agreement_Ashiey Szpara_F Y IPA Althuis, Katie	64.RD		40,576	-
terans Affairs, Department of	Direct		IPA Althuis, Katie	64.RD		22,448	-
terans Affairs, Department of	Direct		IPA Baker Nicki	64.RD		33,858	-
terans Affairs, Department of	Direct		IPA Barick, Audrey	64.RD		60,511	-
terans Affairs, Department of	Direct		IPA Bauer, David	64.RD		29,443	-
terans Affairs, Department of	Direct		IPA Bauer, David	64.RD		29,442	-
terans Affairs, Department of	Direct		IPA Beaulieu, Melanie	64.RD		2,654	-
terans Affairs, Department of	Direct		IPA Cartee, Naw May Pearl	64.RD		53,410	-
terans Affairs, Department of	Direct		IPA Carver, Kyle	64.RD		(144)	-
terans Affairs, Department of terans Affairs, Department of	Direct Direct		IPA Choi,Hwajung IPA CHOWDHURY, MAHBOOB	64.RD 64.RD		1,981 3,803	-
terans Affairs, Department of	Direct		IPA Cohn, Amy	64.RD		16,571	
terans Affairs, Department of	Direct		IPA Cohn, Amy	64.RD		16,359	
terans Affairs, Department of	Direct		IPA De Vries, Raymond	64.RD		19,861	-
erans Affairs, Department of	Direct		IPA Dolan, David	64.RD		14,922	-
terans Affairs, Department of	Direct		IPA Engle, Jason	64.RD		2,889	-
terans Affairs, Department of	Direct		IPA Farris, Karen	64.RD		2,277	-
terans Affairs, Department of	Direct		IPA Farris, Karen	64.RD		241	-
erans Affairs, Department of	Direct		IPA Garlick, James	64.RD		7,396	-
terans Affairs, Department of	Direct		IPA Geisendorfer, Max	64.RD		19,327	-
terans Affairs, Department of	Direct		IPA Gornick, Michelle	64.RD		3,376	-
erans Affairs, Department of	Direct		IPA Gregory, Lynn A	64.RD		31,519	-
erans Affairs, Department of	Direct		IPA Guo, Chiao	64.RD		38,850	-
erans Affairs, Department of	Direct		IPA Henderson, James	64.RD		18,245	-
terans Affairs, Department of	Direct		IPA Henderson, James	64.RD		3,596	-
terans Affairs, Department of	Direct		IPA Hoelscher, Alise IPA Ignacio / 506-D95049	64.RD 64.RD		7,958 4,549	-
terans Affairs, Department of terans Affairs, Department of	Direct Direct		IPA Ignacio / 506-D95049 IPA Kadri, Reema Sub#810	64.RD		4,349	-
terans Affairs, Department of	Direct		IPA Kadri, Reema	64.RD		1,770	
terans Affairs, Department of	Direct		IPA Kanicki, Ariane	64.RD		60,679	
terans Affairs, Department of	Direct		IPA Kanicki, Ariane	64.RD		23,884	
terans Affairs, Department of	Direct		IPA Kanicki, Ariane	64.RD		(242)	-
terans Affairs, Department of	Direct		IPA Kim,Hyungjin	64.RD		61,368	-
erans Affairs, Department of	Direct		IPA King, Michael	64.RD		(2,303)	-
terans Affairs, Department of	Direct		IPA King, W. Michael	64.RD		27,110	-
terans Affairs, Department of	Direct		IPA Klein,Debra	64.RD		2,752	-
terans Affairs, Department of	Direct		IPA Krans, Amy	64.RD		12,744	-
terans Affairs, Department of	Direct		IPA Lavieri, Mariel	64.RD		11,107	-
terans Affairs, Department of	Direct		IPA Lee, Soo Jung	64.RD		49,270	-
terans Affairs, Department of	Direct		IPA Lu, Yu-Ting (Catherine)	64.RD		41,493	-
terans Affairs, Department of	Direct		IPA Lumeng, Carey	64.RD		4,076	-
terans Affairs, Department of	Direct		IPA Ma, Sean	64.RD		(15,727)	-
terans Affairs, Department of	Direct		IPA Manikas Maly, Marianna	64.RD		31,246	-
terans Affairs, Department of	Direct		IPA Manikas, Marianna	64.RD		(15,294)	-
terans Affairs, Department of	Direct		IPA Mann,Jason IPA Martin, Catherine	64.RD 64.RD		10,800 41,636	-
terans Affairs, Department of terans Affairs, Department of	Direct Direct		IPA Martin, Catherine	64.RD		9,616	-
terans Affairs, Department of	Direct		IPA Mase, Rebecca	64.RD		18,662	-
terans Affairs, Department of	Direct		IPA McCloskey, Lisa	64.RD		34,771	_
terans Affairs, Department of	Direct		IPA McConnell, Daniel	64.RD		12,700	_
terans Affairs, Department of	Direct		IPA Mohammed Kabeto	64.RD		(176)	-
terans Affairs, Department of	Direct		IPA Muller, Martijn	64.RD		3,243	-
terans Affairs, Department of	Direct		IPA Nabozny	64.RD		69,171	-
terans Affairs, Department of	Direct		IPA Neeley, Christopher	64.RD		2,650	-
erans Affairs, Department of	Direct		IPA Nowak, Michael	64.RD		15,858	-
erans Affairs, Department of	Direct		IPA Patel, Nita	64.RD		(5,352)	
erans Affairs, Department of	Direct		IPA Quinn, Martha	64.RD		22,728	-
erans Affairs, Department of	Direct		IPA Quinn, Martha	64.RD		19,488	-
erans Affairs, Department of	Direct		IPA Rogers, Mary	64.RD		18,793	-
erans Affairs, Department of	Direct		IPA Rogers, Mary	64.RD		4,535	-
erans Affairs, Department of	Direct		IPA Sarosh, Cyrus	64.RD		13,458	-
erans Affairs, Department of	Direct		IPA Scisney-Matlock, Margaret	64.RD		12,103	
erans Affairs, Department of	Direct		IPA Scisney-Matlock, Margaret	64.RD		9,623	
erans Affairs, Department of	Direct		IPA Semerad, Jay	64.RD		4,549	
erans Affairs, Department of	Direct		IPA Shih, Albert	64.RD		35,166	
terans Affairs, Department of	Direct		IPA Swalwell, Kathy	64.RD		25,383	-
terans Affairs, Department of	Direct		IPA Szpara, Ashley	64.RD		15,518	-
terans Affairs, Department of	Direct		IPA Teitz-Tennenbaum, Seagal	64.RD		74,442	
terans Affairs, Department of	Direct		IPA Teitz-Tennenbaum, Seagal	64.RD 64.RD		14,577	
erans Affairs, Department of erans Affairs, Department of	Direct Direct		IPA Villegas-Umana, Emily IPA Villegas-Umana, Emily	64.RD 64.RD		26,625 8,228	
terans Affairs, Department of	Direct		IPA Villegas-Omana, Emily IPA Wang, Jintao	64.RD 64.RD		8,228 21,173	-
							-
	Direct						
terans Affairs, Department of terans Affairs, Department of	Direct Direct		IPA Wells, Joanna IPA Wilke, Carol	64.RD 64.RD		14,795 6,461	

Cluster Title/Federal Grantor/Program Veterans Affairs, Department of	Type Direct	Pass-Through Grantor	Award Identifier	CFDA Number 64.RD	CFDA Program Title	Federal Expenditures	Pass-Through
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		IPA Xu, Jintao IPA Zhang, Xiaojie	64.RD 64.RD		(800) 60,935	-
Veterans Affairs, Department of	Direct		IPA Zhu	64.RD		46,712	_
Veterans Affairs, Department of	Direct		IPA Zikmund-Fisher, Brian	64.RD		3,608	-
Veterans Affairs, Department of	Direct		IPA, Heist, Kevin	64.RD		6,791	-
Veterans Affairs, Department of	Direct		IPA, Williams, David A	64.RD		1,730	-
Veterans Affairs, Department of	Direct		IPA: Toma, Mariam	64.RD		1,301	-
Veterans Affairs, Department of	Direct		IPA:Luther, Tahra	64.RD		(3,584)	-
Veterans Affairs, Department of	Direct		IPA_Althius,Katie	64.RD 64.RD		4,477	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA-Andrew Ryan 2018 IPA-Ehrlinger, Rachel	64.RD 64.RD		27,707 2,337	-
Veterans Affairs, Department of	Direct		IPA-Ha, Jinkyung	64.RD		15,921	-
Veterans Affairs, Department of	Direct		IPA-Hwajung Choi	64.RD		(1,415)	-
Veterans Affairs, Department of	Direct		IPA-Ma, Sean	64.RD		55,649	-
Veterans Affairs, Department of	Direct		IPA-McCloskey,Lisa	64.RD		52,577	-
Veterans Affairs, Department of	Direct		IPA-McGuire, Matthew	64.RD		32,206	-
Veterans Affairs, Department of	Direct		IPA-Wang, Shirley	64.RD		13,774	-
Veterans Affairs, Department of	Direct		IPA-Wilke, Carol	64.RD		8,248	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPS Chen, Jenny Krent, Chris	64.RD 64.RD		11,367 11,134	-
Veterans Affairs, Department of	Direct		Manikas, Marianna IPA	64.RD		39,760	-
Veterans Affairs, Department of	Direct		Moore, Ian	64.RD		(180)	-
Veterans Affairs, Department of	Direct		Nowak, Michael	64.RD		1,075	-
Veterans Affairs, Department of	Direct		PO 506-D75203	64.RD		4,361	-
Veterans Affairs, Department of	Direct		PO# D85006	64.RD		9,751	-
Veterans Affairs, Department of	Direct		Semerad, Jay	64.RD		755	-
Veterans Affairs, Department of	Direct		VA IPA - Alise Hoelscher	64.RD		26,244	-
Veterans Affairs, Department of	Direct		VA IPA - Ashe,Doctor	64.RD		35,919	-
Veterans Affairs, Department of	Direct		VA IPA - Bak, Trevor	64.RD		46,755	-
Veterans Affairs, Department of	Direct		VA IPA - Bhaumik, Arijit	64.RD		19,816	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		VA IPA - Calhoun,Oliver VA IPA - Garlick,James	64.RD 64.RD		5,642 11,373	-
Veterans Affairs, Department of	Direct		VA IPA - Goldman,Erin	64.RD		46,573	-
Veterans Affairs, Department of	Direct		VA IPA - Hernandez,Katrina	64.RD		2,419	-
Veterans Affairs, Department of	Direct		VA IPA - Horowitz, Jennifer	64.RD		3,168	-
Veterans Affairs, Department of	Direct		VA IPA - Ignacio,Rosalinda	64.RD		36,648	-
Veterans Affairs, Department of	Direct		VA IPA - Jannausch, Mary	64.RD		42,038	-
Veterans Affairs, Department of	Direct		VA IPA - Kabeto, Mohammed	64.RD		7,323	-
Veterans Affairs, Department of	Direct		VA IPA - Kerry Ryan	64.RD		14,323	-
Veterans Affairs, Department of	Direct		VA IPA - Klein,Debbie	64.RD		20,342	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		VA IPA - Kutyma,Evelina VA IPA - Laing,Julia	64.RD 64.RD		28,503 30,013	-
Veterans Affairs, Department of	Direct		VA IPA - Lang,Julia	64.RD		8,265	-
Veterans Affairs, Department of	Direct		VA IPA - Mann, Jason	64.RD		1,899	_
Veterans Affairs, Department of	Direct		VA IPA - Miller, Courtney	64.RD		13,243	-
Veterans Affairs, Department of	Direct		VA IPA - Mobley,Linda	64.RD		11,594	-
Veterans Affairs, Department of	Direct		VA IPA - Moll,Allison	64.RD		24,844	-
Veterans Affairs, Department of	Direct		VA IPA - O'Reilly, Dennis	64.RD		4,363	-
Veterans Affairs, Department of	Direct		VA IPA - Satinder Singh Baveja	64.RD		6,110	-
Veterans Affairs, Department of	Direct		VA IPA - Uju-Eke,Oluchi	64.RD		3,303	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		VA IPA - Van Sparrentak, Murphy VA IPA - Walton, Maureen	64.RD 64.RD		5,841 12,158	-
Veterans Affairs, Department of	Direct		VA IPA - Waton, Matteen	64.RD		76,413	-
Veterans Affairs, Department of	Direct		VA II A - Weston, Michele VA IPA - Yeagley, Emily	64.RD		38,125	-
Veterans Affairs, Department of	Direct		VA IPA - Yeagley,Emily	64.RD		(480)	-
Veterans Affairs, Department of	Direct		VA IPA Calhoun, O	64.RD		8,690	-
Veterans Affairs, Department of	Direct		VA IPA Gross,Colin	64.RD		15,344	-
Veterans Affairs, Department of	Direct		VA IPA He, Yongqun	64.RD		1,968	-
Veterans Affairs, Department of	Direct		VA IPA Myra Kim	64.RD		6,300	-
Veterans Affairs, Department of	Direct		VA IPA Satinder Singh Baveja	64.RD		6,267	-
Veterans Affairs, Department of	Direct		VA IPA Shelley Stoll	64.RD 64.RD		56,414	-
Veterans Affairs, Department of	Direct Direct		VA IPA Shih, Albert VA IPA Swalwell,Kathleen	64.RD 64.RD		(556) 16,573	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		VA IPA Swaiweli,Kathleen VA IPA -Thomas, Jennifer	64.RD		16,575	-
Veterans Affairs, Department of	Direct		VA II A "Homas, John VA II VA II A Williams, David	64.RD		568	-
Veterans Affairs, Department of	Direct		VA IPA Zheng, Yihao	64.RD		13,751	-
Veterans Affairs, Department of	Direct		VA IPA Zikmund-Fisher, Brian	64.RD		25,237	-
Veterans Affairs, Department of	Direct		VA IPA-Soo Jung Lee	64.RD		2,480	-
Veterans Affairs, Department of	Direct		VA Jinkyung HA FY18	64.RD		19,146	-
Veterans Affairs, Department of	Direct		VA250-16-D0138	64.RD		12,007	-
Veterans Affairs, Department of	Direct		VA250-17-C-0083	64.RD		40,679	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		VA250-17-C-0107 PO# D70010	64.RD		15,929	-
v cicians Affairs, Department of	Direct		VA251-15-C-0063 VA251-15-C-0171	64.RD 64.RD		8,764 49,879	
Veterans Affairs, Department of	Direct Direct						-
	Direct Direct Direct		VA251-15-D-0057 VA251-15-D-0057	64.RD 64.RD		52,131 8,484	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		VA251-15-D-0057	64.RD 64.RD		2,860 41,882	-
	Direct		VA-IPA Chowdhury, Mahboob	64.RD		41,882 5,232	-
terans Affairs, Department of terans Affairs, Department of	Direct		VA-IPA Ha, Jinkyung VA-IPA Pankaj Vats	64.RD		5,252	-
terans Analis, Department of	Direct		Total Veterans Affairs, Department of	04.RD		\$ 3,000,406	\$ -
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	D: .		82 50 4001	66.027	Internships, Training and Workshops for the Office of Air	¢ 105.017	0
vironmental Protection Agency	Direct		83594901	66.037	and Radiation	\$ 195,817	
vironmental Protection Agency	Pass-Through	Michigan, State of, Environmental Quality, Department of	205J Contract 2014-0100	66.454	Water Quality Management Planning	\$ (331)	
vironmental Protection Agency	Pass-Through	Michigan, State of, Environmental Quality, Department of	2017-0019	66.460	Nonpoint Source Implementation Grants	<u>\$ 82,422</u> <u>\$ 562</u>	
vironmental Protection Agency	Pass-Through	Michigan Technological University	1509080Z1	66.469 66.469	Great Lakes Program	\$ 562 407,220	\$ -
ivironmental Protection Agency	Pass-Through Pass-Through	Michigan, State of, Environmental Quality, Department of Michigan, State of, Natural Resources, Department of	18-AOC-013 GL-01E01195	66.469	Great Lakes Program Great Lakes Program	207,990	-
wironmental Protection Agency wironmental Protection Agency	Pass-Through	Ohio State University, The	60065547	66.469	Great Lakes Program	23,866	-
in noninental Protection Preservey	russ rinougn	one balle on feloky, the	00000011	00.109	orda zato riogram	\$ 639,638	S -
vironmental Protection Agency	Direct		83543601	66.509	Science To Achieve Results (STAR) Research Program	\$ 236,537	s -
vironmental Protection Agency	Direct		83563701	66.509	Science To Achieve Results (STAR) Research Program	52,330	-
wironmental Protection Agency	Pass-Through	Northeastern University	505112-78050	66.509	Science To Achieve Results (STAR) Research Program	142,505	-
wironmental Protection Agency	Pass-Through	The Water Research Foundation	STAR_N1R14	66.509	Science To Achieve Results (STAR) Research Program	11,810	-
vironmental Protection Agency	Pass-Through	Yale University	GK000296(CON-80000100)	66.509	Science To Achieve Results (STAR) Research Program	723	-
					D2 Annual National Chalant Davies Computition for	\$ 443,905	\$ -
the second second	D		02020001	66.516	P3 Award: National Student Design Competition for	¢ 12.056	¢.
vironmental Protection Agency	Direct		83928901 Total Environmental Protection Accord	66.516	Sustainability	\$ 12,056 \$ 1,373,507	
			Total Environmental Protection Agency			۵	ş -
clear Regulatory Commission	Direct		NRC-HQ-60-15-C-0012	77.RD		\$ 373,035	s -
uclear Regulatory Commission	Pass-Through	Purdue University	19200223-009	77.RD		53,155	-
clear Regulatory Commission	Pass-Through	Purdue University	4112-81070	77.RD		125,964	-
	-					\$ 552,154	s -
					U.S. Nuclear Regulatory Commission Scholarship and		
uclear Regulatory Commission	Direct		31310018M0030	77.008	Fellowship Program	\$ 83,181	s -
					U.S. Nuclear Regulatory Commission Scholarship and		
uclear Regulatory Commission	Direct		NRC-HQ-84-14-G0043	77.008	Fellowship Program	127	-
	D: .		NBC 110 04 15 C 0020	77.000	U.S. Nuclear Regulatory Commission Scholarship and	124 512	
uclear Regulatory Commission	Direct		NRC-HQ-84-15-G-0039	77.008	Fellowship Program U.S. Nuclear Regulatory Commission Scholarship and	134,512	-
uclear Regulatory Commission	Direct		NRC-HQ-84-16-G-0010	77.008	Fellowship Program	184,585	
defeat regulatory commission	Direct			111000	reno nomp riogram	\$ 402,405	s -
			Total Nuclear Regulatory Commission			\$ 954,559	
Deve to the f	Deve Threed	Ashster Denne Inc	Colorent Assessed	81 DD		\$ 113.480	e
nergy, Department of nergy, Department of	Pass-Through	Achates Power Inc. Alliance for Sustainable Energy, LLC	Subaward Agreement XHD-4-42014-01	81.RD 81.RD		\$ 113,480 7,431	5 -
nergy, Department of	Pass-Through Pass-Through	Argonne National Laboratory	3F-31141	81.RD		(18,525)	-
nergy, Department of	Pass-Through	Argonne National Laboratory	7F-30052	81.RD		45,205	-
nergy, Department of	Pass-Through	Argonne National Laboratory	7F-30154	81.RD		(40,087)	-
ergy, Department of	Pass-Through	Argonne National Laboratory	7F-30215	81.RD		153,347	_
nergy, Department of	Pass-Through	Argonne National Laboratory	8F-30020	81.RD		80,570	-
nergy, Department of	Pass-Through	Argonne National Laboratory	8F-30021	81.RD		84,825	-
nergy, Department of	Pass-Through	Argonne National Laboratory	8F-30062	81.RD		99,683	-
nergy, Department of	Pass-Through	Argonne National Laboratory	8F-30147	81.RD		844,674	-
ergy, Department of	Pass-Through	Argonne National Laboratory	8F-30202	81.RD		62,796	-
ergy, Department of	Pass-Through	Argonne National Laboratory	9F-60042	81.RD		17,291	-
ergy, Department of	Pass-Through	Argonne National Laboratory	9F-60045	81.RD		20,137	-
ergy, Department of	Pass-Through	Argonne National Laboratory	9F-60047	81.RD		97,626	-
ergy, Department of	Pass-Through	Argonne National Laboratory	9F-60126	81.RD		24,528	-
ergy, Department of	Pass-Through	Argonne National Laboratory	9F-60182	81.RD		6,650	-
ergy, Department of	Pass-Through	Argonne National Laboratory	Subcontract No 6F-30844	81.RD		122,887	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184138	81.RD		49,490	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184558	81.RD		4,830	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184559	81.RD		1,921	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184561	81.RD		2,714	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	0196971	81.RD		6,935	-
ergy, Department of ergy, Department of	Pass-Through Pass-Through	Battelle Energy Alliance, LLC Battelle Energy Alliance, LLC	210193 213554	81.RD 81.RD		22,134 72,600	-
ergy, Department of	Pass-Through Pass-Through	Battelle Energy Alliance, LLC	213534 213870	81.RD		9,079	-
ergy, Department of	Pass-Through	Beltech, LLC	Service Agreement	81.RD		25,139	-
ergy, Department of	Pass-Through	Brookhaven Science Associates, LLC	302986	81.RD		135,747	-
ergy, Department of	Pass-Through	Brookhaven Science Associates, LLC	326127	81.RD		315,946	_
argy, Department of	Pass-Through	Brookhaven Science Associates, LLC	346255	81.RD		145,859	-
ergy, Department of	Pass-Through	Brookhaven Science Associates, LLC	361688	81.RD		641	-
	Pass-Through	Detroit Diesel Corporation	Research Agreement	81.RD		208,208	-
			AGC PO18001011	81.RD		35,000	-
ergy, Department of	Pass-Through	Ford Motor Company					
hergy, Department of hergy, Department of	Pass-Through Pass-Through	Ford Motor Company	RQ14-337R01	81.RD		(449)	-
nergy, Department of nergy, Department of nergy, Department of							-
nergy, Department of nergy, Department of nergy, Department of nergy, Department of nergy, Department of	Pass-Through	Ford Motor Company	RQ14-337R01	81.RD		(449)	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	r CFDA Program Title	Federal Expenditures	Pass-Through
Energy, Department of	Pass-Through	Idaho National Laboratory Idaho National Laboratory	194314 204315	81.RD 81.RD		8,130 36,660	-
Energy, Department of Energy, Department of	Pass-Through Pass-Through	Idaho National Laboratory	204313	81.RD 81.RD		6,781	-
Energy, Department of	Pass-Through	Johns Hopkins University	2003555195	81.RD		8,947	-
Energy, Department of	Pass-Through	Krell Institute	Award Ltr dtd 3/27/18	81.RD		2,854	-
Energy, Department of	Pass-Through	Lawrence Berkeley National Laboratory	7234031	81.RD		394,342	-
Energy, Department of	Pass-Through	Lawrence Berkeley National Laboratory	7263193	81.RD		(30,876)	-
Energy, Department of	Pass-Through	Lawrence Berkeley National Laboratory	7342299	81.RD		13,051	-
Energy, Department of	Pass-Through	Lawrence Berkeley National Laboratory	7451048	81.RD		6,866	-
Energy, Department of	Pass-Through	Lawrence Berkeley National Laboratory	Subcontract 7264325	81.RD		5,641	-
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B608839	81.RD		70	-
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B614207	81.RD		487,536	-
Energy, Department of Energy, Department of	Pass-Through Pass-Through	Lawrence Livermore National Security, LLC Lawrence Livermore National Security, LLC	B625733 B626360	81.RD 81.RD		31,609 48,353	-
Energy, Department of	Pass-Through Pass-Through	Lawrence Livermore National Security, LLC	B620300 B627062	81.RD 81.RD		48,555 27,967	-
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B627515	81.RD		84,441	
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B628876	81.RD		38,204	-
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B629652	81.RD		15,028	-
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B630159	81.RD		22,466	
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B632153	81.RD		73,346	-
Energy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B632749	81.RD		54,376	-
Energy, Department of	Pass-Through	Los Alamos National Security, LLC	416304	81.RD		125,475	-
Energy, Department of	Pass-Through	Los Alamos National Security, LLC	459210	81.RD		154,298	-
Energy, Department of	Pass-Through	Los Alamos National Security, LLC	367023 sub contract 507277	81.RD		32,279	-
Energy, Department of	Pass-Through	Los Alamos National Security, LLC	427118-367023	81.RD		63,097	-
Energy, Department of	Pass-Through	Los Alamos National Security, LLC	BA #367023 Subcontract# 370629	81.RD		193,821	-
Energy, Department of	Pass-Through	Los Alamos National Security, LLC	Subcontract No. 495208/367023	81.RD		15,299	-
Energy, Department of	Pass-Through	Los Alamos National Security, LLC	Subcontract# 389182, B.A. #367 XEU-7-70041-01	81.RD 81.RD		(88) 35,483	-
Energy, Department of Energy, Department of	Pass-Through Pass-Through	National Renewable Energy Laboratory National Technology and Engineering Solutions of Sandia LLC (NTESS)	1511621	81.RD 81.RD		35,483 (165)	-
Energy, Department of Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1626776	81.RD 81.RD		12,646	-
Energy, Department of Energy, Department of	Pass-Through Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1853288	81.RD 81.RD		12,646	-
Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1869167	81.RD		30,611	
Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1969581	81.RD		80,122	-
Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1995518	81.RD		20,842	-
Energy, Department of	Pass-Through	Niowave. Inc.	Subcontract	81.RD		74,073	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000135076	81.RD		143,834	
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000136101	81.RD		28,380	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000136608	81.RD		229,702	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000138067	81.RD		68,857	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000149341	81.RD		4,000	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000153508	81.RD		(547)	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000159555	81.RD		63,286	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000162644	81.RD		198,522	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000169997 340625	81.RD		53,406	-
Energy, Department of Energy, Department of	Pass-Through Pass-Through	Pacific Northwest National Laboratory Pacific Northwest National Laboratory	340625 379141	81.RD 81.RD		(30) 8,516	-
Energy, Department of	Pass-Through	Pacific Northwest National Laboratory	390688	81.RD		8,510	-
Energy, Department of	Pass-Through	Pacific Northwest National Laboratory	PO 387535	81.RD		(18,253)	
Energy, Department of	Pass-Through	Savannah River National Laboratory	0000306392	81.RD		54,558	
Energy, Department of	Pass-Through	SLAC National Accelerator Laboratory	174133	81.RD		(1,591)	
Energy, Department of	Pass-Through	SLAC National Accelerator Laboratory	190771	81.RD		74.440	-
Energy, Department of	Pass-Through	Southwest Research Institute	L99020KJ	81.RD		41,339	-
Energy, Department of	Pass-Through	Triad National Security, LLC	375553	81.RD		15,623	-
Energy, Department of	Pass-Through	Triad National Security, LLC	487270	81.RD		968,549	440,155
Energy, Department of	Pass-Through	Triad National Security, LLC	Subcontract No. 423006 Basic A	81.RD		106,172	-
Energy, Department of	Pass-Through	UChicago Argonne, LLC	DE-AC02-06CH11357	81.RD		113,349	-
Energy, Department of	Pass-Through	University of California - Berkeley	7451043	81.RD		8,656	-
Energy, Department of	Pass-Through	University of Utah	10051007	81.RD		42,858	-
Energy, Department of	Pass-Through	UT-Battelle, LLC	4000140128	81.RD		328,640	-
Energy, Department of	Pass-Through	UT-Battelle, LLC	4000140129	81.RD		1,106,004	-
Energy, Department of Energy, Department of	Pass-Through Pass-Through	UT-Battelle, LLC UT-Battelle, LLC	4000162123 4000168180	81.RD 81.RD		75,367 33,966	-
Energy, Expandient of	1 ass-1 mougn	U Plancic, ELC	4000106160	01.KD		\$ 9,006,217	\$ 440,155
Energy, Department of	Direct		DE FG02 05 ER15686	81.049	Office of Science Financial Assistance Program	\$ 52,187	
Energy, Department of	Direct		DE-FG02-05 ER15080	81.049	Office of Science Financial Assistance Program	130.142	
Energy, Department of	Direct		DE-FG02-08ER15931	81.049	Office of Science Financial Assistance Program	253,680	-
Energy, Department of	Direct		DE-FG02-08ER15997	81.049	Office of Science Financial Assistance Program	227,556	-
Energy, Department of	Direct		DE-FG02-08ER46525	81.049	Office of Science Financial Assistance Program	329,920	214,579
Energy, Department of	Direct		DE-NA0002956	81.049	Office of Science Financial Assistance Program	514,441	64,041
Energy, Department of	Direct		DE-SC0001939	81.049	Office of Science Financial Assistance Program	1,714,249	1,304,602
	Direct		DE-SC0004871	81.049	Office of Science Financial Assistance Program	230,666	-
Energy, Department of	Direct						
Energy, Department of Energy, Department of	Direct		DE-SC0004888	81.049	Office of Science Financial Assistance Program	200,802	-
Energy, Department of Energy, Department of Energy, Department of	Direct Direct		DE-SC0006587	81.049	Office of Science Financial Assistance Program	149,641	-
Energy, Department of Energy, Department of	Direct						-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier DE-SC0008637	CFDA Numbe		Federal Expenditures	Pass-Through
Energy, Department of Energy, Department of	Direct Direct		DE-SC0008637 DE-SC0010341	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	2,140,182 92,465	299,551
Energy, Department of	Direct		DE-SC0010341	81.049	Office of Science Financial Assistance Program	76,275	-
Energy, Department of	Direct		DE-SC0010342	81.049	Office of Science Financial Assistance Program	86,072	
Energy, Department of	Direct		DE-SC0011078	81.049	Office of Science Financial Assistance Program	2,946	
Energy, Department of	Direct		DE-SC0011078	81.049	Office of Science Financial Assistance Program	11,924	-
Energy, Department of	Direct		DE-SC0012327	81.049	Office of Science Financial Assistance Program	186,070	
Energy, Department of	Direct		DE-SC0012479	81.049	Office of Science Financial Assistance Program	156,433	_
Energy, Department of	Direct		DE-SC0012482	81.049	Office of Science Financial Assistance Program	(50,759)	
Energy, Department of	Direct		DE-SC0012464	81.049	Office of Science Financial Assistance Program	82,770	_
Energy, Department of	Direct		DE-SC0013393	81.049	Office of Science Financial Assistance Program	151,524	
Energy, Department of	Direct		DE-SC0013562	81.049	Office of Science Financial Assistance Program	162,239	_
Energy, Department of	Direct		DE-SC0013961	81.049	Office of Science Financial Assistance Program	7,170	
Energy, Department of	Direct		DE-SC0013971	81.049	Office of Science Financial Assistance Program	57,663	-
Energy, Department of	Direct		DE-SC0013991	81.049	Office of Science Financial Assistance Program	57,014	-
Energy, Department of	Direct		DE-SC0014132	81.049	Office of Science Financial Assistance Program	67,907	-
Energy, Department of	Direct		DE-SC0014134	81.049	Office of Science Financial Assistance Program	41,009	-
Energy, Department of	Direct		DE-SC0015394	81.049	Office of Science Financial Assistance Program	28,763	-
Energy, Department of	Direct		DE-SC0015708	81.049	Office of Science Financial Assistance Program	(198)	
Energy, Department of	Direct		DE-SC0015782	81.049	Office of Science Financial Assistance Program	91,653	-
Energy, Department of	Direct		DE-SC0015782	81.049	Office of Science Financial Assistance Program	1,927	-
Energy, Department of	Direct		DE-SC0015799 DE-SC0016206	81.049	Office of Science Financial Assistance Program	143,018	-
Energy, Department of	Direct		DE-SC0016266	81.049	Office of Science Financial Assistance Program	219,248	-
Energy, Department of	Direct		DE-SC0016384 DE-SC0016489	81.049	Office of Science Financial Assistance Program	188,015	-
Energy, Department of	Direct		DE-SC0016489 DE-SC0016804	81.049	Office of Science Financial Assistance Program	262,601	-
Energy, Department of	Direct		DE-SC0016804 DE-SC0016804	81.049	Office of Science Financial Assistance Program	147,898	-
Energy, Department of Energy, Department of	Direct		DE-SC0016804 DE-SC0016808	81.049	Office of Science Financial Assistance Program	259,600	54,552
Energy, Department of	Direct		DE-SC0010808 DE-SC0017380	81.049	Office of Science Financial Assistance Program	63,837	54,552
Energy, Department of	Direct		DE-SC0017380 DE-SC0017971	81.049	Office of Science Financial Assistance Program	169,654	-
Energy, Department of	Direct		DE-SC0017971 DE-SC0018018	81.049	Office of Science Financial Assistance Program	132,412	-
					Office of Science Financial Assistance Program		-
Energy, Department of	Direct		DE-SC0018058	81.049 81.049		90,310 84,727	-
Energy, Department of	Direct		DE-SC0018059		Office of Science Financial Assistance Program		-
Energy, Department of	Direct		DE-SC0018173	81.049	Office of Science Financial Assistance Program	84,114	
Energy, Department of	Direct		DE-SC0018189	81.049	Office of Science Financial Assistance Program	(24)	-
Energy, Department of	Direct		DE-SC0018941	81.049	Office of Science Financial Assistance Program	464,420	-
Energy, Department of	Direct		DE-SC0019084	81.049	Office of Science Financial Assistance Program	19,673	-
Energy, Department of	Direct		DE-SC0019118	81.049	Office of Science Financial Assistance Program	132,646	-
Energy, Department of	Direct		DE-SC0019172	81.049	Office of Science Financial Assistance Program	147,775	-
Energy, Department of	Direct		DE-SC0019184	81.049	Office of Science Financial Assistance Program	12,598	-
Energy, Department of	Direct		DE-SC0019186	81.049	Office of Science Financial Assistance Program	246,885	-
Energy, Department of	Direct		DE-SC0019187	81.049	Office of Science Financial Assistance Program	12,566	-
Energy, Department of	Direct		DE-SC0019193	81.049	Office of Science Financial Assistance Program	532,978	-
Energy, Department of	Direct		DE-SC0019225	81.049	Office of Science Financial Assistance Program	94,505	-
Energy, Department of	Direct		DE-SC0019255	81.049	Office of Science Financial Assistance Program	404,519	
Energy, Department of	Direct		DE-SC0019278	81.049	Office of Science Financial Assistance Program	131,105	53,492
Energy, Department of	Direct		DE-SC0019758	81.049	Office of Science Financial Assistance Program	113,054	-
Energy, Department of	Pass-Through	Integrated Sensors, LLC	DE-FOA-0001940	81.049	Office of Science Financial Assistance Program	2,214	-
Energy, Department of	Pass-Through	Kent State University	400005-UM	81.049	Office of Science Financial Assistance Program	103,261	-
Energy, Department of	Pass-Through	Kitware, Inc	K002192-00-S01	81.049	Office of Science Financial Assistance Program	93,112	-
Energy, Department of	Pass-Through	Northwestern University	SP0027267-PROJ0007138	81.049	Office of Science Financial Assistance Program	123,602	-
Energy, Department of	Pass-Through	Ohio State University, The	60042071	81.049	Office of Science Financial Assistance Program	138,146	-
Energy, Department of	Pass-Through	Princeton University	SUB0000133	81.049	Office of Science Financial Assistance Program	72,243	-
Energy, Department of	Pass-Through	State University of New York (SUNY)	68799	81.049	Office of Science Financial Assistance Program	165,564	-
Energy, Department of	Pass-Through	State University of New York (SUNY)	82192/2/1148574	81.049	Office of Science Financial Assistance Program	13,151	-
Energy, Department of	Pass-Through	University of Rochester	417000G / UR FAO GR510576	81.049	Office of Science Financial Assistance Program	67,589	-
						\$ 14,825,571	
Energy, Department of	Direct		DE-EE0006434	81.086	Conservation Research and Development	\$ 75,239	
Energy, Department of	Direct		DE-EE0006821	81.086	Conservation Research and Development	(2,354)	, -
Energy, Department of	Direct		DE-EE0007212	81.086	Conservation Research and Development	480,524	-
Energy, Department of	Direct		DE-EE0007626	81.086	Conservation Research and Development	222,944	-
Energy, Department of	Direct		DE-EE0007979	81.086	Conservation Research and Development	233,029	-
Energy, Department of	Direct		DE-EE0008362	81.086	Conservation Research and Development	390,573	-
Energy, Department of	Direct		DE-EE0008456	81.086	Conservation Research and Development	57,553	-
Energy, Department of	Direct		DE-EE0008723	81.086	Conservation Research and Development	4,714	-
Energy, Department of	Pass-Through	Bosch	Agreement	81.086	Conservation Research and Development	8,369	-
Energy, Department of	Pass-Through	Daimler Benz of Stuttgart, Germany	Research Agrmt dtd 11/15/17	81.086	Conservation Research and Development	66,710	-
Energy, Department of	Pass-Through	Pennsylvania State University	555377-UM-DOE-7278	81.086	Conservation Research and Development	96,373	-
Energy, Department of	Pass-Through	Robert Bosch LLC. (dba Bosch USA)	DE-EE0007307-01	81.086	Conservation Research and Development	70,647	-
Energy, Department of	Pass-Through	The American Center for Mobility	DE-EE0008470-01	81.086	Conservation Research and Development	84,658	-
Energy, Department of	Pass-Through	United States Automotive Materials Partnership LLC	17-2992-AMP	81.086	Conservation Research and Development	186,271	-
Energy, Department of	Pass-Through	University of Southern California	93560722	81.086	Conservation Research and Development	299,556	-
Energy, Department of	Pass-Through	University of Virginia	GQ10067.157734	81.086	Conservation Research and Development	216,603	-
		. 0				\$ 2,491,409	s -
Energy, Department of	Direct		DE-EE0006708	81.087	Renewable Energy Research and Development	\$ 50,216	
Energy, Department of	Direct		DE-EE0007046	81.087	Renewable Energy Research and Development	7,511	
Energy, Department of	Direct		DE-EE0007549	81.087	Renewable Energy Research and Development	220,429	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number			Pass-Throu
ergy, Department of	Direct		DE-EE0008086	81.087	Renewable Energy Research and Development	199,489	97,
ergy, Department of	Direct		DE-EE0008093	81.087	Renewable Energy Research and Development	270,199	41,
rgy, Department of	Direct		DE-EE0008482	81.087	Renewable Energy Research and Development	112,409	
gy, Department of	Direct		DE-EE0008526	81.087	Renewable Energy Research and Development	82,126	
rgy, Department of	Direct		DE-EE0008561	81.087	Renewable Energy Research and Development	54,877	
rgy, Department of	Pass-Through	American Institute of Chemical Engineers	DE-EE0007888-06-1B	81.087	Renewable Energy Research and Development	(31,234)	
gy, Department of	Pass-Through	American Institute of Chemical Engineers	DE-EE0007888-08-5	81.087	Renewable Energy Research and Development	9,471	
gy, Department of	Pass-Through	Ford Motor Company	RQ17-144R06	81.087	Renewable Energy Research and Development	33,470	
rgy, Department of	Pass-Through	Re Vision Consulting, LLC	Research Agreement	81.087	Renewable Energy Research and Development	26,375	
rgy, Department of	Pass-Through	University of California - Berkeley	PBCX01-EMCJB	81.087	Renewable Energy Research and Development	68,028	
rgy, Department of	Pass-Through	University of Illinois-Urbana-Champaign	15851	81.087	Renewable Energy Research and Development	(4,184)	
rgy, Department of	Pass-Through	Volvo Group Global	Agreement	81.087	Renewable Energy Research and Development	275,286	
	-					\$ 1,374,468 \$	5 139,
gy, Department of	Direct		DE-FE0025315	81.089	Fossil Energy Research and Development	\$ 116,884 \$	6
gy, Department of	Direct		DE-FE0030684	81.089	Fossil Energy Research and Development	319,789	
gy, Department of	Direct		DE-FE0031228	81.089	Fossil Energy Research and Development	34,698	
gy, Department of	Pass-Through	Aerojet Corporation	200065051	81.089	Fossil Energy Research and Development	382,058	
gy, Department of	Pass-Through	University of Iowa	S00701-01	81.089	Fossil Energy Research and Development	13,986	
rgy, Department of	Pass-Through	University of Texas at Austin	UTA16-000734	81.089	Fossil Energy Research and Development	84,070	
gy, Department of	Pass-Through	Washington University in St. Louis	WU-15-194	81.089	Fossil Energy Research and Development	8,604	
507 1	8	5			60 1	\$ 960,089 \$	6
gy, Department of	Direct		DE NA0002727	81.112	Stewardship Science Grant Program	\$ 4,006 \$	6
gy, Department of	Direct		DE-NA0002723	81.112	Stewardship Science Grant Program	60,579	35
gy, Department of	Direct		DE-NA0003527	81.112	Stewardship Science Grant Program	210,861	
gy, Department of	Direct		DE-NA0003606	81.112	Stewardship Science Grant Program	233,833	
rgy, Department of	Direct		DE-NA0003869	81.112	Stewardship Science Grant Program	829,292	
gy, Department of	Pass-Through	Cornell University	83228-10967	81.112	Stewardship Science Grant Program	151,456	
gy, Department of	Pass-Through	Texas A & M University	M1803473	81.112	Stewardship Science Grant Program	269,289	
gy, Department of	Pass-Through	University of Nevada, Reno	UNR-16-70	81.112	Stewardship Science Grant Program	51,113	
gy, Department of		University of Rochester	416233-G	81.112	Stewardship Science Grant Program	135,531	
	Pass-Through	University of Rochester					
gy, Department of	Pass-Through		417539G/ UR FAO GR510909	81.112	Stewardship Science Grant Program	89,164	
gy, Department of	Pass-Through	William Marsh Rice University	R19071	81.112	Stewardship Science Grant Program	\$ 2,047,065 \$	3.5
w. Donostmont of	Direct		DE-NA0002481	81.113	Defense Nuclear Nonproliferation Research		5 52
gy, Department of						\$ 1,068 \$	2.000
gy, Department of	Direct		DE-NA0002534	81.113	Defense Nuclear Nonproliferation Research	4,638,204	2,999
gy, Department of	Direct		DE-NA0003920	81.113	Defense Nuclear Nonproliferation Research	2,372	
gy, Department of	Pass-Through	North Carolina State University	2014-0501-01	81.113	Defense Nuclear Nonproliferation Research	426,106	
rgy, Department of	Pass-Through	North Carolina State University	2014-0501-01-F1	81.113	Defense Nuclear Nonproliferation Research	35,786	
					Energy Efficiency and Renewable Energy Information	\$ 5,103,536 \$	5 2,999,
					Dissemination, Outreach, Training and Technical		
way Danastmant of	Dimont		DE-EE0005565	81.117		\$ 25,528 \$	s 49,
rgy, Department of	Direct				Analysis/Assistance		
rgy, Department of	Direct		DE-NE0000132	81.121	Nuclear Energy Research, Development and Demonstration	\$ 266,847 \$	
rgy, Department of	Direct		DE-NE0000639	81.121	Nuclear Energy Research, Development and Demonstration	(192,064)	
gy, Department of	Direct		DE-NE0008503	81.121	Nuclear Energy Research, Development and Demonstration	(7,704)	
gy, Department of	Direct		DE-NE0008519	81.121	Nuclear Energy Research, Development and Demonstration	170,167	
gy, Department of	Direct		DE-NE0008520	81.121	Nuclear Energy Research, Development and Demonstration	139,825	
gy, Department of	Direct		DE-NE0008632	81.121	Nuclear Energy Research, Development and Demonstration	164,839	
gy, Department of	Direct		DE-NE0008697	81.121	Nuclear Energy Research, Development and Demonstration	272,166	108
							100
gy, Department of	Direct		DE-NE0008781	81.121	Nuclear Energy Research, Development and Demonstration	73,300	
gy, Department of	Direct		DE-NE0008782	81.121	Nuclear Energy Research, Development and Demonstration	140,626	1
gy, Department of	Direct		DE-NE0008783	81.121	Nuclear Energy Research, Development and Demonstration	111,751	
gy, Department of	Direct		DE-NE0008784	81.121	Nuclear Energy Research, Development and Demonstration	76,675	
gy, Department of	Pass-Through	Carnegie-Mellon University	1070222-374895	81.121	Nuclear Energy Research, Development and Demonstration	38,910	
y, Department of	Pass-Through	George Washington University	18-S36	81.121	Nuclear Energy Research, Development and Demonstration	50,357	
y, Department of	Pass-Through	Georgia Technology Research Corporation	RF764-G6	81.121	Nuclear Energy Research, Development and Demonstration	(23,230)	
y, Department of	Pass-Through	North Carolina State University	2016-1536-05	81.121	Nuclear Energy Research, Development and Demonstration	229,876	
		2					
y, Department of	Pass-Through	Notre Dame University-Louaize, Lebanon (NDU)	Subaward DE-NE0008272	81.121	Nuclear Energy Research, Development and Demonstration	(2,954)	
y, Department of	Pass-Through	Ohio State University, The	60046086/PO #RF01482663	81.121	Nuclear Energy Research, Development and Demonstration	43,332	
y, Department of	Pass-Through	Oregon State University	G0156A-A	81.121	Nuclear Energy Research, Development and Demonstration	71,299	
y, Department of	Pass-Through	Oregon State University	G0157A-A	81.121	Nuclear Energy Research, Development and Demonstration	161,191	
y, Department of	Pass-Through	Pennsylvania State University	5724-UM-DOE-8717	81.121	Nuclear Energy Research, Development and Demonstration	197,577	
y, Department of	Pass-Through	Purdue University	4105-77202	81.121	Nuclear Energy Research, Development and Demonstration	271,746	
y, Department of	Pass-Through	Purdue University	4105-85097	81.121	Nuclear Energy Research, Development and Demonstration	110,604	
y, Department of	Pass-Through	University of Illinois-Urbana-Champaign	088924-16618	81.121	Nuclear Energy Research, Development and Demonstration	9,042	
		University of Massachusetts Lowell				32,151	
gy, Department of	Pass-Through		S5190000030483	81.121	Nuclear Energy Research, Development and Demonstration		
gy, Department of	Pass-Through	University of Wisconsin	775K515	81.121	Nuclear Energy Research, Development and Demonstration	287,910	
gy, Department of	Pass-Through	Virginia Polytechnic Institute and State University	429353-19337	81.121	Nuclear Energy Research, Development and Demonstration	113,329	
						\$ 2,807,568 \$	
	Pass-Through	Stanford University	60545512-107908	81.124	Predictive Science Academic Alliance Program	\$ 107,156 \$	6
			Grant Code AA540; Subaward No.	81.124	Predictive Science Academic Alliance Program	30,669	
gy, Department of gy, Department of	Pass-Through	University of Illinois-Urbana-Champaign	Grant Code Fill 19 10, Dabamard 1101				
gy, Department of	Pass-Through	University of Illinois-Urbana-Champaign				\$ 137,825 \$	6
y, Department of y, Department of	Pass-Through Direct	University of Illinois-Urbana-Champaign	DE-AR0000653	81.135	Advanced Research Projects Agency - Energy	\$ 837,487 \$	5 4,29
	Pass-Through	University of Illimois-Urbana-Champaign		81.135 81.135	Advanced Research Projects Agency - Energy Advanced Research Projects Agency - Energy		4,29

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Energy, Department of Energy, Department of	Direct Base Through	Southwest Research Institute	DE-AR0000797 K99085KJ	81.135 81.135	Advanced Research Projects Agency - Energy	489,928 140,227	104,824
	Pass-Through Pass-Through	University of Delaware	46101	81.135	Advanced Research Projects Agency - Energy Advanced Research Projects Agency - Energy	140,227	-
nergy, Department of nergy, Department of	Pass-Through	University of Maryland, The	56289 - Z7218004	81.135	Advanced Research Projects Agency - Energy	238,786	-
Energy, Department of	Pass-Through	Yale University	GR106208(CON-80001763)	81.135	Advanced Research Projects Agency - Energy	4,880	_
hergy, Department of	1 uss-1 inough	The Oniversity	GR100200(CO14-00001705)	01.155	Advanced Research Projects Agency - Energy	\$ 2,663,694	\$ 239,009
			Total Energy, Department of			\$ 41,442,970	
ucation, Department of	Pass-Through	Flint Community Schools	MOU	84.RD		\$ (2)	s -
acation, Department of	Pass-Through	Flint Community Schools	MOU	84.RD		(2)	-
ucation, Department of	Pass-Through	Grand Rapids Public Schools	MOU 2018-2019	84.RD		15,000	-
ucation, Department of	Pass-Through	Michigan, State of, Education, Department of	Agreement	84.RD		561,781	-
ucation, Department of	Pass-Through	Michigan, State of, Education, Department of	MOU FY2019	84.RD		193,427	-
ucation, Department of	Pass-Through	Ypsilanti Community Schools	MOU 2018-2019	84.RD		\$ 785,204	-
					National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies	9 /83,20 4	<u>, -</u>
ducation, Department of	Direct		P015A140090 (NRC)	84.015	Fellowship Program	\$ 34,656	¢
ucation, Department of	Direct		1015A140090 (NRC)	84.015	National Resource Centers Program for Foreign Language	\$ 54,000	
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ucation, Department of	Direct		P015A140091 (NRC)	84.015	Fellowship Program	43,368	-
· 1					National Resource Centers Program for Foreign Language	.2,500	
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
lucation, Department of	Direct		P015A140093 (NRC)	84.015	Fellowship Program	94,160	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ducation, Department of	Direct		P015A140095 (NRC)	84.015	Fellowship Program National Resource Centers Program for Foreign Language	66,725	-
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
acation, Department of	Direct		P015A140100	84.015	Fellowship Program	76,505	
ication, Department of	Direct		P015A140100	84.015	National Resource Centers Program for Foreign Language	76,505	-
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
cation, Department of	Direct		P015A180105	84.015	Fellowship Program	198,503	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
cation, Department of	Direct		P015A180106	84.015	Fellowship Program	181,648	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ucation, Department of	Direct		P015A180107	84.015	Fellowship Program	146,111	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
acation, Department of	Direct		P015A180108	84.015	Studies Program and Foreign Language and Area Studies Fellowship Program	93,000	_
ication, Department of	Ditte		1015/100100	04.013	National Resource Centers Program for Foreign Language	\$3,000	-
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
lucation, Department of	Direct		P015A180114	84.015	Fellowship Program	161,902	5,436
-					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
lucation, Department of	Direct		P015B140090 (FLAS)	84.015	Fellowship Program	3,397	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
ucation, Department of	Direct		P015B140091 (FLAS)	84.015	Studies Program and Foreign Language and Area Studies Fellowship Program	3,360	
ucation, Department of	Direct		F013D140091 (FLAS)	84.015	National Resource Centers Program for Foreign Language	5,360	-
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ucation, Department of	Direct		P015B140092	84.015	Fellowship Program	12,542	-
*					National Resource Centers Program for Foreign Language	_,	
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
			P015B140093 (FLAS)	84.015	Fellowship Program	4,072	-
ication, Department of	Direct		1015B110055 (1E11B)	0 110 12		.,	
ication, Department of	Direct		10135110033 (12113)	0.0015	National Resource Centers Program for Foreign Language	.,	
ucation, Department of	Direct			0.0012	National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International	.,	
ducation, Department of ducation, Department of	Direct		P015B140095 (FLAS)	84.015	National Resource Centers Program for Foreign Language	16.663	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ducation, Department of	Direct		P015B140100	84.015	Fellowship Program	7,250	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ducation, Department of	Direct		P015B180105	84.015	Fellowship Program	382,800	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
			D0147D100107	0.1.01.5	Studies Program and Foreign Language and Area Studies		
ducation, Department of	Direct		P015B180106	84.015	Fellowship Program	191,414	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ducation, Department of	Direct		P015B180107	84.015	Fellowship Program	312,332	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
	D: I		D015D100100	04.015		200.250	
Education, Department of	Direct		P015B180108	84.015	Fellowship Program	280,250	-
					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
ducation, Department of	Direct		P015B180110	84.015	Fellowship Program	332,800	-
· •					National Resource Centers Program for Foreign Language		
					and Area Studies or Foreign Language and International		
					Studies Program and Foreign Language and Area Studies		
Education, Department of	Direct		D016D190114	84.015		308,439	
Education, Department of	Direct		P015B180114	84.015	Fellowship Program		-
						\$ 2,951,897	\$ 5,436
Education, Department of	Direct		P022A150008	84.022	Overseas Programs - Doctoral Dissertation Research Abroad	\$ (139) \$	s -
Education, Department of	Direct		P022A160004	84.022	Overseas Programs - Doctoral Dissertation Research Abroad	(8,913)	-
Education, Department of	Direct		P022A170002	84.022	Overseas Programs - Doctoral Dissertation Research Abroad	(1,912)	-
Education, Department of	Direct		P022A180037	84.022	Overseas Programs - Doctoral Dissertation Research Abroad	41,718	
Education, Department of	Direct		1022/180037	04.022	Overseas i rograms - Doctoral Dissertation Research Abroad	\$ 30,754 5	s -
	D: I		P200 + 1501 (4	84.200			
Education, Department of	Direct		P200A150164	84.200		\$ (42,029)	s -
Education, Department of	Direct		P200A150170	84.200	Graduate Assistance in Areas of National Need	183,425	-
						\$ 141,396	s -
					Innovative Approaches to Literacy, Full-service Community		
Education, Department of	Direct		U215J180081-19	84.215	Schools; and Promise Neighborhoods	\$ 135,372 \$	s -
Education, Department of	Direct		R305A120811	84.305	Education Research, Development and Dissemination	\$ 173,037	\$ 78,338.00
Education, Department of	Direct		R305A140059	84.305	Education Research, Development and Dissemination	83,397	56,249
Education, Department of	Direct		R305A140363	84.305	Education Research, Development and Dissemination	41,675	41,675
Education, Department of	Direct		R305A140647	84.305	Education Research, Development and Dissemination	(16,627)	11,075
Education, Department of	Direct		R305A150163	84.305	Education Research, Development and Dissemination	235,756	117,879
							11/,0/9
Education, Department of	Direct		R305A170489	84.305	Education Research, Development and Dissemination	276,581	-
Education, Department of	Direct		R305B150012-19	84.305	Education Research, Development and Dissemination	733,127	-
Education, Department of	Direct		R305B170015-19	84.305	Education Research, Development and Dissemination	87,342	-
Education, Department of	Direct		R305H140028	84.305	Education Research, Development and Dissemination	331,859	171,285
Education, Department of	Pass-Through MDRC		R305N160018	84.305	Education Research, Development and Dissemination	39,879	-
Education, Department of	Pass-Through Miami U	niversity	G02732	84.305	Education Research, Development and Dissemination	229,451	-
Education, Department of		rk University	F0255-04	84.305	Education Research, Development and Dissemination	1,426	
Education, Department of		rk University	F7627-01	84.305	Education Research, Development and Dissemination	82,273	
Education, Department of		stern University	SP0034839-PROJ0009317	84.305	Education Research, Development and Dissemination	9,076	
				84.305		24,964	-
Education, Department of		for Research on Educational Effectiveness (SREE)	Consultancy Agreement		Education Research, Development and Dissemination		-
Education, Department of	Pass-Through Universi	ty of Minnesota	P005236601	84.305	Education Research, Development and Dissemination	825	-
					-	\$ 2,334,041	
Education, Department of	Direct		R324A150023	84.324	Research in Special Education	\$ 418,517 5	\$ 188,588.00
Education, Department of	Direct		R324B180003	84.324	Research in Special Education	226,958	-
Education, Department of	Direct		R324U180001	84.324	Research in Special Education	80,481	9,206.00
· •						\$ 725,956	
					Special Education - Personnel Development to Improve	. ,25,50	
Education, Department of	Direct		H325D160032	84.325		\$ 312,600	\$
Education, Department of	Direct		1152512100052	04.323	Gaining Early Awareness and Readiness for Undergraduate	φ 512,000 3	<i>y</i> -
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Education, Department of	Pass-Through Michigan	n, State of, Department of Talent and Economic Development	16-00-11	84.334		\$ 43,496	• -
					Gaining Early Awareness and Readiness for Undergraduate		
Education, Department of	Pass-Through Michigan	n, State of, Department of Talent and Economic Development	16-00-13	84.334	Programs	6,657	-
					Gaining Early Awareness and Readiness for Undergraduate		
Education, Department of	Pass-Through Michigan	n, State of, Department of Talent and Economic Development	16-00-18	84.334	Programs	(2,682)	-
· •	5 5				Gaining Early Awareness and Readiness for Undergraduate		
Education, Department of	Pass-Through Michigan	n, State of, Department of Talent and Economic Development	16-00-19	84.334	Programs	27,917	
	Mouga Mieniga	.,	10 00 19	01001	Gaining Early Awareness and Readiness for Undergraduate	2,,,,11	
Education, Department of	Dass Through Miching	n, State of, Department of Talent and Economic Development	18 00 13	04 224		6 605	
Equeation. Department of	Pass-Through Michigan	ii, State of, Department of Falent and Economic Development	18-00-13	84.334	Programs	6,605	-
, I					Gaining Early Awareness and Readiness for Undergraduate		
	Pass-Through Michigan	n, State of, Department of Talent and Economic Development	18-00-17	84.334	Programs	81,836	-
Education, Department of	Pass-Through Michigan	n, State of, Department of Talent and Economic Development	18-00-17	84.334	Programs Gaining Early Awareness and Readiness for Undergraduate	81,836	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title Gaining Early Awareness and Readiness for Undergraduate	Federal Expenditures	Pass-Through
Education, Department of	Pass-Through	Michigan, State of, Strategic Fund	10-00-12	84.334	Programs	15,915	-
Education, Department of	Pass-Through	Michigan, State of, Strategic Fund	16-00-12	84.334	Gaining Early Awareness and Readiness for Undergraduate Programs	(5,085	
			16.00.11			\$ 195,549	
Education, Department of Education, Department of	Pass-Through Pass-Through	Michigan, State of, Department of Talent and Economic Development Tennessee, State of	16-00-11 0000024026 / 33105-04117 / 515	84.344 84.372	TRIO_Dissemination Partnership Grants Statewide Longitudinal Data Systems	\$ 41 \$ 119,326	<u>s -</u> s -
Education, Department of	r uss-r niougn	Tennessee, State of	Total Education, Department of	04.572	Statewide Eoligitadinal Data Systems	\$ 7,732,136	
Health and Human Services, Department of	Direct		14IPA1405517	93.RD		\$ (30)\$-
Health and Human Services, Department of	Direct		16IPA1604636 Mod2	93.RD		29,769	-
Health and Human Services, Department of	Direct		18IPA1806125	93.RD		6,482	
Health and Human Services, Department of	Direct		18IPA1816749 19IPA1911955	93.RD		19,122	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		200-2010-33976	93.RD 93.RD		5,103 6,741,740	-
Health and Human Services, Department of	Direct		200-2017-95888	93.RD		169,405	
Health and Human Services, Department of	Direct		2019-05-HP-NEW	93.RD		11,812	
Health and Human Services, Department of	Direct		75FCMC18D0041	93.RD		2,680,106	
Health and Human Services, Department of	Direct		75N95019C00017	93.RD		88,382	-
Health and Human Services, Department of	Direct		75N95019C00017	93.RD		73,901	-
Health and Human Services, Department of	Direct Direct		HHSF223201510146C	93.RD		482,720	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		HHSF223201510157C HHSF223201510170C	93.RD 93.RD		291,677 243,236	133,812
Health and Human Services, Department of Health and Human Services, Department of	Direct		HHSF223201510170C HHSF223201810187C	93.RD 93.RD		134,311	-
Health and Human Services, Department of	Direct		HHSN268201100026C	93.RD		588,344	85,686
Health and Human Services, Department of	Direct		HHSN268201600006I	93.RD		296,011	-
Health and Human Services, Department of	Direct		HHSN268201700004C	93.RD		786,858	-
Health and Human Services, Department of	Direct		HHSN268201800002I	93.RD		4,946,271	493,318
Health and Human Services, Department of	Direct		HHSN271201400033C	93.RD		649,695	-
Health and Human Services, Department of	Direct		HHSN272201600049C	93.RD		2,839,621	-
Health and Human Services, Department of	Direct		HHSN276201400001C	93.RD		1,776,658	426,101
Health and Human Services, Department of	Direct		HHSP233201800021C-CLIN 1	93.RD		303,509	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Pass-Through	Abt Associates, Inc.	HHSP233201800021C-CLIN 6 49104	93.RD 93.RD		15,594 23,107	-
Health and Human Services, Department of	Pass-Through	Abt Associates, Inc.	44098 / AG-3198-C-14-0017	93.RD		13,706	
Health and Human Services, Department of	Pass-Through	Alaska, State of	0617-130	93.RD		1,055	-
Health and Human Services, Department of	Pass-Through	Albany College of Pharmacy	2016-728-1	93.RD		15,134	-
Health and Human Services, Department of	Pass-Through	American Indian Health and Family Services of SE Michigan, Inc (AIHFS)	RA Eff.07/31/19	93.RD		4,488	-
Health and Human Services, Department of	Pass-Through	American Indian Health and Family Services of SE Michigan, Inc (AIHFS)	Research Agreement	93.RD		2,746	
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	75FCMC18D0016/Task 75FCMC19F00	93.RD		93,810	-
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	HHSM-500_T0003	93.RD		164,777	-
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	HHSM-500-2014-0029ITask HHSM-5	93.RD		396	
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Arbor Research Collaborative For Health ArchieMD, Inc.	HHSM-500-T003 Agreement	93.RD 93.RD		327,783 (300	
Health and Human Services, Department of	Pass-Through	Association of University Centers on Disabilities	AUCD	93.RD		2,957	, -
Health and Human Services, Department of	Pass-Through	ATGC, Inc	Subcontract	93.RD		157,226	-
Health and Human Services, Department of	Pass-Through	Biocrede, Inc	Research Agreement	93.RD		(4,144) -
Health and Human Services, Department of	Pass-Through	BlueWillow Biologics, Inc.	17030-276 Study A NBRA	93.RD		13	
Health and Human Services, Department of	Pass-Through	BlueWillow Biologics, Inc.	Roundtable Research	93.RD		29	-
Health and Human Services, Department of	Pass-Through	BlueWillow Biologics, Inc.	Roundtable Research Agreemen	93.RD		26	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES513359	93.RD		68,944	-
Health and Human Services, Department of	Pass-Through	Catholic Social Services	Agreement	93.RD		20,469	-
Health and Human Services, Department of	Pass-Through	Catholic Social Services	Subcontracting Request	93.RD 93.RD		35,847 10,659	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass Through	Center for Policy Research (CPR) Chaperone Therapeutics, Inc	Second Tier Subaward Agreement Roundtable Research Agreement	93.RD 93.RD		746	
Health and Human Services, Department of	Pass-Through Pass-Through	Cleveland Clinic Foundation	953-SUB	93.RD		114,099	-
Health and Human Services, Department of	Pass-Through	COPD Foundation, Inc	FDP CR Sub agreement	93.RD		108,010	-
Health and Human Services, Department of	Pass-Through	Duke University	203-8171	93.RD		11,255	
Health and Human Services, Department of	Pass-Through	Duke University	203-8327	93.RD		986	-
Health and Human Services, Department of	Pass-Through	Duke University	A030563	93.RD		11,597	-
Health and Human Services, Department of	Pass-Through	Duke University	A030692	93.RD		4,746	-
Health and Human Services, Department of	Pass-Through	Echelon Biosciences, Inc (EBI)	13-PAF05069	93.RD		22,869	-
Health and Human Services, Department of	Pass-Through	Exo Dynamics, LLC	Roundtable Research Agreement	93.RD		17,915	-
Health and Human Services, Department of	Pass-Through	Flint, City of	Research Agreement	93.RD		112,395	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	GreenMark Biomedical Inc. Health Research and Educational Trust	Research Agreement	93.RD 93.RD		65,442 179,833	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	Health Research and Educational Trust	80772 80776	93.RD 93.RD		179,833	-
Health and Human Services, Department of	Pass-Through	Health Research and Educational Trust	87707	93.RD		178,723	
Health and Human Services, Department of	Pass-Through	Health Research and Educational Trust	87713	93.RD		43,508	
Health and Human Services, Department of	Pass-Through	Hennepin Healthcare Research Institute (HHRI)	HHSH250201500009C	93.RD		33,339	
Health and Human Services, Department of	Pass-Through	Hennepin Healthcare Research Institute (HHRI)	HHSH250201500009C	93.RD		9,718	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4684929UM	93.RD		45,745	
Health and Human Services, Department of	Pass-Through	Innovative Bio Therapies (IBT)	Project Specif Addendum	93.RD		15,954	
Health and Human Services, Department of	Pass-Through	Innovative Bio Therapies (IBT)	Project Specific Addendum to M	93.RD		18,898	
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Invenio Imaging, Inc.	Research Agreement 19-880-10	93.RD 93.RD		(15,514	
	Pass-Through	Joslin Diabetes Center	19-880-10			18,003	-

	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
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Hadhan Human Services, Department of Halth and Human Services, Department of Pass-ThroughRush Linversity Medical Center152202-Sub0192.084Diseases Precution O Discase, Disability, and Deals by Infections521Halth and Human Services, Department of Halth Marman Services, Department of Halth Muman Services, Department of Halth Muman Services, Department of DirectNext-University Medical Center93.084Diseases521Halth Marman Services, Department of Halth Muman Services, Department of Halth Muman Services, Department of DirectTenple UniversitySecond Tire Subaward Agreement93.086Grants Food and Drug Administration Research522Halth And Human Services, Department of Halth Muman Services, Department of DirectDirectSecond Tire Subaward Agreement93.103Food and Drug Administration Research S Stoll FD005085-0493.103Food and Drug Administration Research23Halth And Human Services, Department of Health Muman Services, Department of DirectDirectStoll FD005085-0493.103Food and Drug Administration Research S Stoll FD005085-0423Health And Human Services, Department of Health Muman Services, Department of DirectDirectStoll FD005085-0493.103Food and Drug Administration Research S Stoll FD005085-0423Health And Human Services, Department of Health Muman Services, Department of Health Muman Services, Department of DirectDirectStoll FD005085-0493.101Maternal and Child Health Federal Consolidated Programs Stoll FD005085-0423Health And Human Services, Department of	913,821 \$	\$ 913,821	321 \$	208,49
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Health and Human Services, Department of Pass-Through Wayne State University WSU17100 93.110 Maternal and Child Health Federal Consolidated Programs (89,304			-
	(2,514)			-
Health and Human Services, Department of Pass-Through Wayne State University WSU17103 93.110 Maternal and Child Health Federal Consolidated Programs	(1,406)	(1,406)	406)	-
	4,270	4,270	270	-
	15,074			-
	21,913			-
	36,068			_
	702,466 \$			4,33
	99,128 \$			
	>>,.20 0	÷ 55,126	20 0	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier 1 R21 ES029751-02	CFDA Number 93.113	CFDA Program Title	Federal Expenditur 130		iss-Through
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		4 R00 ES026198-03	93.113	Environmental Health Environmental Health		,571 ,443	-
Health and Human Services, Department of	Direct		4 R01 ES021465-05	93.113	Environmental Health		,443 ,093	-
Health and Human Services, Department of	Direct		5 F32 ES026477-03	93.113	Environmental Health		,523	
Health and Human Services, Department of	Direct		5 K01 ES026839-05	93.113	Environmental Health		,269	_
Health and Human Services, Department of	Direct		5 K23 ES027221-03	93.113	Environmental Health		,285	_
Health and Human Services, Department of	Direct		5 K99 ES026198-02	93.113	Environmental Health	103		_
Health and Human Services, Department of	Direct		5 P01 ES022844-05	93.113	Environmental Health		,670	-
Health and Human Services, Department of	Direct		5 P30 ES017885-08	93.113	Environmental Health	1,648		-
Health and Human Services, Department of	Direct		5 R00 ES024340-05	93.113	Environmental Health	242		-
Health and Human Services, Department of	Direct		5 R01 ES012236-15	93.113	Environmental Health		,430	-
Health and Human Services, Department of	Direct		5 R01 ES022616-05	93.113	Environmental Health	357		80,969
Health and Human Services, Department of	Direct		5 R01 ES024732-04	93.113	Environmental Health	289	165	10,682
Health and Human Services, Department of	Direct		5 R01 ES026578-04	93.113	Environmental Health	660	,321	-
Health and Human Services, Department of	Direct		5 R01 ES026964-03	93.113	Environmental Health	331	,904	-
Health and Human Services, Department of	Direct		5 R01 ES028694-02	93.113	Environmental Health	261	,024	32,755
Health and Human Services, Department of	Direct		5 R01 ES028802-02	93.113	Environmental Health	470	,187	-
Health and Human Services, Department of	Direct		5 R24 ES028502-03	93.113	Environmental Health	346		139,997
Health and Human Services, Department of	Direct		5 U01 ES026697-04	93.113	Environmental Health		,905	-
Health and Human Services, Department of	Direct		T32 ES007062	93.113	Environmental Health		,514	-
Health and Human Services, Department of	Pass-Through	Bowling Green State University	10009736-UM05	93.113	Environmental Health		,606	-
Health and Human Services, Department of	Pass-Through	Brown University	00001336	93.113	Environmental Health		,217	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512047	93.113	Environmental Health		,370)	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512141	93.113	Environmental Health		,865	47,385
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512634	93.113	Environmental Health		,100	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES513536	93.113	Environmental Health		,542	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES513981	93.113	Environmental Health	29	,837	-
Health and Human Services, Department of	Pass-Through	Colorado State University	G-00695	93.113	Environmental Health		(1)	-
Health and Human Services, Department of	Pass-Through	Colorado State University	G-18939-1	93.113	Environmental Health		,510	-
Health and Human Services, Department of	Pass-Through	Harvard University	112147-5072942	93.113	Environmental Health		,279	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2002950119	93.113	Environmental Health		,173	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	R01ES025531	93.113	Environmental Health		,380	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC103336UM	93.113	Environmental Health		,551	-
Health and Human Services, Department of	Pass-Through	Northeastern University	500550-78050	93.113	Environmental Health		(18)	-
Health and Human Services, Department of	Pass-Through	Northeastern University	500610-78050	93.113	Environmental Health		,313	-
Health and Human Services, Department of	Pass-Through	University of New Mexico	3RDG3	93.113 93.113	Environmental Health Environmental Health		,288	-
Health and Human Services, Department of	Pass-Through	University of New Mexico	3RDG30	93.113	Environmental Health Environmental Health		,215 ,383	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Toronto University of Washington	Subgrant1 UWSC10726	93.113	Environmental Health		,585 ,542	-
Health and Human Services, Department of	rass-miougn	University of washington	0W3C10720	95.115	Environmental Health		,542 ,554 \$	311,788
Health and Human Services, Department of	Direct		1D33HP316700100	93.117	Preventive Medicine Residency		,241 \$	511,788
Health and Human Services, Department of	Direct		5 D33 HP25796-04-00	93.117	Preventive Medicine Residency		,241 3	-
rituani and rianian bei rites, Deparanent or	Direct		5 B55 III 25770 01 00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Treventive modeline residency		.993 \$	
Health and Human Services, Department of	Direct		1 F30 DE028455-01	93.121	Oral Diseases and Disorders Research		,544 \$	-
Health and Human Services, Department of	Direct		1 F30 DE028465-01	93.121	Oral Diseases and Disorders Research		.308	-
Health and Human Services, Department of	Direct		1 F31 DE028740-01	93.121	Oral Diseases and Disorders Research		,239	-
Health and Human Services, Department of	Direct		1 K99 DE026810-02	93.121	Oral Diseases and Disorders Research		,944	-
Health and Human Services, Department of	Direct		1 R21 DE027765-01A1	93.121	Oral Diseases and Disorders Research		439	-
Health and Human Services, Department of	Direct		1 R21 DE028690 01	93.121	Oral Diseases and Disorders Research	20	.207	2,846
Health and Human Services, Department of	Direct		1 R56 DE026464-01A1	93.121	Oral Diseases and Disorders Research	258	,919	198,735
Health and Human Services, Department of	Direct		4 R01 DE022327-05	93.121	Oral Diseases and Disorders Research	(24	,884)	-
Health and Human Services, Department of	Direct		4 R01 DE022567-04	93.121	Oral Diseases and Disorders Research	48	,644	-
Health and Human Services, Department of	Direct		4 R01 DE024450-04	93.121	Oral Diseases and Disorders Research	113	,433	-
Health and Human Services, Department of	Direct		4 U01 DE021412-06	93.121	Oral Diseases and Disorders Research	(9	,140)	-
Health and Human Services, Department of	Direct		5 F30 DE023479-04	93.121	Oral Diseases and Disorders Research		,347)	-
Health and Human Services, Department of	Direct		5 F30 DE025471-04	93.121	Oral Diseases and Disorders Research		,033	-
Health and Human Services, Department of	Direct		5 F30 DE026048-03	93.121	Oral Diseases and Disorders Research		,175	-
Health and Human Services, Department of	Direct		5 F30 DE027605-02	93.121	Oral Diseases and Disorders Research		,128	-
Health and Human Services, Department of	Direct		5 F31 DE027600-03	93.121	Oral Diseases and Disorders Research		,817	-
Health and Human Services, Department of	Direct		5 F32 DE026346-04	93.121	Oral Diseases and Disorders Research		,117	-
Health and Human Services, Department of	Direct		5 F32 DE027604-02	93.121	Oral Diseases and Disorders Research		,366	-
Health and Human Services, Department of	Direct		5 K12 DE023574-05	93.121	Oral Diseases and Disorders Research		,804	3,752
Health and Human Services, Department of	Direct		5 K12DE027826-02	93.121	Oral Diseases and Disorders Research		,369	-
Health and Human Services, Department of	Direct		5 R00 DE022557-04	93.121	Oral Diseases and Disorders Research		,954	-
Health and Human Services, Department of	Direct		5 R00 DE024173-05	93.121	Oral Diseases and Disorders Research		,894	-
Health and Human Services, Department of	Direct		5 R01 DE011723-19	93.121	Oral Diseases and Disorders Research		,009)	-
	Direct		5 R01 DE015846-15	93.121	Oral Diseases and Disorders Research		,359	-
Health and Human Services, Department of				93.121	Oral Diseases and Disorders Research		,262	81,814
Health and Human Services, Department of	Direct		5 R01 DE020843-10					
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 DE021139-08	93.121	Oral Diseases and Disorders Research	524		-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct Direct		5 R01 DE021139-08 5 R01 DE021410-07	93.121 93.121	Oral Diseases and Disorders Research	475	,164	-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct Direct Direct		5 R01 DE021139-08 5 R01 DE021410-07 5 R01 DE024796-05	93.121 93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research	475 271	,164 ,394	-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct Direct Direct Direct		5 R01 DE021139-08 5 R01 DE021410-07 5 R01 DE024796-05 5 R01 DE025225-05	93.121 93.121 93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research	475 271 690	,164 ,394 ,231	337,096
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct Direct Direct Direct Direct		5 R01 DE021139-08 5 R01 DE021410-07 5 R01 DE024796-05 5 R01 DE025225-05 5 R01 DE025227-04	93.121 93.121 93.121 93.121 93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research	475 271 690 464	,164 ,394 ,231 ,396	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct Direct Direct Direct Direct Direct		5 R01 DE021139-08 5 R01 DE021410-07 5 R01 DE024796-05 5 R01 DE025225-05 5 R01 DE025827-04 5 R01 DE026116-04	93.121 93.121 93.121 93.121 93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research	475 271 690 464 476	,164 ,394 ,231 ,396 ,070	337,096 10,560
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct Direct Direct Direct Direct		5 R01 DE021139-08 5 R01 DE021410-07 5 R01 DE024796-05 5 R01 DE025225-05 5 R01 DE025227-04	93.121 93.121 93.121 93.121 93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research Oral Diseases and Disorders Research	475 271 690 464 476	,164 ,394 ,231 ,396 ,070 ,765	337,096

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Numbe		Federal		Pass-Through
Health and Human Services, Department of	Direct		5 R01 DE026666-02S1 5 R01 DE026728-02	93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research		405,039	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 DE026728-02 5 R01 DE027034-02	93.121	Oral Diseases and Disorders Research		309,539 340,081	-
Health and Human Services, Department of	Direct		5 R01 DE027034-02	93.121	Oral Diseases and Disorders Research		449,067	-
Health and Human Services, Department of	Direct		5 R01 DE0276750-02	93.121	Oral Diseases and Disorders Research		419,256	
Health and Human Services, Department of	Direct		5 R01DE022327-07	93.121	Oral Diseases and Disorders Research		315,752	_
Health and Human Services, Department of	Direct		5 R03 DE027399-02	93.121	Oral Diseases and Disorders Research		64,914	33,033
Health and Human Services, Department of	Direct		5 R03 DE027421-02	93.121	Oral Diseases and Disorders Research		173,895	-
Health and Human Services, Department of	Direct		5 R03 DE027456-02	93.121	Oral Diseases and Disorders Research		125,017	-
Health and Human Services, Department of	Direct		5 R21 DE027169-02	93.121	Oral Diseases and Disorders Research		117,349	-
Health and Human Services, Department of	Direct		5 R35 DE027551-03	93.121	Oral Diseases and Disorders Research		1,023,912	-
Health and Human Services, Department of	Direct		5 R56 DE025097-02	93.121	Oral Diseases and Disorders Research		(43,379)	8,090
Health and Human Services, Department of	Direct		5 U01 DE021412-09S1	93.121	Oral Diseases and Disorders Research		1,792,035	1,204,397
Health and Human Services, Department of	Direct		5 U01 DE023771-05	93.121	Oral Diseases and Disorders Research		63,775	-
Health and Human Services, Department of	Direct		5 U01 DE025184-04	93.121	Oral Diseases and Disorders Research		531,907	-
Health and Human Services, Department of	Direct		5 U01 DE025633-04	93.121	Oral Diseases and Disorders Research		541,438	-
Health and Human Services, Department of	Direct		5 U01 DE027372 03	93.121	Oral Diseases and Disorders Research		2,142,271	1,309,426
Health and Human Services, Department of	Direct		5 U24 DE026915-03	93.121	Oral Diseases and Disorders Research		3,100,214	1,591,091
Health and Human Services, Department of	Direct		7 K08 DE023552-06	93.121	Oral Diseases and Disorders Research		42,730	-
Health and Human Services, Department of	Direct		T32 DE007057	93.121	Oral Diseases and Disorders Research		693,373	-
Health and Human Services, Department of	Pass-Through	Carolinas HealthCare System	3000300177	93.121	Oral Diseases and Disorders Research		8,465	-
Health and Human Services, Department of	Pass-Through	Carolinas HealthCare System	Subcontract	93.121	Oral Diseases and Disorders Research		60,179	-
Health and Human Services, Department of	Pass-Through	Fukuoka Dental College	Prime 7 R01 DE023538 04	93.121	Oral Diseases and Disorders Research		(134)	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	Subaward#2002809952	93.121	Oral Diseases and Disorders Research		3,036	-
Health and Human Services, Department of	Pass-Through	Kitware, Inc	K002137-00-S02	93.121	Oral Diseases and Disorders Research		30,983	-
Health and Human Services, Department of	Pass-Through	Research Foundation of City University of New York (CUNY)	R923393	93.121	Oral Diseases and Disorders Research		37,723	-
Health and Human Services, Department of	Pass-Through	University of Connecticut Health Center (UConn Health)	UCHC7-112614499	93.121	Oral Diseases and Disorders Research		32,008	-
Health and Human Services, Department of	Pass-Through	University of Florida, The	UFDSP00010750 / 00112186	93.121	Oral Diseases and Disorders Research		9,022	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0051687 (129710-2)	93.121	Oral Diseases and Disorders Research		8,483	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0051687 (131243-2)	93.121	Oral Diseases and Disorders Research	-	655,683	
						\$	19,142,973 \$	4,795,947
Health and Human Services, Department of	Direct		2 A22 HP31014-02-00	93.124	Nurse Anesthetist Traineeship	\$	65,476 \$	-
Health and Human Services, Department of	Pass-Through	The Research Institute at Nationwide Children's Hospital	710040-0818-00	93.127	Emergency Medical Services for Children	\$	41,966 \$	-
Health and Human Services, Department of	Pass-Through	The Research Institute at Nationwide Children's Hospital	PO4602434-0-46	93.127	Emergency Medical Services for Children	-	198,849	-
	D 71 1		B30073(003	02.124		\$	240,815 \$	-
Health and Human Services, Department of	Pass-Through	National Kidney Foundation of Michigan	R39OT26992	93.134	Grants to Increase Organ Donations	\$	2,227 \$	-
	D'		5 D 40 (7E002000 05	02.126	Injury Prevention and Control Research and State and	¢	000.01/	
Health and Human Services, Department of	Direct		5 R49 CE002099-05	93.136	Community Based Programs Injury Prevention and Control Research and State and	\$	928,916 \$	-
	D'		5 H01 OF002 (00 05	02.126			1.071.076	220 (50
Health and Human Services, Department of	Direct		5 U01 CE002698-05	93.136	Community Based Programs		1,271,376	229,659
Hackbard Hammer Commission Demostry and of	Direct		(101 CE002780 01 02	02.126	Injury Prevention and Control Research and State and		265.216	(7.7)7
Health and Human Services, Department of	Direct		6 U01 CE002780-01-03	93.136	Community Based Programs Injury Prevention and Control Research and State and		365,216	67,737
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181635-002	93.136	Community Based Programs		5,334	
ricann and riunan services, Department of	1 ass=1 mough	whenigan, state of, freatur and fruman services, Department of	E20181055-002	95.150	Injury Prevention and Control Research and State and		5,554	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182818-001	93.136	Community Based Programs		25,176	
Health and Human Services, Department of	rass-rinough	whengan, state of, Hearth and Human Services, Department of	E20182818-001	95.150	Injury Prevention and Control Research and State and		23,170	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182839-002	93.136	Community Based Programs		21,629	
ricann and riunan services, Department of	1 ass=1 mough	whenigan, state of, freatur and fruman services, Department of	120182859-002	95.150	Injury Prevention and Control Research and State and		21,029	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192866-00	93.136	Community Based Programs		33,657	
rieutai and riantan ber (1965, Department of	russ rinough	Meingan, Sale of, Health and Haman Services, Department of	220132000 00	,,,,,,,	Injury Prevention and Control Research and State and		55,057	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193206-00	93.136	Community Based Programs		76,721	
rieutai and riantan ber (1965, Department of	russ rinough	Meingan, Saite of, Health and Haman Services, Department of	120133200 00	,,,,,,,	Injury Prevention and Control Research and State and		/0,/21	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193259-00	93.136	Community Based Programs		57,145	-
, <u>r</u>					Injury Prevention and Control Research and State and		.,	
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17145	93.136	Community Based Programs		9,339	-
					Injury Prevention and Control Research and State and		.,	
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU19002	93.136	Community Based Programs		17,042	-
,,						\$	2,811,551 \$	297,396
					Community Programs to Improve Minority Health Gran	t	// /// /	
Health and Human Services, Department of	Direct		5CPIMP171156-03-00	93.137	Program	S	442,904 \$	368,113
Health and Human Services, Department of	Pass-Through	International Union, UAW	Agreement dated 8/28/12	93.142	NIEHS Hazardous Waste Worker Health and Safety Tra	ining \$	20,144 \$	-
· 1	0	,	5		NIEHS Superfund Hazardous Substances Basic Researd			
Health and Human Services, Department of	Pass-Through	Northeastern University	500525-78050	93.143	and Education	\$	(450) \$	-
	6				NIEHS Superfund Hazardous Substances Basic Researd	h		
Health and Human Services, Department of	Pass-Through	Northeastern University	500589-78050	93.143	and Education		240,686	-
· 1	3.	-			NIEHS Superfund Hazardous Substances_Basic Researd	h		
Health and Human Services, Department of	Pass-Through	Northeastern University	500590-78050	93.143	and Education		174,435	-
· •	5	-				\$	414,671 \$	-
Health and Human Services, Department of	Direct		1 F31 HG010569-01	93.172	Human Genome Research	\$	11,810 \$	-
Health and Human Services, Department of	Direct		1 K01 HG010496 01	93.172	Human Genome Research		4,231	-
Health and Human Services, Department of	Direct		2 R56 HG000376-28A1	93.172	Human Genome Research		103,243	-
	Direct		3 R01 HG010567-02S1	93.172	Human Genome Research		167,175	64,465
Health and Human Services, Department of								
	Direct		4 R01 HG007022-05	93.172	Human Genome Research		(15,823)	-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		4 R01 HG007022-05 4 R01 HG007068-04	93.172 93.172	Human Genome Research Human Genome Research		(33,089)	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 HG008773-04	93.172	Human Genome Research	346,567	-
Health and Human Services, Department of	Direct		5 R01 HG009124-03 5 R01HG009976-02	93.172	Human Genome Research Human Genome Research	372,481	-
Health and Human Services, Department of	Direct Direct			93.172 93.172	Human Genome Research	363,787 125,383	-
Health and Human Services, Department of			5 R21HG009205-02				-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 UM1 HG009382-03 T32 HG000040	93.172 93.172	Human Genome Research Human Genome Research	557,889	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		T32 HG000040	93.172	Human Genome Research	613,514 93,344	-
Health and Human Services, Department of	Pass-Through	Broad Institute	5000057-5500000825	93.172	Human Genome Research	78,890	66,921
Health and Human Services, Department of	Pass-Through Pass-Through	Columbia University	2(GG013080-01)	93.172	Human Genome Research	34,344	66,921
Health and Human Services, Department of	Pass-Through	Jackson Laboratory/MMRRC	Research Agreement	93.172	Human Genome Research	2,642	-
Health and Human Services, Department of	Pass-Through	Jackson Laboratory/MMRRC	TBI	93.172	Human Genome Research	18,877	-
Health and Human Services, Department of	Pass-Through	Rutgers University	0354/PO765768	93.172	Human Genome Research	78,937	-
Health and Human Services, Department of	Pass-Through	Rutgers University	0858/PO1029910	93.172	Human Genome Research	7,352	-
Health and Human Services, Department of	Pass-Through	Stanford University	4733597	93.172	Human Genome Research	71,684	
Health and Human Services, Department of	Pass-Through	Stanford University	61448507-123432	93.172	Human Genome Research	163,427	_
Health and Human Services, Department of	Pass-Through	Stanford University	61630349-104913	93.172	Human Genome Research	156,274	-
Health and Human Services, Department of	Pass-Through	Washington University School of Medicine in St. Louis	WU-18-165-MOD-1	93.172	Human Genome Research	61,128	
ricatin and rianian Services, Department of	1 ass-1 mough	washington on versity benoof of weatenic in bt. Louis	W0-10-105-M0D-1	75.172	Human Schönke Research	\$ 3,384,550	\$ 131,386
Health and Human Services, Department of	Direct		1 F32 DC017063-01	93.173	Research Related to Deafness and Communication Disorders	\$ 56,299	
Health and Human Services, Department of	Direct		1 R21 DC017799 01	93.173	Research Related to Deafness and Communication Disorders	7,908	-
Health and Human Services, Department of	Direct		1 R56 DC016880-01	93.173	Research Related to Deafness and Communication Disorders	245,830	-
Health and Human Services, Department of	Direct		4 K08 DC012535-06	93.173	Research Related to Deafness and Communication Disorders	(3,559)	
Health and Human Services, Department of	Direct		4 P30 DC005188-15	93.173	Research Related to Deafness and Communication Disorders	21,503	-
				93.173		(2,050)	-
Health and Human Services, Department of	Direct		5 F32 DC015381-02		Research Related to Deafness and Communication Disorders		-
Health and Human Services, Department of	Direct		5 R00 DC013828-05	93.173	Research Related to Deafness and Communication Disorders	166,816	-
Health and Human Services, Department of	Direct		5 R01 DC004084-17	93.173	Research Related to Deafness and Communication Disorders	198,838	
Health and Human Services, Department of	Direct		5 R01 DC004820-16	93.173	Research Related to Deafness and Communication Disorders	462,452	56,195
Health and Human Services, Department of	Direct		5 R01 DC009410-10	93.173	Research Related to Deafness and Communication Disorders	187,341	48,339
Health and Human Services, Department of	Direct		5 R01 DC011277-10	93.173	Research Related to Deafness and Communication Disorders	517,843	23,304
Health and Human Services, Department of	Direct		5 R01 DC012760-05	93.173	Research Related to Deafness and Communication Disorders	311,673	-
Health and Human Services, Department of	Direct		5 R01 DC013885-04	93.173	Research Related to Deafness and Communication Disorders	122,901	-
Health and Human Services, Department of	Direct		5 R01 DC014428-05	93.173	Research Related to Deafness and Communication Disorders	451,984	-
Health and Human Services, Department of	Direct		5 R01 DC014456-04	93.173	Research Related to Deafness and Communication Disorders	442,259	-
Health and Human Services, Department of	Direct		5 R01 DC014703-04S1	93.173	Research Related to Deafness and Communication Disorders	624,260	263,825
Health and Human Services, Department of	Direct		5 R01 DC015799-03	93.173	Research Related to Deafness and Communication Disorders	481,592	200,020
Health and Human Services, Department of			5 R01 DC015809-03S1	93.173	Research Related to Deafness and Communication Disorders	501,517	
	Direct				Research Related to Deafness and Communication Disorders		-
Health and Human Services, Department of	Direct		5 R21 DC015097-02	93.173		24,494	-
Health and Human Services, Department of	Direct		5 R21 DC015312-02	93.173	Research Related to Deafness and Communication Disorders	148,390	36,423
Health and Human Services, Department of	Direct		5 R21 DC016171-02	93.173	Research Related to Deafness and Communication Disorders	229,444	-
Health and Human Services, Department of	Direct		5 R21 DC016456-02	93.173	Research Related to Deafness and Communication Disorders	202,603	-
Health and Human Services, Department of	Direct		5 R21 DC016681-03	93.173	Research Related to Deafness and Communication Disorders	130,830	-
Health and Human Services, Department of	Direct		5 R33 DC013678-05	93.173	Research Related to Deafness and Communication Disorders	471,199	106,279
Health and Human Services, Department of	Direct		5-R01-DC-017119-02	93.173	Research Related to Deafness and Communication Disorders	327,792	-
Health and Human Services, Department of	Direct		5R21DC015861-04	93.173	Research Related to Deafness and Communication Disorders	223,303	-
Health and Human Services, Department of	Direct		T32 DC000011	93.173	Research Related to Deafness and Communication Disorders	462,455	-
Health and Human Services, Department of	Direct		T32 DC005356	93.173	Research Related to Deafness and Communication Disorders	163,321	-
Health and Human Services, Department of	Pass-Through	Alfred I dupont Hospital, DE	3023854003	93.173	Research Related to Deafness and Communication Disorders	49,452	
Health and Human Services, Department of	Pass-Through	Ann and Robert H. Lurie Children's Hospital of Chicago	901537-UMich	93.173	Research Related to Deafness and Communication Disorders	9,996	
Health and Human Services, Department of	Pass-Through	Baylor University	PO 5601176401	93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	238,063	
							-
Health and Human Services, Department of	Pass-Through	Boston University	4500002041	93.173	Research Related to Deafness and Communication Disorders	12,109	-
Health and Human Services, Department of	Pass-Through	Drexel University	232603	93.173	Research Related to Deafness and Communication Disorders	(51,458)	
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	118484	93.173	Research Related to Deafness and Communication Disorders	149,066	7,363
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	118484	93.173	Research Related to Deafness and Communication Disorders	18,524	13,094
Health and Human Services, Department of	Pass-Through	Massachusetts Eye and Ear	2300188	93.173	Research Related to Deafness and Communication Disorders	74,866	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC108793UM	93.173	Research Related to Deafness and Communication Disorders	9,764	-
Health and Human Services, Department of	Pass-Through	University of Iowa	PO#1001942196	93.173	Research Related to Deafness and Communication Disorders	24,838	-
Health and Human Services, Department of	Pass-Through	University of Southern California	63773594	93.173	Research Related to Deafness and Communication Disorders	(3,408)	
						\$ 7,711,050	\$ 554,822
					Immunization Research, Demonstration, Public Information		
					and Education Training and Clinical Skills Improvement		
Health and Human Services, Department of	Direct		5 U01 IP001034-03	93.185	Projects	\$ 1,672,464	\$ 5,282
					Immunization Research, Demonstration, Public Information		
					and Education Training and Clinical Skills Improvement		
Health and Human Services, Department of	Direct		5 U01 IP001104-02-00	93.185	Projects	216,653	-
						\$ 1,889,117	\$ 5,282
					Childhood Lead Poisoning Prevention Projects, State and		
					Local Childhood Lead Poisoning Prevention and Surveillance		
Health and Human Services, Department of	Pass-Through	Michigan State University	RC107653-UM	93.197	of Blood Lead Levels in Children	\$ 207,848	s -
· •	2				Research and Training in Complementary and Integrative		
Health and Human Services, Department of	Direct		1 R21 AT010106-01	93.213	Health	\$ 132,606	s -
· •					Research and Training in Complementary and Integrative	- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Health and Human Services, Department of	Direct		1 R61 AT009867-01	93.213	Health	88,580	-
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Research and Training in Complementary and Integrative	00,000	
readin and runnan bervices, Department of					Research and Training in Complementary and integrative		
Health and Human Services, Department of	Direct		5 R01 AT007550-05S1	93.213	Health	560,457	99,732

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 AT009003-04	93.213	Research and Training in Complementary and Integrative Health	207,051	25,296
,					Research and Training in Complementary and Integrative		
Health and Human Services, Department of	Direct		5 R21 AT009253-02	93.213	Health Research and Training in Complementary and Integrative	(68,019)	-
Health and Human Services, Department of	Pass-Through	Arizona State University	17-126	93.213	Health	(4,245)	-
					Research and Training in Complementary and Integrative		
Health and Human Services, Department of	Pass-Through	Baylor University	3220170-01	93.213	Health Research and Training in Complementary and Integrative	242,210	-
Health and Human Services, Department of	Pass-Through	Baylor University	3220170-01	93.213	Health	82,670	-
Health and Human Services, Department of	Pass-Through	Beth Israel Deaconess Medical Center	01029585	93.213	Research and Training in Complementary and Integrative Health	71,903	
readin and Human Services, Department of	1 uss-1 hrough	Den Israel Deaconess Wealch Center	01029303	75.215	Research and Training in Complementary and Integrative	/1,905	
Health and Human Services, Department of	Pass-Through	Ohio University	UT17564	93.213	Health Research and Training in Complementary and Integrative	7,922	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	10348sc	93.213	Health	857	-
					Research and Training in Complementary and Integrative	20.042	
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	11062sc	93.213	Health Research and Training in Complementary and Integrative	29,843	-
Health and Human Services, Department of	Pass-Through	Yale University	GR102053 (CON-80001172)	93.213	Health	4,086	-
Health and Human Services, Department of	Pass-Through	Yale University	GR104519 (CON-80001462)	93.213	Research and Training in Complementary and Integrative Health	38,614	
ricanii and riunan Scivices, Department of	1 ass-1 lifough	Tale University	GR104519 (CON-80001402)	95.215	iteatui	\$ 1,394,535 5	125,028
					National Research Service Awards Health Services Research		
Health and Human Services, Department of	Direct		T32 HS000053 1 P30 HS024385-01	93.225 93.226	Training Research on Healthcore Costs, Quality and Outcomes	\$ (51,606) \$ \$ 1,176,761 \$	
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 P30 HS024383-01 1 R01 HS022305-01A1	93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	\$ 1,176,761 \$ 273,810	- 15,421
Health and Human Services, Department of	Direct		1 R01 HS022505 01111 1 R01 HS023597-01	93.226	Research on Healthcare Costs, Quality and Outcomes	345,295	61,845
Health and Human Services, Department of	Direct		1 R21 HS026257-02	93.226	Research on Healthcare Costs, Quality and Outcomes	142,044	-
Health and Human Services, Department of	Direct		1 R36 HS025614 01A1	93.226	Research on Healthcare Costs, Quality and Outcomes	56,448	-
Health and Human Services, Department of	Direct		1 R36 HS025615 01A1	93.226	Research on Healthcare Costs, Quality and Outcomes	17,924	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R36 HS026445-01 1R36HS025875-01A1	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	38,052 56,116	-
Health and Human Services, Department of	Direct		5 K08 HS023313-04	93.226	Research on Healthcare Costs, Quality and Outcomes	30,343	-
Health and Human Services, Department of	Direct		5 K08 HS023621-05	93.226	Research on Healthcare Costs, Quality and Outcomes	178,816	-
Health and Human Services, Department of	Direct		5 K08 HS024160-05	93.226	Research on Healthcare Costs, Quality and Outcomes	134,893	-
Health and Human Services, Department of	Direct		5 K08 HS024552-04	93.226	Research on Healthcare Costs, Quality and Outcomes	165,693	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 K08 HS024763-04 5 K08 HS025465 02	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	120,873 154,417	-
Health and Human Services, Department of	Direct		5 K08 HS025778 02	93.226	Research on Healthcare Costs, Quality and Outcomes	151,910	-
Health and Human Services, Department of	Direct		5 K08 HS026030-02	93.226	Research on Healthcare Costs, Quality and Outcomes	116,761	-
Health and Human Services, Department of	Direct		5 R01 HS018334-10	93.226	Research on Healthcare Costs, Quality and Outcomes	389,201	-
Health and Human Services, Department of	Direct		5 R01 HS022535-04	93.226	Research on Healthcare Costs, Quality and Outcomes	142,870	93,810
Health and Human Services, Department of	Direct		5 R01 HS023784-03	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes	37,105	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HS024512-04 5 R01 HS024525-04	93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	228,795 310,858	-
Health and Human Services, Department of	Direct		5 R01 HS024525-04	93.226	Research on Healthcare Costs, Quality and Outcomes	297,592	-
Health and Human Services, Department of	Direct		5 R01 HS024914-03	93.226	Research on Healthcare Costs, Quality and Outcomes	402,279	-
Health and Human Services, Department of	Direct		5 R01 HS024953-05	93.226	Research on Healthcare Costs, Quality and Outcomes	290,815	96,914
Health and Human Services, Department of	Direct		5 R01 HS025365-02	93.226	Research on Healthcare Costs, Quality and Outcomes	166,328	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HS025451-03 5 R01 HS025707-03	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	520,033 389,806	-
Health and Human Services, Department of	Direct		5 R01 HS026003-02	93.226	Research on Healthcare Costs, Quality and Outcomes	266,803	_
Health and Human Services, Department of	Direct		5 R01 HS026244 02	93.226	Research on Healthcare Costs, Quality and Outcomes	179,239	-
Health and Human Services, Department of	Direct		5 R01HS024709-05	93.226	Research on Healthcare Costs, Quality and Outcomes	321,551	263,931
Health and Human Services, Department of	Direct		5 R03 HS025838-02	93.226	Research on Healthcare Costs, Quality and Outcomes	50,311	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R18 HS021425-05 5 R18 HS022258-05	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	(2,658) 175,572	-
Health and Human Services, Department of	Direct		5 R18 HS02529005	93.226	Research on Healthcare Costs, Quality and Outcomes	184,922	-
Health and Human Services, Department of	Direct		5 R21 HS024567-02	93.226	Research on Healthcare Costs, Quality and Outcomes	28,137	-
Health and Human Services, Department of	Direct		5 U18 HS025292-04	93.226	Research on Healthcare Costs, Quality and Outcomes	699,711	36,551
Health and Human Services, Department of	Direct		T32 HS000053	93.226	Research on Healthcare Costs, Quality and Outcomes	510,769	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Arbor Research Collaborative For Health Dartmouth-Hitchcock Medical Center (DHMC)	Subaward Agreement 1P3-HS024403-01	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	23,777 27,517	-
Health and Human Services, Department of	Pass-Through	Duke University	203-7634	93.226	Research on Healthcare Costs, Quality and Outcomes	25,121	-
Health and Human Services, Department of	Pass-Through	Duke University	203-7974	93.226	Research on Healthcare Costs, Quality and Outcomes	90,977	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60047941 UM	93.226	Research on Healthcare Costs, Quality and Outcomes	33,370	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60047941 UM	93.226	Research on Healthcare Costs, Quality and Outcomes	8,787	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Northwestern University University of California - San Francisco	60050159 UM 10588sc	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes	17,248 38,469	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Washington University in St. Louis	10588sc WU-17-424	93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	38,469 16,728	-
	1 and 1 mough			15.220		\$ 9,032,189 \$	568,472
Health and Human Services, Department of	Direct		1 K08 HL147377-01	93.233	National Center on Sleep Disorders Research	\$ 24,282 \$	s -
Health and Human Services, Department of	Direct		4 R01 HL105999-05	93.233	National Center on Sleep Disorders Research	105,163	78,786
Health and Human Services, Department of	Direct		5 K23 HL122461-05 5 R01 HL123379-04	93.233	National Center on Sleep Disorders Research	168,890	-
Health and Human Services, Department of	Direct		J KUT HL1233/9-04	93.233	National Center on Sleep Disorders Research	218,671	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Direct Pass-Through	The Children's Hospital of Philadelphia	5 R01 HL126700-04 3210920619-S1/PO#20022076-RSUB	93.233 93.233	National Center on Sleep Disorders Research National Center on Sleep Disorders Research	575,065 47,026	-
ealth and Human Services, Department of	Pass-Through	University of Pennsylvania	574911	93.233	National Center on Sleep Disorders Research	68.875	-
ealth and Human Services, Department of	Pass-Through	University of Pennsylvania	574911	93.233	National Center on Sleep Disorders Research	29,675	-
ealth and Human Services, Department of	Pass-Through	University of Utah	10051783-01/POU000181390	93.233	National Center on Sleep Disorders Research	7,248	-
· · ·		-				\$ 1,244,895	\$ 78,786
ealth and Human Services, Department of	Direct		1 K08 MH116267-02	93.242	Mental Health Research Grants	\$ 189,016	s -
ealth and Human Services, Department of	Direct		1 R21 MH120824-01A1	93.242	Mental Health Research Grants	47,694	-
alth and Human Services, Department of	Direct		1 RF MH114244-01	93.242	Mental Health Research Grants	501,825	-
alth and Human Services, Department of	Direct		3 R01 MH101459-05S1	93.242	Mental Health Research Grants	(414,372)	-
alth and Human Services, Department of	Direct		3 R01 MH102242-05S1	93.242	Mental Health Research Grants	745,492	61,933
alth and Human Services, Department of	Direct		4 R01 MH093486-05	93.242	Mental Health Research Grants	9,095	-
alth and Human Services, Department of alth and Human Services, Department of	Direct Direct		4 R01 MH096699-05 4 R01 MH101493-04	93.242 93.242	Mental Health Research Grants Mental Health Research Grants	51,041 186,136	184,55
alth and Human Services, Department of	Direct		5 F30 MH112328-02	93.242	Mental Health Research Grants	2,716	104,55
alth and Human Services, Department of	Direct		5 F31 MH117887-02	93.242	Mental Health Research Grants	38,068	
Ith and Human Services, Department of	Direct		5 K01 MH095920-05	93.242	Mental Health Research Grants	(561)	-
alth and Human Services, Department of	Direct		5 K01 MH110605-03	93.242	Mental Health Research Grants	190,668	-
alth and Human Services, Department of	Direct		5 K08 MH104743-03	93.242	Mental Health Research Grants	(29,694)	-
lth and Human Services, Department of	Direct		5 K08 MH107662-05	93.242	Mental Health Research Grants	237,472	-
alth and Human Services, Department of	Direct		5 K23 MH108823-04	93.242	Mental Health Research Grants	205,819	-
lth and Human Services, Department of	Direct		5 K23 MH109762-03	93.242	Mental Health Research Grants	180,442	-
Ith and Human Services, Department of	Direct		5 K23 MH112852-02	93.242	Mental Health Research Grants	127,993	-
alth and Human Services, Department of	Direct		5 K23 MH113776-03	93.242	Mental Health Research Grants	155,271	-
alth and Human Services, Department of	Direct		5 R01 MH063649-15	93.242	Mental Health Research Grants	173,427	-
alth and Human Services, Department of	Direct		5 R01 MH082784-10	93.242	Mental Health Research Grants	95,286	-
alth and Human Services, Department of	Direct		5 R01 MH085321-10	93.242	Mental Health Research Grants	236,850	-
alth and Human Services, Department of	Direct Direct		5 R01 MH099898-04 5 R01 MH101459-07	93.242 93.242	Mental Health Research Grants Mental Health Research Grants	3,184 983,870	3,53
alth and Human Services, Department of alth and Human Services, Department of	Direct		5 R01 MH101459-07	93.242	Mental Health Research Grants	983,870 191,898	77.53
alth and Human Services, Department of	Direct		5 R01 MH102205-05	93.242	Mental Health Research Grants	780,920	282,01
alth and Human Services, Department of	Direct		5 R01 MH103244-05	93.242	Mental Health Research Grants	341,444	37,50
alth and Human Services, Department of	Direct		5 R01 MH104261-05	93.242	Mental Health Research Grants	298,857	-
alth and Human Services, Department of	Direct		5 R01 MH107419-04	93.242	Mental Health Research Grants	791,614	73,08
alth and Human Services, Department of	Direct		5 R01 MH107741-05	93.242	Mental Health Research Grants	524,177	-
alth and Human Services, Department of	Direct		5 R01 MH110524-04	93.242	Mental Health Research Grants	327,732	177,59
alth and Human Services, Department of	Direct		5 R01 MH110872-03	93.242	Mental Health Research Grants	727,056	120,01
ealth and Human Services, Department of	Direct		5 R01 MH110932-04	93.242	Mental Health Research Grants	685,707	326,11
ealth and Human Services, Department of	Direct		5 R01 MH112669-02	93.242	Mental Health Research Grants	357,669	-
alth and Human Services, Department of	Direct		5 R01 MH113574-02	93.242	Mental Health Research Grants	162,216	-
ealth and Human Services, Department of	Direct		5 R01 MH113582-03	93.242	Mental Health Research Grants	776,144	206,02
alth and Human Services, Department of	Direct		5 R01 MH114203-03	93.242	Mental Health Research Grants	819,504	-
ealth and Human Services, Department of	Direct		5 R01 MH114958-02	93.242	Mental Health Research Grants	210,119	-
alth and Human Services, Department of	Direct		5 R01 MH11511-02	93.242 93.242	Mental Health Research Grants	788,947	287,15
alth and Human Services, Department of alth and Human Services, Department of	Direct Direct		5 R01 MH115765-02 5 R21 MH108989-02	93.242	Mental Health Research Grants Mental Health Research Grants	377,361 162,459	287,15
alth and Human Services, Department of	Direct		5 R21 MH109363-02 5 R21 MH109932-02	93.242	Mental Health Research Grants	65,424	23,86
alth and Human Services, Department of	Direct		5 R21 MH10752-02 5 R21 MH111445-03	93.242	Mental Health Research Grants	68,809	44,71
ealth and Human Services, Department of	Direct		5 R21 MH114835-02	93.242	Mental Health Research Grants	113,492	45,68
ealth and Human Services, Department of	Direct		5 R21MH117788-02	93.242	Mental Health Research Grants	98,098	-
alth and Human Services, Department of	Direct		5 R25 MH071279-15	93.242	Mental Health Research Grants	248,997	-
alth and Human Services, Department of	Direct		5 R34 MH111531-03	93.242	Mental Health Research Grants	286,815	52,13
ealth and Human Services, Department of	Direct		5 U01 MH104311-03	93.242	Mental Health Research Grants	1,670,973	647,87
alth and Human Services, Department of	Direct		5 U01 MH105653-04	93.242	Mental Health Research Grants	331,105	8,53
alth and Human Services, Department of	Direct		5 U01 MH106892-05	93.242	Mental Health Research Grants	1,135,534	-
alth and Human Services, Department of	Direct		7 R01 MH095676-05	93.242	Mental Health Research Grants	71,145	78,80
alth and Human Services, Department of	Direct		7R01MH109170-04	93.242	Mental Health Research Grants	103,045	-
alth and Human Services, Department of	Pass-Through	Care New England Health System	9272-8179	93.242	Mental Health Research Grants	97,846	-
Ith and Human Services, Department of	Pass-Through	Dartmouth College	R1090	93.242	Mental Health Research Grants Mental Health Research Grants	11,729	-
alth and Human Services, Department of	Pass-Through	Dartmouth College	R1152	93.242		1,274	-
alth and Human Services, Department of alth and Human Services, Department of	Pass-Through Pass-Through	Dartmouth College Emory University	R751 T461601	93.242 93.242	Mental Health Research Grants Mental Health Research Grants	115,523 (9,959)	-
lth and Human Services, Department of	Pass-Through	Emory University	T714734	93.242	Mental Health Research Grants	37,527	-
Ith and Human Services, Department of	Pass-Through Pass-Through	Hektoen Institute for Medical Research, The	50081-R01-Umich01	93.242	Mental Health Research Grants	26,191	-
alth and Human Services, Department of	Pass-Through	Hektoen Institute for Medical Research, The	50082-R01-UMICH02	93.242	Mental Health Research Grants	19,991	_
alth and Human Services, Department of	Pass-Through	Hektoen Institute for Medical Research, The	50504-324-UMICH	93.242	Mental Health Research Grants	44,805	-
alth and Human Services, Department of	Pass-Through	Hektoen Institute for Medical Research, The	50504-324-UMICH	93.242	Mental Health Research Grants	8,342	-
alth and Human Services, Department of	Pass-Through	Henry Ford Health System	B11169	93.242	Mental Health Research Grants	18,527	-
alth and Human Services, Department of	Pass-Through	Johns Hopkins University	6806	93.242	Mental Health Research Grants	133,484	-
alth and Human Services, Department of	Pass-Through	Johns Hopkins University	2002745506	93.242	Mental Health Research Grants	17,591	-
alth and Human Services, Department of	Pass-Through	Johns Hopkins University	PTE 5R25MH104660-02	93.242	Mental Health Research Grants	5,138	-
alth and Human Services, Department of	Pass-Through	Johns Hopkins University	Subaward	93.242	Mental Health Research Grants	7,179	-
alth and Human Services, Department of	Pass-Through	Michigan State University	RC107579UM	93.242	Mental Health Research Grants	135,280	-
		Michigan State University	RC107692UM	93.242	Mental Health Research Grants	2,982	-
alth and Human Services, Department of	Pass-Through						
ealth and Human Services, Department of ealth and Human Services, Department of ealth and Human Services, Department of	Pass-Through Pass-Through Pass-Through	Michigan State University New York University	RC109167UM 13-A0-00-001751-01	93.242 93.242	Mental Health Research Grants Mental Health Research Grants	311,767 3,077	-

Cluster Title/Federal Grantor/Program	Tuna	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Type Pass-Through	San Francisco State University	PO #S16-0020	93.242	Mental Health Research Grants	19,374	Pass-1 nrougn
Health and Human Services, Department of	Pass-Through	Simmersion L.L.C.	5065-UM	93.242	Mental Health Research Grants	47,338	
Health and Human Services, Department of	Pass-Through	Stony Brook University	1125719-2-71758	93.242	Mental Health Research Grants	269,880	_
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000504051-003	93.242	Mental Health Research Grants	(3,670)	-
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000518108-SC002	93.242	Mental Health Research Grants	108,607	
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	10900sc	93.242	Mental Health Research Grants	19,405	
Health and Human Services, Department of	Pass-Through	University of California-San Diego	78750147	93.242	Mental Health Research Grants	40,924	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	105174354	93.242	Mental Health Research Grants	72.292	-
Health and Human Services, Department of	Pass-Through	University of Colorado Boulder	1554505	93.242	Mental Health Research Grants	2,152	-
Health and Human Services, Department of	Pass-Through	University of Hawaii	MA 1427	93.242	Mental Health Research Grants	20,006	-
Health and Human Services, Department of	Pass-Through	University of Iowa	S00482-01	93.242	Mental Health Research Grants	83,494	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill-MMRRC	5102700	93.242	Mental Health Research Grants	(392)	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	569745	93.242	Mental Health Research Grants	(32)	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	572689	93.242	Mental Health Research Grants	(68,864)	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	574357	93.242	Mental Health Research Grants	670,443	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	576948	93.242	Mental Health Research Grants	10,043	-
Health and Human Services, Department of	Pass-Through	University of Texas Health Science Center at San Antonio	162919/161086	93.242	Mental Health Research Grants	146,361	-
Health and Human Services, Department of	Pass-Through	University of Toledo	F-2017-128	93.242	Mental Health Research Grants	44,234	-
Health and Human Services, Department of	Pass-Through	University of Toledo	F-2018-32	93.242	Mental Health Research Grants	8,225	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC11023/PO 037783	93.242	Mental Health Research Grants	31,081	-
Health and Human Services, Department of	Pass-Through	University of Wisconsin	796K633	93.242	Mental Health Research Grants	45,987	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University	VUMC62534	93.242	Mental Health Research Grants	19,228	-
Health and Human Services, Department of	Pass-Through	Washington University School of Medicine in St. Louis	WU-19-102	93.242	Mental Health Research Grants	168,801	39,042
						\$ 19,177,210	\$ 2,777,717
					Substance Abuse and Mental Health Services Projects of		
Health and Human Services, Department of	Direct		1H79TI081658-02	93.243	Regional and National Significance	\$ 65,114	s -
					Substance Abuse and Mental Health Services Projects of		
Health and Human Services, Department of	Direct		5 U79 SM062492-03	93.243	Regional and National Significance	81,370	-
			D		Substance Abuse and Mental Health Services Projects of		
Health and Human Services, Department of	Pass-Through	American Indian Health and Family Services of SE Michigan, Inc (AIHFS)	Research Agreement	93.243	Regional and National Significance	91,245	-
					Substance Abuse and Mental Health Services Projects of		
Health and Human Services, Department of	Pass-Through	American Indian Health and Family Services of SE Michigan, Inc (AIHFS)	Research Agreement	93.243	Regional and National Significance	21,372	-
		DICH OVE	CU20CD (0/2/20 02	02.242	Substance Abuse and Mental Health Services Projects of	0.267	
Health and Human Services, Department of	Pass-Through	Baylor College of Medicine	5U79SM063570-03	93.243	Regional and National Significance	9,267	-
					Substance Abuse and Mental Health Services Projects of	10.500	
Health and Human Services, Department of	Pass-Through	Baylor College of Medicine	7U79SM063570-02	93.243	Regional and National Significance	18,530	-
				02.242	Substance Abuse and Mental Health Services Projects of	51 00 <i>5</i>	
Health and Human Services, Department of	Pass-Through	Behavioral Connections of Wood County Inc	Research Agreement	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	51,235	-
Useld and Hamme Comises Demotorent of	Deve Thomas	Million Casts of Harld and Harry Comises Department of	E20180858-001	02 242	Regional and National Significance	43,854	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180858-001	93.243	Substance Abuse and Mental Health Services Projects of	43,834	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192442-00	93.243	Regional and National Significance	114,732	
Health and Human Services, Department of	Pass-1 nrougn	Michigan, State of, Health and Human Services, Department of	E20192442-00	93.243	Substance Abuse and Mental Health Services Projects of	114,/32	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192900-00	93.243	Regional and National Significance	114,739	
Health and Human Services, Department of	Fass-Through	whenigan, state or, realth and Human Services, Department of	E20192900-00	93.243	Substance Abuse and Mental Health Services Projects of	114,/39	-
Health and Human Services, Department of	Pass-Through	Teen HYPE	Agreement	93.243	Regional and National Significance	45,359	
Health and Human Services, Department of	Fass-Through	Icell HIFE	Agreement	93.243	Regional and National Significance	\$ 656,817	<u>-</u>
Health and Human Services, Department of	Direct		5 D09 HP2867702-00	93.247	Advanced Nursing Education Workforce Grant Program	\$ 135,225	
Health and Human Services, Department of	Direct		5 T94 HP30911-02-00	93.247	Advanced Nursing Education Workforce Grant Program	370.269	10.000
ricatin and rianian Services, Department of	Direct		5 174 11 50711-02-00	/5.24/	Advanced Marshig Education Workforce Grant Hogian	\$ 505,494	
Health and Human Services, Department of	Direct		5 R01 OH010582-04	93.262	Occupational Safety and Health Program	\$ 329,258	
Health and Human Services, Department of	Direct		5 R01 OH01082-02-00	93.262	Occupational Safety and Health Program	322,001	
Health and Human Services, Department of	Direct		5 T42 OH008455-15-00	93.262	Occupational Safety and Health Program	1,631,421	32,629
Health and Human Services, Department of	Direct		T42 OH008455	93.262	Occupational Safety and Health Program	57,353	19,944
· •						\$ 2,340,033	
					Health Systems Strengthening and HIV/AIDS Prevention,		
					Care and Treatment under the President's Emergency Plan for		
Health and Human Services, Department of	Direct		5 R01 HS024698-04	93.266	AIDS Relief	\$ 402,768	s -
Health and Human Services, Department of	Direct		1 R03 AA025449-02	93.273	Alcohol Research Programs	\$ 68,164	
Health and Human Services, Department of	Direct		5 K01 AA024804-04	93.273	Alcohol Research Programs	167,410	-
Health and Human Services, Department of	Direct		5 K23 AA023869-05	93.273	Alcohol Research Programs	167,460	-
Health and Human Services, Department of	Direct		5 K23 AA026333-02	93.273	Alcohol Research Programs	196,423	-
Health and Human Services, Department of	Direct		5 R01 AA007065-30	93.273	Alcohol Research Programs	144,640	-
Health and Human Services, Department of	Direct		5 R01 AA023122-05	93.273	Alcohol Research Programs	377,014	-
Health and Human Services, Department of	Direct		5 R01 AA024175-05	93.273	Alcohol Research Programs	664,673	-
Health and Human Services, Department of	Direct		5 R01 AA024433-03	93.273	Alcohol Research Programs	409,839	43,301
Health and Human Services, Department of	Direct		5 R01 AA024755-04	93.273	Alcohol Research Programs	420,506	-
Health and Human Services, Department of	Direct		5 R01 AA025684-02	93.273	Alcohol Research Programs	190,064	23,035
Health and Human Services, Department of	Direct		5 R01 AA025790-02	93.273	Alcohol Research Programs	244,201	-
Health and Human Services, Department of	Direct		5 R21AA025945-02	93.273	Alcohol Research Programs	92,926	-
Health and Human Services, Department of	Direct		5K23AA022641-05	93.273	Alcohol Research Programs	142,762	-
Health and Human Services, Department of	Direct		T32 AA007477	93.273	Alcohol Research Programs	274,104	-
Health and Human Services, Department of	Pass-Through	Arborsense, Inc.	R44AA026119	93.273	Alcohol Research Programs	208,875	-
Health and Human Services, Department of	Pass-Through	Brown University	00001217	93.273	Alcohol Research Programs	39,078	-
Health and Human Services, Department of	Pass-Through	Columbia University	1(GG014239)	93.273	Alcohol Research Programs	27,141	-
Health and Human Services, Department of	Pass-Through	Cornell University	69951-10235	93.273	Alcohol Research Programs	45,177	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Idaho State University	11-255X	93.273	Alcohol Research Programs	5,283	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	11086sc	93.273	Alcohol Research Programs	47,064	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Colorado University of Illinois at Chicago	1552087 17243	93.273 93.273	Alcohol Research Programs Alcohol Research Programs	(1) 161,741	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	A007345702	93.273	Alcohol Research Programs	290,599	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	A007398901	93.273	Alcohol Research Programs	22,031	-
Health and Human Services, Department of	Pass-Through	University of Washington	BP015637	93.273	Alcohol Research Programs	15,005	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC10669	93.273	Alcohol Research Programs	3,598	_
ricardi and Human Services, Department of	1 uss-1 mough	University of Washington	0 ((361000)	15.215	Autonoi Researen Programs	\$ 4,425,777	\$ 66,336
Health and Human Services, Department of	Direct		1 F31 DA047738-01A1	93.279	Drug Abuse and Addiction Research Programs	\$ 4,136	
Health and Human Services, Department of	Direct		1 K01 DA044270-01A1	93.279	Drug Abuse and Addiction Research Programs	46,238	· .
Health and Human Services, Department of	Direct		1 K01 DA044279-01A1	93.279	Drug Abuse and Addiction Research Programs	54,387	
Health and Human Services, Department of	Direct		1 K08 DA048110-01	93.279	Drug Abuse and Addiction Research Programs	25,034	
Health and Human Services, Department of	Direct		1 R01 DA044204-01A1	93.279	Drug Abuse and Addiction Research Programs	160,445	-
Health and Human Services, Department of	Direct		1 R03 DA048129-01	93.279	Drug Abuse and Addiction Research Programs	15,478	-
Health and Human Services, Department of	Direct		1 R13 DA046190-01	93.279	Drug Abuse and Addiction Research Programs	10,940	-
Health and Human Services, Department of	Direct		1 R21 DA040752-01A1	93.279	Drug Abuse and Addiction Research Programs	135,796	-
Health and Human Services, Department of	Direct		1 R21 DA049729-01	93.279	Drug Abuse and Addiction Research Programs	2,704	-
Health and Human Services, Department of	Direct		1 R34 DA045712-02	93.279	Drug Abuse and Addiction Research Programs	88,259	-
Health and Human Services, Department of	Direct		2 R01 DA031160 07	93.279	Drug Abuse and Addiction Research Programs	3,193	-
Health and Human Services, Department of	Direct		2 R01 DA031160-06	93.279	Drug Abuse and Addiction Research Programs	154,780	-
Health and Human Services, Department of	Direct		4 P01 DA031656-05	93.279	Drug Abuse and Addiction Research Programs	123,565	-
Health and Human Services, Department of	Direct		4 R01 DA001411-42 4 R01 DA003207 04	93.279	Drug Abuse and Addiction Research Programs	25,099	25,485
Health and Human Services, Department of	Direct		4 R01 DA033397-04 4 R01 DA035811 05	93.279	Drug Abuse and Addiction Research Programs	(674)	-
Health and Human Services, Department of	Direct		4 R01 DA035811-05 5 F31 DA041083 02	93.279 93.279	Drug Abuse and Addiction Research Programs	586,275	98,993
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 F31 DA041083-02 5 K01 DA036681-05	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	(9,645) 104,723	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 K01 DA030081-05 5 K08 DA037912-05	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	225,319	-
Health and Human Services, Department of	Direct		5 K08 DA037912-05 5 K23 DA036008-05	93.279	Drug Abuse and Addiction Research Programs	11,513	-
Health and Human Services, Department of	Direct		5 K23 DA038718-04	93.279	Drug Abuse and Addiction Research Programs	132,602	
Health and Human Services, Department of	Direct		5 K23 DA039341-04	93.279	Drug Abuse and Addiction Research Programs	205,031	
Health and Human Services, Department of	Direct		5 R01 DA001411-45	93.279	Drug Abuse and Addiction Research Programs	7,070,920	240,237
Health and Human Services, Department of	Direct		5 R01 DA003910-31	93.279	Drug Abuse and Addiction Research Programs	124,192	-
Health and Human Services, Department of	Direct		5 R01 DA015188-13	93.279	Drug Abuse and Addiction Research Programs	268,539	
Health and Human Services, Department of	Direct		5 R01 DA016575-17	93.279	Drug Abuse and Addiction Research Programs	2,186,400	14,137
Health and Human Services, Department of	Direct		5 R01 DA035183-05	93.279	Drug Abuse and Addiction Research Programs	66,323	-
Health and Human Services, Department of	Direct		5 R01 DA035316-05	93.279	Drug Abuse and Addiction Research Programs	491,572	231,685
Health and Human Services, Department of	Direct		5 R01 DA038261-04	93.279	Drug Abuse and Addiction Research Programs	468,369	-
Health and Human Services, Department of	Direct		5 R01 DA038599-05	93.279	Drug Abuse and Addiction Research Programs	533,339	94,810
Health and Human Services, Department of	Direct		5 R01 DA039159-03	93.279	Drug Abuse and Addiction Research Programs	466,512	-
Health and Human Services, Department of	Direct		5 R01 DA039901-05	93.279	Drug Abuse and Addiction Research Programs	525,930	46,901
Health and Human Services, Department of	Direct		5 R01 DA039952-05	93.279	Drug Abuse and Addiction Research Programs	318,359	8,197
Health and Human Services, Department of	Direct		5 R01 DA041032-05	93.279	Drug Abuse and Addiction Research Programs	1,045,355	451,983
Health and Human Services, Department of	Direct		5 R01 DA042092-03	93.279	Drug Abuse and Addiction Research Programs	407,368	-
Health and Human Services, Department of	Direct		5 R01 DA042859-03	93.279	Drug Abuse and Addiction Research Programs	588,795	-
Health and Human Services, Department of	Direct		5 R01 DA043696-03	93.279	Drug Abuse and Addiction Research Programs	292,203	-
Health and Human Services, Department of	Direct		5 R01 DA044157-02	93.279 93.279	Drug Abuse and Addiction Research Programs	121,509	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 DA044245-03 5 R01 DA044960-02	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	589,147 136,191	-
Health and Human Services, Department of	Direct		5 R01 DA045063-02	93.279	Drug Abuse and Addiction Research Programs	290,924	12,706
Health and Human Services, Department of	Direct		5 R01 DA045005-02 5 R01 DA045705-02	93.279	Drug Abuse and Addiction Research Programs	489,637	12,700
Health and Human Services, Department of	Direct		5 R03 DA039003-02	93.279	Drug Abuse and Addiction Research Programs	(9,679)	-
Health and Human Services, Department of	Direct		5 R03 DA041891-02	93.279	Drug Abuse and Addiction Research Programs	100,348	-
Health and Human Services, Department of	Direct		5 R05 DA041071-02 5 R21 DA041202-02	93.279	Drug Abuse and Addiction Research Programs	12,693	-
Health and Human Services, Department of	Direct		5 R21 DA041565-02	93.279	Drug Abuse and Addiction Research Programs	122,721	-
Health and Human Services, Department of	Direct		5 R21 DA045146-02	93.279	Drug Abuse and Addiction Research Programs	157,782	-
Health and Human Services, Department of	Direct		5 R21 DA045277-02	93.279	Drug Abuse and Addiction Research Programs	65,785	17,286
Health and Human Services, Department of	Direct		5 R34 DA045067-02	93.279	Drug Abuse and Addiction Research Programs	76,284	-
Health and Human Services, Department of	Direct		5 R34 DA047466-02	93.279	Drug Abuse and Addiction Research Programs	106,829	-
Health and Human Services, Department of	Direct		5 R37 DA039997-05	93.279	Drug Abuse and Addiction Research Programs	541,009	80,223
Health and Human Services, Department of	Direct		5 U01 DA041106-05	93.279	Drug Abuse and Addiction Research Programs	2,475,402	887,473
Health and Human Services, Department of	Direct		5 U01 DA043098-03	93.279	Drug Abuse and Addiction Research Programs	734,895	163,209
Health and Human Services, Department of	Direct		5R01DA036541-03	93.279	Drug Abuse and Addiction Research Programs	154,387	-
Health and Human Services, Department of	Direct		7 R01 DA042779 03	93.279	Drug Abuse and Addiction Research Programs	99,158	-
Health and Human Services, Department of	Direct		T32 DA007268	93.279	Drug Abuse and Addiction Research Programs	386,816	-
Health and Human Services, Department of	Direct		T32 DA007281	93.279	Drug Abuse and Addiction Research Programs	216,862	-
Health and Human Services, Department of	Pass-Through	Albert Einstein College of Medicine	310734	93.279	Drug Abuse and Addiction Research Programs	13,263	-
Health and Human Services, Department of	Pass-Through	Arbor Medical Innovations	R43DA046981	93.279	Drug Abuse and Addiction Research Programs	13,282	-
Health and Human Services, Department of	Pass-Through	Boys Town National Research Hospital	97008	93.279	Drug Abuse and Addiction Research Programs	(390)	-
Health and Human Services, Department of	Pass-Through	Brown University	00001179	93.279	Drug Abuse and Addiction Research Programs	26,724	-
Health and Human Services, Department of	Pass-Through	Children's Research Institute	30003671-01 Subaward 40026	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	25,022	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass Through	Emory University Emory University	Subaward 40036 T852804	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	2,620 35,755	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Emory University George Washington University	1852804 18-S26	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	35,755 28,551	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan State University	RC104851UM	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	186,484	-
Health and Human Services, Department of	Pass-Through	Pennsylvania State University	5276-UM-DHHS-9838	93.279	Drug Abuse and Addiction Research Programs	5,643	-
reach and ruman betwees, Department of	1 ass-1 inough	· cally - and oute on vestry	5270-0M*D11115*7050	13.217	2.45 . touse and requestor research i tograms	5,045	-

Health and Human Services, Department ofPaHealth and Human Services, Department ofPa	ass-Through ass-Through	Rush University Medical Center Texas State University, San Marcos	13083008-Sub02	93.279	Drug Abuse and Addiction Research Programs	28,827	
Health and Human Services, Department of Pa			18012-82851-1	93.279	Drug Abuse and Addiction Research Programs	27,147	-
	ass-Through	Texas State University, San Marcos	18013-82803-1	93.279	Drug Abuse and Addiction Research Programs	40,015	-
Health and Human Services, Department of Pa	ass-Through	University of Bath	Subcontract	93.279	Drug Abuse and Addiction Research Programs	315,600	-
	ass-Through	University of California-San Diego	69115330	93.279	Drug Abuse and Addiction Research Programs	67,575	-
	ass-Through	University of California-San Diego	72012619	93.279	Drug Abuse and Addiction Research Programs	280,508	-
	ass-Through	University of California-San Diego	72012619	93.279	Drug Abuse and Addiction Research Programs	(19,798)	-
	ass-Through	University of California-San Diego	117223515 / \$9002283	93.279	Drug Abuse and Addiction Research Programs	281	-
	ass-Through	University of Maryland, The	1600919	93.279	Drug Abuse and Addiction Research Programs	15,758	-
	ass-Through	University of Maryland, The	1801973 PO SR00004939	93.279	Drug Abuse and Addiction Research Programs	113,127	-
	ass-Through ass-Through	University of Minnesota University of Minnesota	A007451302 P004670602	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	11,517 50,012	-
	ass-Through	University of Minnesota	P007183802	93.279	Drug Abuse and Addiction Research Programs	67,707	-
	ass-Through	University of Washington	UWSC8498	93.279	Drug Abuse and Addiction Research Programs	108,783	-
	ass-Through	University of Wisconsin	855K400	93.279	Drug Abuse and Addiction Research Programs	65,622	-
Health and Human Services, Department of Pa	ass-Through	Virginia Commonwealth University	FP00000224_SA002	93.279	Drug Abuse and Addiction Research Programs	14,786	-
						\$ 25,352,495 \$	\$ 2,373,325
				02.202	Centers for Disease Control and Prevention Investigations	¢ 0.00 ¢	P
Health and Human Services, Department of Di	Direct		5 U01 DP006265-03	93.283	and Technical Assistance Centers for Disease Control and Prevention Investigations	\$ 862,998 \$, -
Health and Human Services, Department of Pa	ass-Through	Michigan, State of, Health and Human Services, Department of	E20180447-001	93.283	and Technical Assistance	754	
Treath and Human Services, Department of	ass-rinough	whengan, state of, freatur and fruman services, Department of	120130447-001	95.265	Centers for Disease Control and Prevention Investigations	754	-
Health and Human Services, Department of Pa	ass-Through	Michigan, State of, Health and Human Services, Department of	E20182522-00	93.283	and Technical Assistance	18,626	
	8	5, , , , , <u>,</u>			Centers for Disease Control and Prevention Investigations	-,	
Health and Human Services, Department of Pa	ass-Through	Michigan, State of, Health and Human Services, Department of	E20193020-00	93.283	and Technical Assistance	1,496	-
					Centers for Disease Control and Prevention Investigations		
Health and Human Services, Department of Pa	ass-Through	Michigan, State of, Health and Human Services, Department of	E20193022-00 G	93.283	and Technical Assistance	1,503	
						\$ 885,377 \$	<u>i -</u>
Health and Human Services, Department of Di	Direct		1 R21 EB019221-02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	\$ 8,111 \$	÷ -
Health and Human Services, Department of Di	Direct		1 R21 EB021562-02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	62,098	-
Health and Human Services Department of D	Vinant		21101ED019752 0451	02 286	Discovery and Applied Research for Technological	221 285	
Health and Human Services, Department of Di	Direct		3U01EB018753-04S1	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	321,285	-
Health and Human Services, Department of Di	Direct		4 R01 EB016079-04	93.286	Innovations to Improve Human Health	31,350	-
Health and Human Services, Department of Di	Direct		5 01 EB008998-09	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	236,525	-
Health and Human Services, Department of Di	Direct		5 R01 EB003320-23	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	569,356	-
	Direct		5 R01 EB005678-12	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	295,798	160,915
	Direct		5 R01 EB009910-09	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	171,166	55,557
					Discovery and Applied Research for Technological		
	Direct		5 R01 EB013198-09	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	410,602	298,606
	Direct		5 R01 EB016079-06	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	203,844	-
Health and Human Services, Department of Di	Direct		5 R01 EB018297-04	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	114,361	-
Health and Human Services, Department of Di	Direct		5 R01 EB019436-04	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	315,312	-
Health and Human Services, Department of Di	Direct		5 R01 EB019834-03	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	100,407	33,082
Health and Human Services, Department of Di	Direct		5 R01 EB020644-04	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	193,611	-
Health and Human Services, Department of Di	Direct		5 R01 EB021155-04S1	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	429,519	-
Health and Human Services, Department of Di	Direct		5 R01 EB022028-04	93.286	Innovations to Improve Human Health	610,735	161,676
Health and Human Services, Department of Di	Direct		5 R01 EB022033-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	415,838	-
Health and Human Services, Department of Di	Direct		5 R01 EB022075-034	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	539,135	-
Health and Human Services, Department of Di	Direct		5 R01 EB022563-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	612,498	-
Health and Human Services, Department of Di	Direct		5 R01 EB023294-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	420,032	130,131
Health and Human Services, Department of Di	Direct		5 R01 EB023618-03	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	371,017	24,035
	Direct		5 R03 EB019352-02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	(22,884)	-
Health and Human Services, Department of Di					Discovery and Applied Research for Technological		
	Direct		5 R03 EB023459-02	93.286	Innovations to Improve Human Health	83,733	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R03 EB027444 02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	69,190	
					Discovery and Applied Research for Technological		
Health and Human Services, Department of	Direct		5 R21 EB019566-02	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	5,115	-
Health and Human Services, Department of	Direct		5 R21 EB020811-02	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	(1,720)	-
Health and Human Services, Department of	Direct		5 R21 EB021546-02	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	86,114	-
Health and Human Services, Department of	Direct		5 R21 EB024038-02	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	208,538	-
Health and Human Services, Department of	Direct		5 R21 EB024410-02	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	137,534	-
Health and Human Services, Department of	Direct		5 R25 EB019898-05	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	49,671	-
Health and Human Services, Department of	Direct		5 U01 EB026977-02	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	277,169	-
Health and Human Services, Department of	Direct		T32 EB005582	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	228,815	-
Health and Human Services, Department of	Pass-Through	Harvard University	130307-5074036	93.286	Innovations to Improve Human Health Discovery and Applied Research for Technological	210,526	-
Health and Human Services, Department of	Pass-Through	Harvard University	130307-5074036	93.286	Innovations to Improve Human Health	(12,359)	-
Health and Human Services, Department of	Pass-Through	Tulane University	TUL-SCC-555609-17/18	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	3,426	-
Health and Human Services, Department of	Pass-Through	University at Buffalo	R1080444	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	5,842	-
Health and Human Services, Department of	Pass-Through	University of Colorado Boulder	1556807	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	71,971	-
Health and Human Services, Department of	Pass-Through	University of Memphis	5-40513	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	29,749	-
Health and Human Services, Department of	Pass-Through	University of Mississippi	66107990617	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	18,458	
Health and Human Convises. Department of	Direct		2181 1020200 04	93.300	National Center for Health Workforce Analysis	\$ 7,925,536 \$ 736,569	
Health and Human Services, Department of Health and Human Services, Department of	Direct		2 U81 HP29300 04 5 U81 HP29300-03-00	93.300	National Center for Health Workforce Analysis	\$ 736,569 281,554	\$ 43,523 45,051
						\$ 1,018,123	
Health and Human Services, Department of	Direct		3 R01 CA071699-20S1	93.307	Minority Health and Health Disparities Research	\$ 216,777	
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		4 P60 MD002249-10 5 R01 MD008879-05	93.307 93.307	Minority Health and Health Disparities Research Minority Health and Health Disparities Research	390,795 282,816	369,950
Health and Human Services, Department of	Direct		5 R01 MD000075-05	93.307	Minority Health and Health Disparities Research	471,861	_
Health and Human Services, Department of	Direct		5 R01 MD011570-04	93.307	Minority Health and Health Disparities Research	974,136	40,796
Health and Human Services, Department of	Direct		5 R01 MD011716-03	93.307	Minority Health and Health Disparities Research	998,463	830,219
Health and Human Services, Department of	Direct		5 R01 MD011721-03	93.307	Minority Health and Health Disparities Research	319,115	72,628
Health and Human Services, Department of	Direct		5 R01 MD013299-02	93.307	Minority Health and Health Disparities Research	831,782	-
Health and Human Services, Department of	Direct		5 R03 MD012327-02	93.307	Minority Health and Health Disparities Research	25,022	-
Health and Human Services, Department of	Direct		5 R21 MD012683-02	93.307	Minority Health and Health Disparities Research	105,817	38,349
Health and Human Services, Department of	Direct		5 T37 MD001425-21	93.307	Minority Health and Health Disparities Research	90,655	-
Health and Human Services, Department of	Direct		5 U01 MD010579-04	93.307	Minority Health and Health Disparities Research	591,421	-
Health and Human Services, Department of	Pass-Through	Boston College	5105592-3	93.307	Minority Health and Health Disparities Research	5,784	-
Health and Human Services, Department of	Pass-Through	Harvard University	115402-5103514	93.307	Minority Health and Health Disparities Research	41,889	-
Health and Human Services, Department of	Pass-Through	Harvard University	116557-5103714	93.307	Minority Health and Health Disparities Research	(4,057)	-
Health and Human Services, Department of	Pass-Through	MEI Research, Ltd.	STTR Phase II	93.307	Minority Health and Health Disparities Research	192,103	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan State University Michigan State University	RC106388E RC106388E	93.307 93.307	Minority Health and Health Disparities Research Minority Health and Health Disparities Research	56,380 17,670	-
Health and Human Services, Department of	Pass-Through	Thomas Jefferson University	080-18060-S10702	93.307	Minority Health and Health Disparities Research	(1,047)	-
Health and Human Services, Department of	Pass-Through	University of Illinois-Urbana-Champaign	079243-15822	93.307	Minority Health and Health Disparities Research	10,265	
Health and Human Services, Department of	Pass-Through	University of Illinois-Urbana-Champaign	079243-15822	93.307	Minority Health and Health Disparities Research	4,303	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	571099	93.307	Minority Health and Health Disparities Research	207,753	
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	576151 PO#4233592	93.307	Minority Health and Health Disparities Research	85,974	-
Health and Human Services, Department of	Pass-Through	Zansors	Agreement	93.307	Minority Health and Health Disparities Research	(73,420)	-
						\$ 5,842,257	
Health and Human Services, Department of	Direct		1 DP2 DK113750-01	93.310	Trans-NIH Research Support	\$ 289,755	\$ -
Health and Human Services, Department of	Direct		1 DP2 GM114848-01	93.310	Trans-NIH Research Support	511,747	-
Health and Human Services, Department of	Direct Direct		1 DP2-MH104119-01 1 U2C ES026553-01	93.310 93.310	Trans-NIH Research Support Trans-NIH Research Support	1,915 993,891	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		3 R25 GM111837-04S1	93.310	Trans-NIH Research Support Trans-NIH Research Support	993,891 182,464	8,231
Health and Human Services, Department of	Direct		3 U18 EB021760-02S1	93.310	Trans-NIH Research Support	182,464 964	0,231
Health and Human Services, Department of	Direct		30T2OD024907-01S2	93.310	Trans-NIH Research Support	775,649	-
Health and Human Services, Department of	Direct		4 U24 DK097153-05	93.310	Trans-NIH Research Support	536,182	21,965
Health and Human Services, Department of	Direct		5 R01 ES026877-04	93.310	Trans-NIH Research Support	458,997	105,913
Health and Human Services, Department of	Direct		5 R01 HD086676-03S1	93.310	Trans-NIH Research Support	354,644	34,094
Health and Human Services, Department of	Direct		5 R25 EB022363-03	93.310	Trans-NIH Research Support	116,153	-
Health and Human Services, Department of	Direct		5 U01 CA235487-02	93.310	Trans-NIH Research Support	300,772	43,773
	Direct		5 U01 GM125274-03	93.310	Trans-NIH Research Support	644,050	-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 U24 DK112342-03 5 U2CES030164-02	93.310 93.310	Trans-NIH Research Support Trans-NIH Research Support	946,652 581,081	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Lerner College of Medicine	992-SUB	93.310	Trans-NIH Research Support	66,282	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC 108889UM	93.310	Trans-NIH Research Support	469,693	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106694A	93.310	Trans-NIH Research Support	221,276	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RG100983	93.310 93.310	Trans-NIH Research Support	9,131 8,352	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RG100983-2		Trans-NIH Research Support		-
Health and Human Services, Department of	Pass-Through	Northeastern University Rockefeller University	500626-78051 51111277000022.05	93.310 93.310	Trans-NIH Research Support	262,928 38,982	-
Health and Human Services, Department of	Pass-Through		5UH3TR000933-05		Trans-NIH Research Support		-
Health and Human Services, Department of	Pass-Through	The University of Texas Health Science Center at Houston	0012225A	93.310 93.310	Trans-NIH Research Support	135,750	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	105433232		Trans-NIH Research Support	23,782	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University Medical Center	VUMC 58159	93.310	Trans-NIH Research Support	7,576	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University Medical Center	VUMC 58159	93.310	Trans-NIH Research Support	6,904 \$ 7,945,572	
	D'		1 1000000000000000000000000000000000000	02.220	DIFUSIO CONTRACTOR		
Health and Human Services, Department of	Direct Direct		1 NU13PS003769-01-00 1 R13 TR002521-01	93.339 93.350	Public Health Conference Support	\$ 89,045 \$ 26,999	
Health and Human Services, Department of					National Center for Advancing Translational Sciences	• - • • • • • • • • • • • • • • • • • •	
Health and Human Services, Department of	Direct		1 U01 TR002488-02	93.350	National Center for Advancing Translational Sciences	803,249	323,38
Health and Human Services, Department of	Direct		5 KL2 TR002241-03	93.350	National Center for Advancing Translational Sciences	1,299,864	-
Health and Human Services, Department of	Direct		5 U01 TR002013-03	93.350	National Center for Advancing Translational Sciences	866,338	462,19
Health and Human Services, Department of	Direct		5 UL1 TR002240-03	93.350	National Center for Advancing Translational Sciences	9,587,667	21,39
Health and Human Services, Department of	Direct		TL1 TR002242	93.350	National Center for Advancing Translational Sciences	126,796	-
Health and Human Services, Department of	Pass-Through	University of Alabama	000508606-018	93.350	National Center for Advancing Translational Sciences	849	-
Health and Human Services, Department of	Pass-Through	University of South Florida	6119-1359-11-В	93.350	National Center for Advancing Translational Sciences	803	-
Health and Human Services, Department of	Pass-Through	Washington University in St. Louis	UWSC10033 / BPO 26355	93.350	National Center for Advancing Translational Sciences	31,492	-
						\$ 12,744,057 \$ (104.091)	
Health and Human Services, Department of	Direct		1 S10 OD021619-01	93.351	Research Infrastructure Programs		s -
Health and Human Services, Department of	Direct		1 S10OD025046 01	93.351	Research Infrastructure Programs	600,000	-
Health and Human Services, Department of	Direct		5 K26 OD016502-05	93.351	Research Infrastructure Programs	(12,117)	-
Health and Human Services, Department of	Direct		5 R21 OD018265-02	93.351	Research Infrastructure Programs	(3,243)	-
Health and Human Services, Department of	Direct		5 R21 OD0201087-02	93.351	Research Infrastructure Programs	(26,151)	-
Health and Human Services, Department of	Direct		5 R21 OD023194-02	93.351	Research Infrastructure Programs	140,860	-
Health and Human Services, Department of	Direct		5 R21 OD024789-02	93.351	Research Infrastructure Programs	159,688	65,270
Health and Human Services, Department of	Pass-Through	North Carolina State University	2018-0522-01	93.351	Research Infrastructure Programs	25,605	-
	0	,			5	\$ 780,551	\$ 65,270
Health and Human Services, Department of	Direct		1U01CA224145-01	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	\$ 701,199	
Health and Human Services, Department of	Pass-Through	Dana-Farber Cancer Institute	1204001	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	30,705	-
Health and Human Services, Department of	Pass-Through	Magee Womens Research Institute	6800	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	16,898	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	H006354701	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	171.897	
		,,				\$ 920,699	s -
Health and Human Services, Department of	Direct		4 UF1HP26979-03-02	93.359	Nurse Education, Practice Quality and Retention Grants	\$ 209,766	
Health and Human Services, Department of	Direct		6UD7HP28536-01-02	93.359	Nurse Education, Practice Quality and Retention Grants	388,675	299,059.00
ritariai and ritariai Sei (1665, Department of	Direct		0007111 20000 01 02	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Traise Education, Fractice Quarky and Retention Oranis	\$ 598,441	\$ 299.059
Health and Human Services, Department of	Direct		4 R01 NR013658-05	93.361	Nursing Research	\$ 75,953	
Health and Human Services, Department of	Direct		4 R01 NR013861-05	93.361	Nursing Research	(37,203)	-
Health and Human Services, Department of	Direct		5 P20 NR015331-05	93.361	Nursing Research	222,959	_
Health and Human Services, Department of	Direct		5 R01 NR016093-03	93.361	Nursing Research	565,201	_
Health and Human Services, Department of	Direct		5 R01 NR016123-04	93.361	Nursing Research	533,123	
Health and Human Services, Department of	Direct		5 R01 NR017096-03	93.361	Nursing Research	506,552	99,778
Health and Human Services, Department of	Direct		5 R21 NR01/050-05	93.361	Nursing Research	174,437	4,964
Health and Human Services, Department of	Direct		5 R21 NR016802-02	93.361	Nursing Research	188,802	10,178
Health and Human Services, Department of	Direct		5 R21 NR010802-02 5 R21 NR016930-02	93.361	Nursing Research	131,547	10,170
Health and Human Services, Department of	Direct		T32 NR016914	93.361	Nursing Research	210,418	
Health and Human Services, Department of	Pass-Through	Henry Ford Health System	B11112MSU	93.361	Nursing Research	12,777	-
							-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4679348UM	93.361	Nursing Research	102,079	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106854UM RC106970UM	93.361 93.361	Nursing Research	12,561 33,794	-
Iealth and Human Services, Department of	Pass-Through	Michigan State University			Nursing Research		-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	3001166284	93.361	Nursing Research	8,853	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU19027	93.361	Nursing Research	47,269	-
	n		DOLO2COUR C	CA 300		\$ 2,789,122	
Health and Human Services, Department of	Pass-Through	Michigan State University	RC103659UM	93.389	National Center for Research Resources	\$ 58,408	
Health and Human Services, Department of	Direct		1 F99 CA234810-01	93.393	Cancer Cause and Prevention Research	\$ 24,425	s -
Health and Human Services, Department of	Direct		1 R01 CA232263-01A1	93.393	Cancer Cause and Prevention Research	167,201	-
Health and Human Services, Department of	Direct		1 R37 CA233476-01	93.393	Cancer Cause and Prevention Research	111,040	-
lealth and Human Services, Department of	Direct		4 P01 CA163233-05	93.393	Cancer Cause and Prevention Research	72,982	34,36
Iealth and Human Services, Department of	Direct		5 R01 CA129102-10	93.393	Cancer Cause and Prevention Research	340,851	96,36
Iealth and Human Services, Department of	Direct		5 R01 CA152192-05	93.393	Cancer Cause and Prevention Research	(19,573)	-
Iealth and Human Services, Department of	Direct		5 R01 CA171277-05	93.393	Cancer Cause and Prevention Research	51,975	-
Health and Human Services, Department of	Direct		5 R01 CA174768-05	93.393	Cancer Cause and Prevention Research	292,265	-
Health and Human Services, Department of	Direct		5 R01 CA189352-05	93.393	Cancer Cause and Prevention Research	320,002	-
Health and Human Services, Department of	Direct		5 R01 CA200731-04	93.393	Cancer Cause and Prevention Research	470,508	-
Health and Human Services, Department of	Direct		5 R01 CA201198-04	93.393	Cancer Cause and Prevention Research	632,062	-
Health and Human Services, Department of	Direct		5 R01 CA201356-04	93.393	Cancer Cause and Prevention Research	395,839	50,85
Health and Human Services, Department of	Direct		5 R01 CA201415-03	93.393	Cancer Cause and Prevention Research	488,051	180,61
Health and Human Services, Department of	Direct		5 R01 CA203542-04	93.393	Cancer Cause and Prevention Research	329,201	
Iealth and Human Services, Department of	Direct		5 R01 CA206010-04	93.393	Cancer Cause and Prevention Research	543,327	-
icardi and framan Scivices, Department 01			5 R01 CA200010-04 5 R01 CA214829-02	93.393	Cancer Cause and Prevention Research	669,462	-
Jealth and Human Services Danartment of					Cancer Cause and Litevenuoli Research		-
	Direct						
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 CA215981-02 5 R01 CA215981-02 5 R01 CA218116-02	93.393 93.393	Cancer Cause and Prevention Research Cancer Cause and Prevention Research	444,950 471,077	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expendi	itures I	Pass-Through
Health and Human Services, Department of	Direct	- ass - area by or anter	5 R01CA212517 03	93,393	Cancer Cause and Prevention Research		85.492	17,282
Health and Human Services, Department of	Direct		5 R21 CA191186-04	93.393	Cancer Cause and Prevention Research		40,590	-
Health and Human Services, Department of	Direct		5 R21 CA201782-02	93.393	Cancer Cause and Prevention Research		67,599	-
Health and Human Services, Department of	Direct		5 R21 CA204560-03	93.393	Cancer Cause and Prevention Research		233,144	-
Health and Human Services, Department of	Direct		5 R21 CA219300-02	93.393	Cancer Cause and Prevention Research	2	209,765	-
Health and Human Services, Department of	Direct		5 R37 CA214787-02	93.393	Cancer Cause and Prevention Research	-	536,382	169,325
Health and Human Services, Department of	Direct		5 R37 CA222885-02	93.393	Cancer Cause and Prevention Research	5	509,568	-
Health and Human Services, Department of	Direct		5 U01 CA182915-05	93.393	Cancer Cause and Prevention Research		574,310	-
Health and Human Services, Department of	Direct		5 U01 CA199284-05	93.393	Cancer Cause and Prevention Research	1,8	300,917	1,345,882
Health and Human Services, Department of	Direct		5 U24 CA204863-03	93.393	Cancer Cause and Prevention Research		341,836	372,844
Health and Human Services, Department of	Pass-Through	Arcascope	Research Agreement	93.393	Cancer Cause and Prevention Research		62,251	-
Health and Human Services, Department of	Pass-Through	Brown University	00001193	93.393	Cancer Cause and Prevention Research		17,406	-
Health and Human Services, Department of	Pass-Through	Brown University	00001193	93.393	Cancer Cause and Prevention Research		16,223	-
Health and Human Services, Department of	Pass-Through	Columbia University	5(GG012814-01)	93.393	Cancer Cause and Prevention Research		15,494	-
Health and Human Services, Department of	Pass-Through	Georgetown University	412187 _ GR411954-UM	93.393	Cancer Cause and Prevention Research		6,328	-
Health and Human Services, Department of	Pass-Through	Georgetown University	GR411619	93.393 93.393	Cancer Cause and Prevention Research Cancer Cause and Prevention Research		69,514 39,981	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Georgetown University Harvard University	GR413124 112185-5101412	93.393	Cancer Cause and Prevention Research		31,484	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000917146	93.393	Cancer Cause and Prevention Research		2,699	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000918478	93.393	Cancer Cause and Prevention Research		34,853	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000954436	93.393	Cancer Cause and Prevention Research		220,677	_
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000956874	93.393	Cancer Cause and Prevention Research		17,818	_
Health and Human Services, Department of	Pass-Through	ImBio	22	93.393	Cancer Cause and Prevention Research		1,632	-
Health and Human Services, Department of	Pass-Through	ImBio	1 R44 CA210825 02	93.393	Cancer Cause and Prevention Research	2	238,290	-
Health and Human Services, Department of	Pass-Through	ImBio	22-03	93.393	Cancer Cause and Prevention Research		26,831	-
Health and Human Services, Department of	Pass-Through	Memorial Sloan-Kettering Cancer Center (MSKCC)	BD519865A	93.393	Cancer Cause and Prevention Research		37,505	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60041989 UM	93.393	Cancer Cause and Prevention Research		48,070	-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	60064997	93.393	Cancer Cause and Prevention Research		30,672	-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	60065296	93.393	Cancer Cause and Prevention Research		80,666	-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	RF01456068	93.393	Cancer Cause and Prevention Research		(75)	-
Health and Human Services, Department of	Pass-Through	ProDevice Medical Supplies and Equipment LLC	Award Letter	93.393	Cancer Cause and Prevention Research		45,524	-
Health and Human Services, Department of	Pass-Through	Purdue University	4102-41070	93.393	Cancer Cause and Prevention Research		(150)	-
Health and Human Services, Department of	Pass-Through	Stanford University	61795885-129906	93.393	Cancer Cause and Prevention Research		273,834	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	3001216083	93.393	Cancer Cause and Prevention Research		17,501	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	R01CA214954	93.393	Cancer Cause and Prevention Research		77,433	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	Subaward No. 3000993722	93.393	Cancer Cause and Prevention Research Cancer Cause and Prevention Research		(6,727)	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5106265 0057797 (130855?1)	93.393 93.393	Cancer Cause and Prevention Research		23,914 23,166	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Pittsburgh University of South Carolina	18-3419	93.393	Cancer Cause and Prevention Research		51.520	-
Health and Human Services, Department of	Pass-Through	University of Southern California	65281593	93.393	Cancer Cause and Prevention Research		26,541	-
Health and Human Services, Department of	Pass-Through	University of Utah	10045740-06	93.393	Cancer Cause and Prevention Research		14,897	
ricann and riunan Services, Department of	1 ass=1 litough	University of Otan	10045740-00	95.595	Cancel Cause and I revention Research	\$ 12.7	751,020 \$	2,267,528
Health and Human Services, Department of	Direct		1 R01 CA226527-01	93.394	Cancer Detection and Diagnosis Research		234,199 \$	-
Health and Human Services, Department of	Direct		1 R01 CA238023 01	93.394	Cancer Detection and Diagnosis Research		78,794	-
Health and Human Services, Department of	Direct		1 R37 CA222829-01A1	93.394	Cancer Detection and Diagnosis Research		74,852	-
Health and Human Services, Department of	Direct		1 U01 CA232931 01	93.394	Cancer Detection and Diagnosis Research		16,688	-
Health and Human Services, Department of	Direct		5 P01 CA085878-14	93.394	Cancer Detection and Diagnosis Research	8	389,374	52,007
Health and Human Services, Department of	Direct		5 R01 CA160254-08	93.394	Cancer Detection and Diagnosis Research		335,010	39,771
Health and Human Services, Department of	Direct		5 R01 CA186769-05	93.394	Cancer Detection and Diagnosis Research		88,194	-
Health and Human Services, Department of	Direct		5 R01 CA190299-05	93.394	Cancer Detection and Diagnosis Research		564,838	338,147
Health and Human Services, Department of	Direct		5 R01 CA194536-04	93.394	Cancer Detection and Diagnosis Research		594,548	-
Health and Human Services, Department of	Direct		5 R01 CA208335-03	93.394	Cancer Detection and Diagnosis Research		704,789	-
Health and Human Services, Department of	Direct		5 R01 CA210237-03	93.394	Cancer Detection and Diagnosis Research		14,770	-
Health and Human Services, Department of	Direct Direct		5 R01 CA211217-02	93.394 93.394	Cancer Detection and Diagnosis Research		536,188 525,258	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 CA214981 02 5 R01 CA215574-02	93.394 93.394	Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research		25,258 408,681	- 59,594
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 CA215574-02 5 R01 CA217954-02	93.394	Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research		108,681 301,153	59,394
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R21 CA188481-02	93.394	Cancer Detection and Diagnosis Research	3	(4,888)	-
Health and Human Services, Department of	Direct		5 R21 CA188481-02 5 R21 CA189775-02	93.394	Cancer Detection and Diagnosis Research		(4,000)	-
Health and Human Services, Department of	Direct		5 R21 CA189775-02 5 R21 CA205414-02	93.394	Cancer Detection and Diagnosis Research		7,200	14,185
Health and Human Services, Department of	Direct		5 R33 CA202867-03	93.394	Cancer Detection and Diagnosis Research	1	181,974	-
Health and Human Services, Department of	Direct		5 R33 CA229023 02	93.394	Cancer Detection and Diagnosis Research		254,716	-
Health and Human Services, Department of	Direct		5 R35 CA197701-04	93.394	Cancer Detection and Diagnosis Research		548,672	-
Health and Human Services, Department of	Direct		5 R35 CA231996-02	93.394	Cancer Detection and Diagnosis Research	7	781,600	-
Health and Human Services, Department of	Direct		5 R37 CA214955-03	93.394	Cancer Detection and Diagnosis Research		352,232	98,601
Health and Human Services, Department of	Direct		5 R50 CA 221808 - 02	93.394	Cancer Detection and Diagnosis Research		53,968	-
Health and Human Services, Department of	Direct		5 U01 CA086400-19	93.394	Cancer Detection and Diagnosis Research		222,151	239,797
Health and Human Services, Department of	Direct		5 U01 CA166104-08	93.394	Cancer Detection and Diagnosis Research		545,908	29,491
Health and Human Services, Department of	Direct		5 U01 CA179106-04	93.394	Cancer Detection and Diagnosis Research		11,187	-
Health and Human Services, Department of	Direct		5 U01 CA183848-06	93.394	Cancer Detection and Diagnosis Research		397,026	-
Health and Human Services, Department of	Direct		5 U01 CA189291-04	93.394	Cancer Detection and Diagnosis Research		252,271	-
Health and Human Services, Department of	Direct		5 U01 CA195599-05	93.394 93.394	Cancer Detection and Diagnosis Research		339,895	6,702
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 U01 CA214170-04 5 U01 CA216459-02	93.394	Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research		703,645 358,536	5,165
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 U01 CA225753-02	93.394	Cancer Detection and Diagnosis Research		46,112	147,737
Health and Human Services, Department of	Direct		5 U01 CA230669-02	93.394	Cancer Detection and Diagnosis Research		46,112 158,171	
reading and Frankan Services, Department Of	Direct		5 551 61250007-02	/J.J.94	Cancer Detection and Diagnosis Research	-		-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct Pass-Through	Case Western Reserve University	5 U24 CA210967-04 RES511502	93.394 93.394	Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research	859,795 558	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Case Western Reserve University	RES513628	93.394	Cancer Detection and Diagnosis Research	2,909	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000853873	93.394	Cancer Detection and Diagnosis Research	56,833	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000853875 0000879068-Project 214681	93.394	Cancer Detection and Diagnosis Research	7,353	
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	Subaward No. 0000961971	93.394	Cancer Detection and Diagnosis Research	371,263	
Health and Human Services, Department of	Pass-Through	Light Age, Inc	Grant #: 1R43CA206756-01	93.394	Cancer Detection and Diagnosis Research	(30,487)	-
Health and Human Services, Department of	Pass-Through	Sloan-Kettering Cancer Institute	Subaward Agreement	93.394	Cancer Detection and Diagnosis Research	22,625	-
Health and Human Services, Department of	Pass-Through	The Research Institute at Nationwide Children's Hospital	820389BF	93.394	Cancer Detection and Diagnosis Research	19,017	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	00004191	93.394	Cancer Detection and Diagnosis Research	17,896	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	3001270326	93.394	Cancer Detection and Diagnosis Research	47,608	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	112292279	93.394	Cancer Detection and Diagnosis Research	22,646	-
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 170509	93,394	Cancer Detection and Diagnosis Research	48,965	-
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 180111 PO RGC0000001422	93.394	Cancer Detection and Diagnosis Research	19,852	-
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 180111 PO# 000001422A	93.394	Cancer Detection and Diagnosis Research	24,990	-
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 191109	93.394	Cancer Detection and Diagnosis Research	109,112	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC8459	93.394	Cancer Detection and Diagnosis Research	336,855	-
Health and Human Services, Department of	Pass-Through	Virginia Polytechnic Institute and State University	432045-19337	93.394	Cancer Detection and Diagnosis Research	99,936	-
	-				-	\$ 15,208,320 \$	\$ 1,031,197
Health and Human Services, Department of	Direct		1 R01 CA220199-02	93.395	Cancer Treatment Research	\$ 616,729 \$	s -
Health and Human Services, Department of	Direct		1 R01 CA226759-01A1	93.395	Cancer Treatment Research	148,253	-
Health and Human Services, Department of	Direct		1 R01 CA235726-01	93.395	Cancer Treatment Research	63,407	-
Health and Human Services, Department of	Direct		1 UG1 CA233160-01	93.395	Cancer Treatment Research	211,351	-
Health and Human Services, Department of	Direct		2 R01 CA217156-03	93.395	Cancer Treatment Research	382,904	2,062
Health and Human Services, Department of	Direct		4 R01 CA163737-05	93.395	Cancer Treatment Research	22,779	-
Health and Human Services, Department of	Direct		4 R01 CA166033-05	93.395	Cancer Treatment Research	66,863	-
Health and Human Services, Department of	Direct		4 R01 CA177307-04	93.395	Cancer Treatment Research	(17,169)	-
Health and Human Services, Department of	Direct		5 P01 CA059827-20	93.395	Cancer Treatment Research	2,226,485	-
Health and Human Services, Department of	Direct		5 R00 - CA197672-05	93.395	Cancer Treatment Research	359,549	-
Health and Human Services, Department of	Direct		5 R00 CA194163-05	93.395	Cancer Treatment Research	286,765	-
Health and Human Services, Department of	Direct		5 R01 CA125187-10S1	93.395	Cancer Treatment Research	(5,998)	-
Health and Human Services, Department of	Direct		5 R01 CA133046-10	93.395	Cancer Treatment Research	216,139	-
Health and Human Services, Department of	Direct		5 R01 CA140667-09	93.395	Cancer Treatment Research	563,246	-
Health and Human Services, Department of	Direct		5 R01 CA160467-08	93.395	Cancer Treatment Research	409,274	8,411
Health and Human Services, Department of	Direct		5 R01 CA181654-06	93.395	Cancer Treatment Research	190,870	-
Health and Human Services, Department of	Direct		5 R01 CA184153-05	93.395	Cancer Treatment Research	598,033	-
Health and Human Services, Department of	Direct		5 R01 CA187004-03	93.395	Cancer Treatment Research	(56,719)	-
Health and Human Services, Department of	Direct		5 R01 CA188252-05	93.395	Cancer Treatment Research	407,392	-
Health and Human Services, Department of	Direct		5 R01 CA188323-05	93.395	Cancer Treatment Research	341,688	-
Health and Human Services, Department of	Direct		5 R01 CA190498-05	93.395	Cancer Treatment Research	442,622	-
Health and Human Services, Department of	Direct		5 R01 CA193690-05	93.395	Cancer Treatment Research	429,363	-
Health and Human Services, Department of	Direct		5 R01 CA200660-04	93.395	Cancer Treatment Research	414,590	-
Health and Human Services, Department of	Direct		5 R01 CA201204-03	93.395	Cancer Treatment Research	154,235	-
Health and Human Services, Department of	Direct		5 R01 CA207272-03	93.395	Cancer Treatment Research	467,026	9,921
Health and Human Services, Department of	Direct		5 R01 CA208267-02	93.395	Cancer Treatment Research	647,798	-
Health and Human Services, Department of	Direct		5 R01 CA211016-03	93.395	Cancer Treatment Research	844,307	-
Health and Human Services, Department of	Direct		5 R01 CA214567-03	93.395	Cancer Treatment Research	663,632	317,391
Health and Human Services, Department of	Direct		5 R01 CA215758-03	93.395	Cancer Treatment Research	513,551	-
Health and Human Services, Department of	Direct		5 R01 CA219345-03	93.395	Cancer Treatment Research	671,889	-
Health and Human Services, Department of	Direct		5 R01CA217141-03	93.395	Cancer Treatment Research	512,644	199,889
Health and Human Services, Department of	Direct		5 R21 CA205636-02	93.395	Cancer Treatment Research	(3,921)	-
Health and Human Services, Department of	Direct		5 R21 CA209166-02	93.395	Cancer Treatment Research	(14,290)	-
Health and Human Services, Department of	Direct		5 R21 CA218498-02	93.395	Cancer Treatment Research	157,647	-
Health and Human Services, Department of	Direct		5 R21 CA226962-02	93.395	Cancer Treatment Research	55,800	-
Health and Human Services, Department of	Direct		5 R37 CA222215-02	93.395	Cancer Treatment Research	438,256	-
Health and Human Services, Department of	Direct		5 U01 CA216449-03	93.395	Cancer Treatment Research	643,566	-
Health and Human Services, Department of	Direct		5 U01 CA229437-02	93.395	Cancer Treatment Research	386,294	183,288
Health and Human Services, Department of	Direct		5 U10 CA180801-05	93.395	Cancer Treatment Research	413,678	-
Health and Human Services, Department of	Direct		7 R01 CA197780-04	93.395	Cancer Treatment Research	113,614	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES513951	93.395	Cancer Treatment Research	6,596	-
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation (CCF)	R01 CA168899	93.395	Cancer Treatment Research	(78)	-
Health and Human Services, Department of	Pass-Through	Cold Spring Harbor Lab	55600215	93.395	Cancer Treatment Research	32,245	-
Health and Human Services, Department of	Pass-Through	Colorado State University	G-33008-1	93.395	Cancer Treatment Research	74,621	-
Health and Human Services, Department of	Pass-Through	ECOG-ACRIN Medical Research Foundation, Inc	1UG1CA18928-01-MICH1	93.395	Cancer Treatment Research	10,130	-
Health and Human Services, Department of	Pass-Through	ECOG-ACRIN Medical Research Foundation, Inc	1UG1CA189828-01-MICH3	93.395	Cancer Treatment Research	11,814	-
Health and Human Services, Department of	Pass-Through	ECOG-ACRIN Medical Research Foundation, Inc	5UG1CA189828-04-MICH4	93.395	Cancer Treatment Research	15,753	-
Health and Human Services, Department of	Pass-Through	ECOG-ACRIN Medical Research Foundation, Inc	5UG1CA189828-05	93.395	Cancer Treatment Research	93,467	-
Health and Human Services, Department of	Pass-Through	Emory University	T791626	93.395	Cancer Treatment Research	109,694	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4684921UM	93.395	Cancer Treatment Research	92,986	-
Health and Human Services, Department of	Pass-Through	Mekanistic Therapeutics LLC	2R44CA213715	93.395	Cancer Treatment Research	29,981	-
Health and Human Services, Department of	Pass-Through	NRG Oncology	NRGCC006-UM	93.395	Cancer Treatment Research	13,774	-
Health and Human Services, Department of	Pass-Through	NRG Oncology	Subaward 180868	93.395	Cancer Treatment Research	16,286	-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	60067041/RF01531328	93.395	Cancer Treatment Research	15,297	-
	D (771)	Oregon Health and Science University	1005019 UMI	93.395	Cancer Treatment Research	8,226	
Health and Human Services, Department of	Pass-Through						
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Oregon Health and Science University	1005019_UMI	93.395	Cancer Treatment Research	2,511	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Oregon Health and Science University Oregon Health and Science University	1005019_UMI_Baker 1005019_UMI_Leja	93.395 93.395	Cancer Treatment Research Cancer Treatment Research	375 122,020	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005019_UMI_Leja	93.395	Cancer Treatment Research	8,107	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005019_UMI Rae	93.395	Cancer Treatment Research	4,847	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627 UMI Baker	93.395	Cancer Treatment Research	46,148	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627_UMI_Rae	93.395	Cancer Treatment Research	48,786	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627_UMI_SCHOTT	93.395	Cancer Treatment Research	44,212	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	accept today's date	93.395	Cancer Treatment Research	540	-
Health and Human Services, Department of	Pass-Through	Rutgers University	0768	93.395	Cancer Treatment Research	49,664	-
Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0254-3841-4609	93.395	Cancer Treatment Research	29,778	-
Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0254-3861-4609	93.395	Cancer Treatment Research	291,597	-
Health and Human Services, Department of	Pass-Through	University of Notre Dame, The	203176UM	93.395 93.395	Cancer Treatment Research Cancer Treatment Research	128,023	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Notre Dame, The University of Notre Dame, The	203234UM 203531UM	93.395	Cancer Treatment Research	63,186 206,212	-
reatin and runnan Scivices, Department of	1 ass-1 li ougi	University of Note Dane, The	20555101	95.595	Cancel Treatment Research	\$ 16,564,279	\$ 720,962
Health and Human Services, Department of	Direct		1 R01 CA240993-01	93.396	Cancer Biology Research	\$ 5,367	
Health and Human Services, Department of	Direct		1R01CA226756-01A1	93.396	Cancer Biology Research	193,660	-
Health and Human Services, Department of	Direct		2 UH2 CA213386-02	93.396	Cancer Biology Research	(31,879)	-
Health and Human Services, Department of	Direct		5 P01 CA093900-14	93.396	Cancer Biology Research	1,622,477	184,631
Health and Human Services, Department of	Direct		5 R01 CA107469-14	93.396	Cancer Biology Research	278,295	-
Health and Human Services, Department of	Direct		5 R01 CA1090554-05	93.396	Cancer Biology Research	316,164	-
Health and Human Services, Department of	Direct		5 R01 CA125577-10	93.396	Cancer Biology Research	117,871	-
Health and Human Services, Department of	Direct		5 R01 CA148621-05	93.396	Cancer Biology Research	4,396	-
Health and Human Services, Department of	Direct		5 R01 CA148828-10	93.396	Cancer Biology Research	376,639	-
Health and Human Services, Department of	Direct		5 R01 CA151588-09	93.396	Cancer Biology Research	457,805	-
Health and Human Services, Department of	Direct		5 R01 CA156744-09	93.396	Cancer Biology Research	377,293	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 CA171306-05 5 R01 CA173745-07	93.396 93.396	Cancer Biology Research Cancer Biology Research	(78,393) 57,082	34,650
Health and Human Services, Department of	Direct		5 R01 CA173745-07 5 R01 CA183857-05	93.396	Cancer Biology Research	244,513	54,050
Health and Human Services, Department of	Direct		5 R01 CA187903-05	93.396	Cancer Biology Research	329,324	_
Health and Human Services, Department of	Direct		5 R01 CA190176-05	93.396	Cancer Biology Research	574,874	_
Health and Human Services, Department of	Direct		5 R01 CA190384-05	93.396	Cancer Biology Research	428,196	217,271
Health and Human Services, Department of	Direct		5 R01 CA193136-05	93.396	Cancer Biology Research	471,084	
Health and Human Services, Department of	Direct		5 R01 CA195655-04	93.396	Cancer Biology Research	96,296	
Health and Human Services, Department of	Direct		5 R01 CA196018-05	93.396	Cancer Biology Research	488,185	130,401
Health and Human Services, Department of	Direct		5 R01 CA196604-05	93.396	Cancer Biology Research	426,204	-
Health and Human Services, Department of	Direct		5 R01 CA196619-03	93.396	Cancer Biology Research	385,129	-
Health and Human Services, Department of	Direct		5 R01 CA198074-05	93.396	Cancer Biology Research	427,998	-
Health and Human Services, Department of	Direct		5 R01 CA202018-04	93.396	Cancer Biology Research	342,641	-
Health and Human Services, Department of	Direct		5 R01 CA204969-03	93.396	Cancer Biology Research	327,120	94,781
Health and Human Services, Department of	Direct		5 R01 CA214384-08	93.396	Cancer Biology Research	377,461	-
Health and Human Services, Department of	Direct		5 R01 CA214911-02	93.396	Cancer Biology Research	702,579	-
Health and Human Services, Department of	Direct		5 R01 CA215596-03	93.396	Cancer Biology Research	396,554	-
Health and Human Services, Department of	Direct		5 R01 CA217510-03	93.396	Cancer Biology Research	585,767	-
Health and Human Services, Department of	Direct		5 R01 CA227622-02	93.396 93.396	Cancer Biology Research	213,670	15,172
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R03 CA212990-02 5 R21 CA195016-02	93.396	Cancer Biology Research Cancer Biology Research	116,983 (12,576)	-
Health and Human Services, Department of	Direct		5 R21 CA214233-03	93.396	Cancer Biology Research	207,586	-
Health and Human Services, Department of	Direct		5 R35 CA197585-04	93.396	Cancer Biology Research	380,753	-
Health and Human Services, Department of	Direct		5 R50 CA221807 02	93.396	Cancer Biology Research	150,423	
Health and Human Services, Department of	Direct		5 R50 CA232985-02	93.396	Cancer Biology Research	40,749	-
Health and Human Services, Department of	Direct		5 U01 CA210152-03	93.396	Cancer Biology Research	659,268	
Health and Human Services, Department of	Direct		5 UH3CA213386-04	93.396	Cancer Biology Research	141,362	
Health and Human Services, Department of	Pass-Through	Arizona State University	18-323	93.396	Cancer Biology Research	84,741	-
Health and Human Services, Department of	Pass-Through	Beth Israel Deaconess Medical Center	01029116	93.396	Cancer Biology Research	9,871	-
Health and Human Services, Department of	Pass-Through	Beth Israel Deaconess Medical Center	Sub award 01029116	93.396	Cancer Biology Research	121,192	-
Health and Human Services, Department of	Pass-Through	Beth Israel Deaconess Medical Center	Sub award 01029116	93.396	Cancer Biology Research	(3,420)	-
Health and Human Services, Department of	Pass-Through	Children's National Medical Center	30003498-01	93.396	Cancer Biology Research	(3,998)	-
Health and Human Services, Department of	Pass-Through	Cold Spring Harbor Lab	Sub#25604657-PO# 921008-SV	93.396	Cancer Biology Research	9,679	-
Health and Human Services, Department of	Pass-Through	Columbia University	1 (GG010518)	93.396	Cancer Biology Research	13,660	-
Health and Human Services, Department of	Pass-Through	Columbia University	1 GG012766-01	93.396	Cancer Biology Research	103,726	-
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Research Foundation Institute	RNG209451-MICH-02 6807	93.396 93.396	Cancer Biology Research Cancer Biology Research	4,510	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Magee Womens Research Institute Magee Womens Research Institute	6807 6810-UM	93.396 93.396	Cancer Biology Research Cancer Biology Research	348,168 2,865	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Magee womens Research Institute Mayo Clinic	UOM-208812-02	93.396	Cancer Biology Research	2,865 7,807	-
Health and Human Services, Department of	Pass-Through	Mayo Clinic	UOM-208812-02 UOM-208812-03/PO 66379143	93.396	Cancer Biology Research	9,327	-
Health and Human Services, Department of	Pass-Through	Mayo Chine Medical College of Wisconsin	1 R01 CA223804-01 FP11970	93.396	Cancer Biology Research	163,517	-
Health and Human Services, Department of	Pass-Through	Purdue University	11000689-008	93.396	Cancer Biology Research	122,157	-
Health and Human Services, Department of	Pass-Through	Texas A & M University	M1902041	93.396	Cancer Biology Research	81,290	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	3001109844	93.396	Cancer Biology Research	26,723	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	3001141555	93.396	Cancer Biology Research	69,961	-
Health and Human Services, Department of	Pass-Through	University of Rochester	416456-G	93.396	Cancer Biology Research	(1,906)	-
Health and Human Services, Department of	Pass-Through	University of Southern California	58065388	93.396	Cancer Biology Research	(4,691)	-
	Pass-Through	University of Southern California	94435417	93.396	Cancer Biology Research	(3,579)	-
Health and Human Services, Department of	r abb r mougn						
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	University of Southern California University of Southern California	109811409 109659374/PO50728339	93.396 93.396	Cancer Biology Research Cancer Biology Research	21,346 27,919	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title		Expenditures 13,409,785 \$	Pass-Through 676,906
Health and Human Services, Department of	Direct		3 P30 CA046592-2885	93.397	Cancer Centers Support Grants	\$ \$	(113,895) \$	0/0,900
Health and Human Services, Department of	Direct		3 P30 CA046592-30S3	93.397	Cancer Centers Support Grants		7,951,728	-
lealth and Human Services, Department of	Direct		5 P50 CA186786-05	93.397	Cancer Centers Support Grants		2,523,967	4,670
ealth and Human Services, Department of	Direct		5 R01 CA193377-04	93.397	Cancer Centers Support Grants		324,651	-
lealth and Human Services, Department of	Direct		5 U54 CA163059-08	93.397	Cancer Centers Support Grants		979,745	201,595
lealth and Human Services, Department of	Pass-Through Weill	Cornell Medical College of Cornell University	17030366-01	93.397	Cancer Centers Support Grants		6,830	-
lealth and Human Services, Department of	Pass-Through Weill	Cornell Medical College of Cornell University	183700-01	93.397	Cancer Centers Support Grants	<u>.</u>	127,074	-
ealth and Human Services, Department of	Direct		1 F31 CA232655-01A1	93.398	Cancer Research Manpower	\$	11,800,100 \$ 9,414 \$	206,265
ealth and Human Services, Department of	Direct		1 F31 CA232035-01A1	93.398	Cancer Research Manpower	Ф	75,342	-
lealth and Human Services, Department of	Direct		5 F30 CA196084-03	93.398	Cancer Research Manpower		(18,706)	-
ealth and Human Services, Department of	Direct		5 F30 CA210379-03	93.398	Cancer Research Manpower		41,082	-
ealth and Human Services, Department of	Direct		5 F30 CA213664-02	93.398	Cancer Research Manpower		11,675	-
ealth and Human Services, Department of	Direct		5 F30 CA228228-02	93.398	Cancer Research Manpower		42,430	-
ealth and Human Services, Department of	Direct		5 F31 CA203563-02	93.398	Cancer Research Manpower		(3,167)	-
alth and Human Services, Department of	Direct		5 F31 CA206259-02	93.398	Cancer Research Manpower		3,237	-
ealth and Human Services, Department of	Direct		5 F31 CA206341-03	93.398	Cancer Research Manpower		41,071	-
ealth and Human Services, Department of	Direct		5 F31 CA220966-02	93.398	Cancer Research Manpower		32,453	-
ealth and Human Services, Department of	Direct		5 F31 CA221066-02	93.398	Cancer Research Manpower		47,432	-
ealth and Human Services, Department of	Direct		5 F31 CA224804-02	93.398	Cancer Research Manpower		40,965	-
lealth and Human Services, Department of	Direct		5 F31 CA224982-02	93.398	Cancer Research Manpower		39,479	-
ealth and Human Services, Department of	Direct		5 F32 CA228262-02	93.398	Cancer Research Manpower		64,402	-
ealth and Human Services, Department of	Direct		5 F32 CA228328-02	93.398	Cancer Research Manpower		57,910	-
ealth and Human Services, Department of	Direct		5 K07 CA196752-04	93.398	Cancer Research Manpower		161,988	-
ealth and Human Services, Department of	Direct		5 K07 CA201052-04	93.398	Cancer Research Manpower		156,062	-
ealth and Human Services, Department of	Direct		5 K08 CA172215-05	93.398	Cancer Research Manpower		79,452	-
ealth and Human Services, Department of	Direct		5 K08 CA181475-06	93.398	Cancer Research Manpower		77,925	-
ealth and Human Services, Department of	Direct		5 K08 CA190645-03	93.398	Cancer Research Manpower		145,883	-
ealth and Human Services, Department of	Direct		5 K08 CA201335-04	93.398	Cancer Research Manpower		200,935	-
ealth and Human Services, Department of	Direct		5 K08 CA201581-04	93.398	Cancer Research Manpower		147,805	-
ealth and Human Services, Department of	Direct		5 K08 CA208013-04	93.398	Cancer Research Manpower		211,817	-
ealth and Human Services, Department of	Direct		5 K08 CA218460-03	93.398	Cancer Research Manpower		89,962	-
ealth and Human Services, Department of	Direct		5 K08 CA226350-02	93.398	Cancer Research Manpower		150,274	-
ealth and Human Services, Department of	Direct		5 K08 CA234222-02	93.398	Cancer Research Manpower		188,817	-
ealth and Human Services, Department of	Direct		5 R25 CA203651-03	93.398	Cancer Research Manpower		164,409	-
lealth and Human Services, Department of	Direct		5 R25 CA214227-03	93.398	Cancer Research Manpower Cancer Research Manpower		206,850	12,794
lealth and Human Services, Department of lealth and Human Services, Department of	Direct Direct		T32 CA009357 T32 CA009357	93.398 93.398	Cancer Research Manpower		345,894	-
ealth and Human Services, Department of	Direct		T32 CA009537	93.398	Cancer Research Manpower		(1,361) 200,517	-
lealth and Human Services, Department of	Direct		T32 CA009672 T32 CA009676	93.398	Cancer Research Manpower		346,104	-
lealth and Human Services, Department of	Direct		T32 CA009676	93.398	Cancer Research Manpower		(15,785)	-
lealth and Human Services, Department of	Direct		T32 CA009070	93.398	Cancer Research Manpower		315,106	-
Iealth and Human Services, Department of	Direct		T32 CA083034	93.398	Cancer Research Manpower		(108,440)	-
lealth and Human Services, Department of	Direct		T32 CA140044	93.398	Cancer Research Manpower		221,284	-
lealth and Human Services, Department of	Direct		T32 CA180984	93.398	Cancer Research Manpower		87,410	-
lealth and Human Services, Department of		Western Reserve University	TRN513563	93.398	Cancer Research Manpower		19,093	
eann and manan Services, Department of	russ rinougii Cuse		1111010000	,515,70	Culter Research Manpower	\$	3,877,020 \$	12,794
lealth and Human Services, Department of	Direct		5 R01 CA203809-03	93.399	Cancer Control	\$	217,659 \$	-
					Strengthening Public Health Systems and Services through			
					National Partnerships to Improve and Protect the Nation's			
lealth and Human Services, Department of	Pass-Through Washt	ntenaw, County of	51222/PO20190505	93.421	Health	\$	25,703 \$	-
					ACL National Institute on Disability, Independent Living,			
lealth and Human Services, Department of	Direct		90AR5020-0200	93.433	and Rehabilitation Research	\$	124,290 \$	-
					ACL National Institute on Disability, Independent Living,			
ealth and Human Services, Department of	Direct		90IF0094-03-00	93.433	and Rehabilitation Research		133,762	-
					ACL National Institute on Disability, Independent Living,			
ealth and Human Services, Department of	Direct		90IF0102-03-00	93.433	and Rehabilitation Research		97,399	-
					ACL National Institute on Disability, Independent Living,			
	Direct		90IFDV0002-02-00	93.433	and Rehabilitation Research		185,831	67,263
eann and Fulnan Services, Department of			001505000 00 00	02 (22	ACL National Institute on Disability, Independent Living,		115 400	
	Direct		90IFRE0002-02-00	93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living,		115,480	-
	Direct							
ealth and Human Services, Department of				02 / 22			517 830	
ealth and Human Services, Department of	Direct		90RES5012-04-00	93.433	and Rehabilitation Research		517,839	-
ealth and Human Services, Department of ealth and Human Services, Department of	Direct		90RES5012-04-00		and Rehabilitation Research ACL National Institute on Disability, Independent Living,			-
ealth and Human Services, Department of ealth and Human Services, Department of				93.433 93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research		517,839 303,775	- 34,939
ealth and Human Services, Department of ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct	leis University	90RES5012-04-00 90RTHF0001-01-00	93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living,		303,775	- 34,939
ealth and Human Services, Department of ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct	deis University	90RES5012-04-00		and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research			- 34,939 -
ealth and Human Services, Department of ealth and Human Services, Department of ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct Pass-Through Brand		90RES5012-04-00 90RTHF0001-01-00	93.433 93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living,		303,775 2,850	- 34,939 - -
ealth and Human Services, Department of ealth and Human Services, Department of ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct Pass-Through Brand	deis University Hospital	90RES5012-04-00 90RTHF0001-01-00 403315	93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research		303,775	- 34,939 - -
ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct Pass-Through Brand Pass-Through Craig		90RES5012-04-00 90RTHF0001-01-00 403315	93.433 93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research		303,775 2,850	- 34,939 - -
ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct Pass-Through Brand Pass-Through Craig	Hospital	90RES5012-04-00 90RTHF0001-01-00 403315 UM001	93.433 93.433 93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living,		303,775 2,850 88,131	- 34,939 - -
lealth and Human Services, Department of Iealth and Human Services, Department of	Direct Direct Pass-Through Brand Pass-Through Craig Pass-Through Resear	Hospital arch Foundation of State University of New York (SUNY)	90RES5012-04-00 90RTHF0001-01-00 403315 UM001	93.433 93.433 93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research		303,775 2,850 88,131	- 34,939 - - -
tealth and Human Services, Department of lealth and Human Services, Department of	Direct Direct Pass-Through Brand Pass-Through Craig Pass-Through Resear	Hospital	90RES5012-04-00 90RTHF0001-01-00 403315 UM001 R1111535	93.433 93.433 93.433 93.433	and Rehabilitation Research ACL National Institute on Disability, Independent Living, and Rehabilitation Research ACL National Institute on Disability, Independent Living,		303,775 2,850 88,131 86,945	- 34,939 - - -

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Thro
					CDC Undergraduate Public Health Scholars Program	\$ 1,738,095	\$ 102
					(CUPS): A Public Health Experience to Expose		
					Undergraduates Interested in Minority Health to Public		
alth and Human Services, Department of	Direct		5 NU50 MN000001-03-00	93.456	Health and the Public Health Professions	\$ 579,560	S
alth and Human Services, Department of	Direct		1 UB6HP31684-01-00	93.516	Public Health Training Centers Program	\$ 776,801	
alth and Human Services, Department of	Pass-Through	University of Illinois at Chicago	7601-03	93.516	Public Health Training Centers Program	32,127	
						\$ 808,928	\$ 235
					PPHF Capacity Building Assistance to Strengthen Public		
					Health Immunization Infrastructure and Performance finance		
alth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180446-00	93.539	in part by Prevention and Public Health Funds	\$ 32,000	\$
- When a difference of the construction of the	Deve Thomas	Michigan, State of, Health and Human Services, Department of	E2017285(00	93.624	ACA - State Innovation Models: Funding for Model Design	\$ 7,425	e .
alth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172856-00	93.624	and Model Testing Assistance ACA - State Innovation Models: Funding for Model Design		3
alth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180501-003	93.624	and Model Testing Assistance	1,209,251	
and and Human Services, Department of	1 ass-1 hrough	whengan, state of, freath and framan services, iseparatient of	E20100501-005	75.024	ACA - State Innovation Models: Funding for Model Design		
alth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182349-001	93.624	and Model Testing Assistance	26,693	
	0	<i>3 / / / /</i>			ACA - State Innovation Models: Funding for Model Design		
alth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192721-00	93.624	and Model Testing Assistance	1,382,662	
						\$ 2,626,031	\$
					Affordable Care Act Implementation Support for State		
					Demonstrations to Integrate Care for Medicare-Medicaid		
lth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180665-001	93.628	Enrollees	\$ 11,741	
Ith and Human Services, Department of	Direct		90PD0301-01-00	93.647	Social Services Research and Demonstration	\$ 6,830	
lth and Human Services, Department of	Direct		90PD0301-02-00	93.647	Social Services Research and Demonstration	36,094	
						\$ 42,924	
alth and Human Services, Department of	Direct		5 M01HP31331-03-00	93.732	Mental and Behavioral Health Education and Training Grant	s \$ 674,896	\$
					Capacity Building Assistance to Strengthen Public Health		
	D 771 1	Mali os cu la lu o i D s s c	E20100650.00	02 722	Immunization Infrastructure and Performance – financed in	¢ 31.100	
alth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180650-00	93.733	part by the Prevention and Public Health Fund (PPHF) Alzheimer's Disease Initiative: Specialized Supportive	\$ 31,188	\$
					Services Project (ADI-SSS) thru Prevention and Public		
lth and Human Services, Department of	Pass-Through	University of Wisconsin	792K890	93.763	Health Funds (PPHF)	\$ 16,232	S.
Ith and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192407-002	93.788	Opioid STR	\$ 327,053	
Ith and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192408-00	93.788	Opioid STR	998,299	
Ith and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193073-002 BZ	93.788	Opioid STR	134,789	
alth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20193111	93.788	Opioid STR	381,714	
<i>,</i> , ,	0	<i>3 / / / /</i>			1	\$ 1,841,855	
					Increasing the Implementation of Evidence-Based Cancer		
					Survivorship Interventions to Increase Quality and Duration		
lth and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182924-00	93.808	of Life Among Cancer Patients	\$ 11,094	\$
					Hospital Preparedness Program (HPP) Ebola Preparedness		
Ith and Human Services, Department of	Pass-Through	Joslin Diabetes Center	100074	93.817	and Response Activities	\$ 550,305	\$ 3
					Ebola Support: Transmission and Prevention Control, Public		
lth and Human Services, Department of	Pass-Through	University of Utah	100038850-01	93.823	Health Preparedness, Vaccine Development	\$ 63,738	\$
					Supporting and Maintaining a Surveillance System for		
lth and Human Services, Department of	Direct		5 U58DP006254-04	93.833	Chronic Kidney Disease (CKD) in the United States	\$ 719,221	
lth and Human Services, Department of	Direct		1 K01 HL145366-01	93.837	Cardiovascular Diseases Research	\$ 60,877	
alth and Human Services, Department of	Direct		1 K08 HL146990-01	93.837	Cardiovascular Diseases Research	20,423	
Ith and Human Services, Department of	Direct		1 R01 HL144657-01	93.837 93.837	Cardiovascular Diseases Research	114,706	
Ith and Human Services, Department of	Direct		1 R25 HL147207-01	93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	42,478 53,156	
Ith and Human Services, Department of Ith and Human Services, Department of	Direct Direct		1R01 HL141509-01A1 1-R01H145176-01A1	93.837	Cardiovascular Diseases Research	18,544	
Ith and Human Services, Department of	Direct		4 R01 HL088419-08	93.837	Cardiovascular Diseases Research	(2,320)	
Ith and Human Services, Department of	Direct		4 R01 HL109054-05	93.837	Cardiovascular Diseases Research	(34,597)	
th and Human Services, Department of	Direct		4 R01 HL109004-05	93.837	Cardiovascular Diseases Research	(25,493)	
th and Human Services, Department of	Direct		4 R01 HL114595-05	93.837	Cardiovascular Diseases Research	(1,705)	
th and Human Services, Department of	Direct		4 R01 HL115138-05	93.837	Cardiovascular Diseases Research	(22,848)	
th and Human Services, Department of	Direct		4 R01 HL118259-04	93.837	Cardiovascular Diseases Research	19,072	
th and Human Services, Department of	Direct		4 U01 HL094345-06	93.837	Cardiovascular Diseases Research	146,184	
h and Human Services, Department of	Direct		4R01 HL114038-04	93.837	Cardiovascular Diseases Research	(5,216)	
th and Human Services, Department of	Direct		5 F31 HL131327-03	93.837	Cardiovascular Diseases Research	18,567	
th and Human Services, Department of	Direct		5 F31 HL144047-02	93.837	Cardiovascular Diseases Research	46,530	
th and Human Services, Department of	Direct		5 F32 HL131288-03	93.837	Cardiovascular Diseases Research	64,946	
th and Human Services, Department of	Direct		5 F32 HL140728-02	93.837	Cardiovascular Diseases Research	61,567	
th and Human Services, Department of	Direct		5 K01 HL132057-04	93.837	Cardiovascular Diseases Research	139,195	
	Direct		5 K01 HL171701 02	93.837	Cardiovascular Diseases Research	141,270	
	Direct		5 K08 HL116639-05	93.837	Cardiovascular Diseases Research	148,834	
Ith and Human Services, Department of			5 K08 HL123621-05	93.837	Cardiovascular Diseases Research	157,084	
Ith and Human Services, Department of Ith and Human Services, Department of	Direct		5 K08 HL130455-04	93.837	Cardiovascular Diseases Research	158,986	
Ith and Human Services, Department of th and Human Services, Department of th and Human Services, Department of	Direct			02.027			
th and Human Services, Department of th and Human Services, Department of th and Human Services, Department of th and Human Services, Department of	Direct Direct		5 K08 HL131993-04	93.837	Cardiovascular Diseases Research	161,685	
th and Human Services, Department of th and Human Services, Department of	Direct Direct Direct		5 K08 HL131993-04 5 K08 HL13614-04	93.837	Cardiovascular Diseases Research	118,684	
Ith and Human Services, Department of Ith and Human Services, Department of	Direct Direct Direct Direct		5 K08 HL131993-04 5 K08 HL13614-04 5 K08HL130944-04	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	118,684 176,109	
Ith and Human Services, Department of lith and Human Services, Department of	Direct Direct Direct		5 K08 HL131993-04 5 K08 HL13614-04	93.837	Cardiovascular Diseases Research	118,684	

Cluster Title/Federal Grantor/Program		ss-Through Grantor Award Identifier CFDA Number CFDA Program Title Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct	5 K23 HL130641-04 93.837 Cardiovascular Diseases Research 187,205 5 K23 HL135397-02 93.837 Cardiovascular Diseases Research 169,531	-
Health and Human Services, Department of	Direct	5 K23 HL11336-05 93.837 Cardiovascular Discasses Research 5,644	-
Health and Human Services, Department of	Direct	5 R00 HL124322-05 93.837 Cardiovascular Diseases Research 239,899	-
Health and Human Services, Department of	Direct	5 R00HL133482-04 93.837 Cardiovascular Diseases Research 124,768	-
Health and Human Services, Department of	Direct	5 R01 HL058984-20 93.837 Cardiovascular Diseases Research 340,007	-
Health and Human Services, Department of	Direct	5 R01 HL068878-19 93.837 Cardiovascular Diseases Research 401,241	-
Health and Human Services, Department of	Direct	5 R01 HL072011-13 93.837 Cardiovascular Diseases Research (30,764)	-
Health and Human Services, Department of	Direct	5 R01 HL085339-09 93.837 Cardiovascular Diseases Research 160,506	-
Health and Human Services, Department of	Direct	5 R01 HL 105297-08 93.837 Cardiovascular Diseases Research 353,039	179,995
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct	5 R01 HL112610-04 93.837 Cardiovascular Diseases Research 1,114 5 R01 HL117626-05S2 93.837 Cardiovascular Diseases Research 516,507	-
Health and Human Services, Department of	Direct	5 R01 HL170200552 55.87 Catulovaskula Diseases Research (117,062)	43,408
Health and Human Services, Department of	Direct	5 R01 HL19243-04 93.837 Cardiovascular Discasses Research (24),002	5,482
Health and Human Services, Department of	Direct	5 R01 HL119542-04 93.837 Cardiovascular Diseases Research 35,401	-
Health and Human Services, Department of	Direct	5 R01 HL120888-04 93.837 Cardiovascular Diseases Research 181,300	-
Health and Human Services, Department of	Direct	5 R01 HL122261-05 93.837 Cardiovascular Diseases Research 423,451	110,155
Health and Human Services, Department of	Direct	5 R01 HL122352-04 93.837 Cardiovascular Diseases Research 175,787	-
Health and Human Services, Department of	Direct	5 R01 HL122416-03 93.837 Cardiovascular Diseases Research (5)	-
Health and Human Services, Department of	Direct	5 R01 HL122664-05 93.837 Cardiovascular Diseases Research 338,548	-
Health and Human Services, Department of	Direct	5 R01 HL122684-05 93.837 Cardiovascular Diseases Research 548,598	87,894
Health and Human Services, Department of	Direct	5 R01 HL123333-05 93.837 Cardiovascular Diseases Research 506,555	-
Health and Human Services, Department of	Direct	5 R01 HL124319-03 93.837 Cardiovascular Diseases Research (29,079)	5,606
Health and Human Services, Department of	Direct	5 R01 HL 126969-04 93.837 Cardiovascular Diseases Research 416,631	89,221
Health and Human Services, Department of	Direct	5 R01 HL 127023-04 93.837 Cardiovascular Diseases Research 330,492 5 R01 HL 127023-04 93.837 Cardiovascular Diseases Research 320,492	-
Health and Human Services, Department of	Direct	5 R01 HL127151-04 93.837 Cardiovascular Diseases Research 429,825 5 R01 HL127215-03 93.837 Cardiovascular Diseases Research 411,381	207 291
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct	5 R01 HL127215-03 93.837 Cardiovascular Diseases Research 411,381 5 R01 HL127564-04 93.837 Cardiovascular Diseases Research 747,038	207,381 327,202
Health and Human Services, Department of Health and Human Services, Department of	Direct	5 R01 HL12/504-04 55.857 Cardiovascular Diseases Research 74,056 5 R01 HL12/504-04 93.837 Cardiovascular Diseases Research 335,969	527,202
Health and Human Services, Department of	Direct	5 R01 HL127805-03 93.837 Cardiovascular Diseases Research 293.01	-
Health and Human Services, Department of	Direct	5 R01 HL128231-04 93.837 Cardiovascular Diseases Research 607,979	269,691
Health and Human Services, Department of	Direct	5 R01 HL1283307-04 93.837 Cardiovascular Diseases Research 553,606	
Health and Human Services, Department of	Direct	5 R01 HL129778-04 93.837 Cardiovascular Diseases Research 789,547	-
Health and Human Services, Department of	Direct	5 R01 HL130106-04 93.837 Cardiovascular Diseases Research 397,112	-
Health and Human Services, Department of	Direct	5 R01 HL131610-02 93.837 Cardiovascular Diseases Research 427,160	302,711
Health and Human Services, Department of	Direct	5 R01 HL132037-03 93.837 Cardiovascular Diseases Research 579,904	32,628
Health and Human Services, Department of	Direct	5 R01 HL132979-04 93.837 Cardiovascular Diseases Research 645,309	160,849
Health and Human Services, Department of	Direct	5 R01 HL133129-03 93.837 Cardiovascular Diseases Research 965,341	-
Health and Human Services, Department of	Direct	5 ROI HL133221-04 93.837 Cardiovascular Diseases Research 239,101	-
Health and Human Services, Department of	Direct	5 ROI HL134846-02 93.837 Cardiovascular Diseases Research 554,448	-
Health and Human Services, Department of	Direct	5 R01 HL136231-03 93.837 Cardiovascular Diseases Research 799,220 5 R01 HL137214-03 93.837 Cardiovascular Diseases Research 296,245	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct	5 R01 HL137214-03 93.837 Cardiovascular Diseases Research 296,245 5 R01 HL137731-03 93.837 Cardiovascular Diseases Research 891,908	385,974
Health and Human Services, Department of	Direct	5 K01 HL137/51-05 55.857 Cattivaskulai Diseases Research 656,663	69,564
Health and Human Services, Department of	Direct	5 R01 HL135094-03 93.837 Cardiovascular Diseases Research 586,538	-
Health and Human Services, Department of	Direct	5 R01 HL138139-03 93.837 Cardiovascular Diseases Research 333,595	
Health and Human Services, Department of	Direct	5 R01 HL139656-02 93.837 Cardiovascular Diseases Research 476,044	-
Health and Human Services, Department of	Direct	5 R01 HL139672-02 93.837 Cardiovascular Diseases Research 501,863	
Health and Human Services, Department of	Direct	5 R01 HL139813-02 93.837 Cardiovascular Diseases Research 375,844	-
Health and Human Services, Department of	Direct	5 R01 HL141292-02 93.837 Cardiovascular Diseases Research 484,568	248,378
Health and Human Services, Department of	Direct	5 R01 HL141891-02 93.837 Cardiovascular Diseases Research 558,193	-
Health and Human Services, Department of	Direct	5 R01 HL142023-02 93.837 Cardiovascular Diseases Research 412,238	-
Health and Human Services, Department of	Direct	5 R01 HO132988-04 93.837 Cardiovascular Diseases Research 641,663	-
Health and Human Services, Department of	Direct	5 R01HL134569-03 93.837 Cardiovascular Diseases Research 810,931	-
Health and Human Services, Department of	Direct	5 R03 HL 138310-02 93.837 Cardiovascular Diseases Research 83,927	-
Health and Human Services, Department of	Direct	5 R21 HL133758-02 93.837 Cardiovascular Diseases Research 38,504 5 R21 HL138054-02 93.837 Cardiovascular Diseases Research 198,998	-
Health and Human Services, Department of	Direct		-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct	5 R25 HL108842-08 93.837 Cardiovascular Diseases Research 102,244 5 R34 HL130738-02 93.837 Cardiovascular Diseases Research 257,969	-
Health and Human Services, Department of	Direct	5 R35 HL150/36/02 55.857 Cardiovascular Diseases Research 628,166	-
Health and Human Services, Department of	Direct	5 R35 HL135624-03 93.837 Catiloväskula Diseases Research 1,010,387	4,401
Health and Human Services, Department of	Direct	5 (c) HL15/38-06 93.837 Cardiovascular Discasses Research 477,760	397,136
Health and Human Services, Department of	Direct	5 U01 HL126499-05 93.837 Cardiovascular Diseases Research 427,829	46,161
Health and Human Services, Department of	Direct	5 U01 HL135842-03 93.837 Cardiovascular Diseases Research 506,427	182,753
Health and Human Services, Department of	Direct	5 UG1 HL135665-03 93.837 Cardiovascular Diseases Research 317,514	-
Health and Human Services, Department of	Direct	T32 HL00785393.837Cardiovascular Diseases Research419,052	-
Health and Human Services, Department of	Direct	T32 HL007853 93.837 Cardiovascular Diseases Research 58,647	-
Health and Human Services, Department of	Direct	T32 HL076123 93.837 Cardiovascular Diseases Research 190,828	-
Health and Human Services, Department of	Direct	T32 HL125242 93.837 Cardiovascular Diseases Research 176,746	-
Health and Human Services, Department of	Pass-Through Brown University	00001264 93.837 Cardiovascular Diseases Research 22,596	-
Health and Human Services, Department of	Pass-Through Case Western Reserve University	1095-SUB 93.837 Cardiovascular Diseases Research 64,736 1162 SUD 9327 Confirment Disease Research 64,736	-
Health and Human Services, Department of	Pass-Through Case Western Reserve University	1153-SUB 93.837 Cardiovascular Diseases Research 6,475 DISSELIEL 0.9327 Cardiovascular Diseases Research 10,025	-
Health and Human Services, Department of	Pass-Through Case Western Reserve University	RESS11861 93.837 Cardiovascular Discases Research 18,225 Subwarned No. 200 CUD 02.827 Conditionation Discases Research 80.927	-
Health and Human Services, Department of	Pass-Through Case Western Reserve University Pass-Through Children's Hospital of Pittsburgh	Subaward No. 840-SUB 93.837 Cardiovascular Diseases Research 89,876 0046317 (126441-4) 93.837 Cardiovascular Diseases Research 43,218	-
	ass-rinough Children's Hospital of Pittspurgh	004051/(120441-4) 95.85/ Cardiovascular Diseases Research 43.218	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Cleveland Clinic Foundation	U54HL119810 93.837 Cardiovascular Diseases Research 25,945	_

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Health System	U 54 HL119810-05 PO#943-SUB	93.837	Cardiovascular Diseases Research	(13,659)	
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Lerner College of Medicine	981-SUB	93.837	Cardiovascular Diseases Research	78,059	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	1583R57	93.837	Cardiovascular Diseases Research	4,832	-
Health and Human Services, Department of	Pass-Through	Drexel University	800193/PO U0174200	93.837	Cardiovascular Diseases Research	119,843	-
Health and Human Services, Department of	Pass-Through	Duke University	203-7664	93.837	Cardiovascular Diseases Research	10,433	-
Health and Human Services, Department of	Pass-Through	Duke University	203-7896	93.837	Cardiovascular Diseases Research	56,257	-
Health and Human Services, Department of	Pass-Through	Emory University	A102030	93.837	Cardiovascular Diseases Research	46,298	-
Health and Human Services, Department of	Pass-Through	Etiometry Inc.	R44HL117340	93.837	Cardiovascular Diseases Research	34,870	-
Health and Human Services, Department of	Pass-Through	Indiana University Joslin Diabetes Center	IN4687798UM 100047	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	212,762 161,712	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Kaiser Permanente Research Foundation Institute	2018103713	93.837	Cardiovascular Diseases Research	32,753	-
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Research Foundation Institute	2019117056	93.837	Cardiovascular Diseases Research	23,014	-
Health and Human Services, Department of	Pass-Through	Massachusetts General Hospital	230189	93.837	Cardiovascular Diseases Research	39,706	-
Health and Human Services, Department of	Pass-Through	MC3 Inc	14-PAF03089	93.837	Cardiovascular Diseases Research	(5,633)	-
Health and Human Services, Department of	Pass-Through	MDI Therapeutics	Subcontract	93.837	Cardiovascular Diseases Research	34,654	-
Health and Human Services, Department of	Pass-Through	New England Research Institute	Pediatric Heart Network Sub-Aw	93.837	Cardiovascular Diseases Research	10,274	-
Health and Human Services, Department of	Pass-Through	New England Research Institute	SERVICES AGREEMENT for Ox Bior	93.837	Cardiovascular Diseases Research	2,542	-
Health and Human Services, Department of	Pass-Through	New England Research Institute	U10HL068270	93.837	Cardiovascular Diseases Research	15,899	-
Health and Human Services, Department of	Pass-Through	New England Research Institute	U10HL068270	93.837	Cardiovascular Diseases Research	1,416	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	New York University School of Medicine New York University School of Medicine	18-A0-00-1001368 18-A0-00-1001368- Proj #111354	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	29,780 35,234	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Purdue University	11000677-003	93.837	Cardiovascular Diseases Research	124,520	-
Health and Human Services, Department of	Pass-Through	Purdue University	11000678-005	93.837	Cardiovascular Diseases Research	311,338	
Health and Human Services, Department of	Pass-Through	San Francisco State University	S18-0010	93.837	Cardiovascular Diseases Research	121,849	-
Health and Human Services, Department of	Pass-Through	San Francisco State University	S18-0010	93.837	Cardiovascular Diseases Research	8,380	-
Health and Human Services, Department of	Pass-Through	St. Luke's Hospital	Agreement	93.837	Cardiovascular Diseases Research	159,423	-
Health and Human Services, Department of	Pass-Through	The Children's Hospital of Philadelphia	3210920617	93.837	Cardiovascular Diseases Research	77,749	-
Health and Human Services, Department of	Pass-Through	The Children's Mercy Hospital	16-0003	93.837	Cardiovascular Diseases Research	23,798	-
Health and Human Services, Department of	Pass-Through	The Children's Mercy Hospital	16-0003	93.837	Cardiovascular Diseases Research	12,725	-
Health and Human Services, Department of	Pass-Through	The University of Texas Health Science Center at Houston	0011882B	93.837	Cardiovascular Diseases Research	10,803	-
Health and Human Services, Department of	Pass-Through	University of California - Davis	201501430-01	93.837	Cardiovascular Diseases Research	6,482	-
Health and Human Services, Department of	Pass-Through	University of California - Davis	A16-0064-S001 (20150143)	93.837	Cardiovascular Diseases Research	81,784	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco University of Connecticut Health Center (UConn Health)	7732sc UCHC7-105632409	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	(1,006)	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Connecticut Health Center (OConn Health) University of Minnesota	N003357702	93.837	Cardiovascular Diseases Research	58,461	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	P006116203	93.837	Cardiovascular Diseases Research	33,821	-
Health and Human Services, Department of	Pass-Through	University of Missouri	C00059617-1	93.837	Cardiovascular Diseases Research	6,233	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5110534	93.837	Cardiovascular Diseases Research	192,761	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	571903	93.837	Cardiovascular Diseases Research	862	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	571903	93.837	Cardiovascular Diseases Research	781	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	571903	93.837	Cardiovascular Diseases Research	(100)	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	568465/10040395/7136-02	93.837	Cardiovascular Diseases Research	(21)	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0061993 (131868-6)	93.837	Cardiovascular Diseases Research	18,821	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC8792 PO#BPO11216	93.837	Cardiovascular Diseases Research	162,943	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University	UNIV60620	93.837	Cardiovascular Diseases Research	124,710	-
Health and Human Services, Department of	Pass-Through	Veralox Therapeutics LLC	Roundtable Research Agreement	93.837	Cardiovascular Diseases Research	92,033	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Washington University in St. Louis Yale University	WU-17-326/PO 2928688C GK000086 (CON-80000358)	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	1,955 30,317	-
Health and Human Services, Department of	Pass-Through	Yale University	M17A12503(A10362)	93.837	Cardiovascular Diseases Research	146,788	-
ricatal and riantal betvices, Department of	1 ass-1 mough	Tale Oniversity	MIT/112505(110502)	22.027	Cardiovasculai Discuses rescaren	\$ 31,731,729	\$ 3,190,475
Health and Human Services, Department of	Direct		1 F32 HL140969-01	93.838	Lung Diseases Research	\$ 28,117	
Health and Human Services, Department of	Direct		1 F32 HL142237-01	93.838	Lung Diseases Research	61,063	· .
Health and Human Services, Department of	Direct		1 F32 HL145915-01	93.838	Lung Diseases Research	1,324	-
Health and Human Services, Department of	Direct		1 R01 HL144086-01	93.838	Lung Diseases Research	55,504	-
Health and Human Services, Department of	Direct		1 R01 HL144660-01	93.838	Lung Diseases Research	137,015	-
Health and Human Services, Department of	Direct		1 R01 HL144849-01	93.838	Lung Diseases Research	60,478	-
Health and Human Services, Department of	Direct		1 R35 HL144481-01	93.838	Lung Diseases Research	270,665	-
Health and Human Services, Department of	Direct		1 R35HL144979?01	93.838	Lung Diseases Research	163,545	-
Health and Human Services, Department of	Direct		1 R56 HL126754-01A1	93.838	Lung Diseases Research Lung Diseases Research	18,228	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		2 R01 HL116434-06 3 R01 HL122438-04S1	93.838 93.838	Lung Diseases Research	726,713 347,908	261,795
Health and Human Services, Department of Health and Human Services, Department of	Direct		4 R01 HL1122438-0481	93.838	Lung Diseases Research	(1,990)	
Health and Human Services, Department of	Direct		5 F31 HL142197-02	93.838	Lung Diseases Research	49,302	
Health and Human Services, Department of	Direct		5 K01 HL136687-03	93.838	Lung Diseases Research	173,921	-
Health and Human Services, Department of	Direct		5 K23 HL136934-02	93.838	Lung Diseases Research	154,842	-
Health and Human Services, Department of	Direct		5 K23HL140165-02	93.838	Lung Diseases Research	171,412	-
Health and Human Services, Department of	Direct		5 K24 HL138188-03	93.838	Lung Diseases Research	100,983	-
Health and Human Services, Department of	Direct		5 K99HL139996-02	93.838	Lung Diseases Research	124,361	-
Health and Human Services, Department of	Direct		5 R01 HL031237-32	93.838	Lung Diseases Research	83,796	-
Health and Human Services, Department of	Direct		5 R01 HL052285-22	93.838	Lung Diseases Research	(2,415)	-
Health and Human Services, Department of	Direct		5 R01 HL078871-10	93.838	Lung Diseases Research	367,064	-
Health and Human Services, Department of	Direct		5 R01 HL094622-09	93.838	Lung Diseases Research	332,630	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL108904-08 5 R01 HL114858-08	93.838 93.838	Lung Diseases Research Lung Diseases Research	408,663 364,983	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 HL114858-08 5 R01 HL118017-04	93.838	Lung Diseases Research	364,983 325,499	-
Health and Human Services, Department of	Direct		5 R01 HL119215-07	93.838	Lung Diseases Research	341,181	-
					0	5.1,101	

Health and Human Services, Department of Direct Health and Human Services, Department of Direct <th>h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital</th> <th>5 R01 HL19682-04 5 R01 HL123515-04 5 R01 HL123515-04 5 R01 HL12555-04 5 R01 HL12703-05 5 R01 HL13469-05 5 R01 HL13469-04 5 R01 HL134647-03 5 R01 HL13811-02 5 R01 HL13811-02 5 R01 HL13811-02 5 R01 HL13811-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL1391782-03 5 U01 HL131072-04 5 U01 HL12892-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL13030-04 7 R08 HL130430-04 7 R08 HL13044 7 R00444 7 R0444 7 R0444 7 R0444 7 R04444 7 R0444 7 R04444 7 R044444 7 R04444 7 R044444 7 R04444 7 R044444</th> <th>93.838 93.8</th> <th>Lung Diseases Research Lung Diseases Research</th> <th>116,587 853,947 421,409 604,473 457,464 532,150 317,317 391,925 338,794 544,954 596,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744</th> <th>269,689 </th>	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL19682-04 5 R01 HL123515-04 5 R01 HL123515-04 5 R01 HL12555-04 5 R01 HL12703-05 5 R01 HL13469-05 5 R01 HL13469-04 5 R01 HL134647-03 5 R01 HL13811-02 5 R01 HL13811-02 5 R01 HL13811-02 5 R01 HL13811-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL139156-02 5 R01 HL1391782-03 5 U01 HL131072-04 5 U01 HL12892-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL13030-04 7 R08 HL130430-04 7 R08 HL13044 7 R00444 7 R0444 7 R0444 7 R0444 7 R04444 7 R0444 7 R04444 7 R044444 7 R04444 7 R044444 7 R04444 7 R044444	93.838 93.8	Lung Diseases Research Lung Diseases Research	116,587 853,947 421,409 604,473 457,464 532,150 317,317 391,925 338,794 544,954 596,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	269,689
Health and Human Services, Department of Direct Health and Human Services, Department of Direct <td>h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital</td> <td>5 R01 HL123515-04 5 R01 HL12555-04 5 R01 HL12703-05 5 R01 HL131608-05 5 R01 HL131608-04 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL138117-02 5 R01 HL138117-02 5 R01 HL14195-02 5 R01 HL141195-02 5 R01 HL14195-02 5 R01 HL14195-02 5 R01 HL14395-02 5 R01 HL1331782-03 5 U01 HL137182-03 5 U01 HL137182-03 5 U01 HL123031-06 7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007517 T32 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 R1062-61/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1</td> <td>91838 93.83</td> <td>Lung Diseases Research Lung Diseases Research</td> <td>421,409 604,473 457,464 532,150 317,317 391,925 338,794 554,954 556,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744</td> <td></td>	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL123515-04 5 R01 HL12555-04 5 R01 HL12703-05 5 R01 HL131608-05 5 R01 HL131608-04 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL138117-02 5 R01 HL138117-02 5 R01 HL14195-02 5 R01 HL141195-02 5 R01 HL14195-02 5 R01 HL14195-02 5 R01 HL14395-02 5 R01 HL1331782-03 5 U01 HL137182-03 5 U01 HL137182-03 5 U01 HL123031-06 7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007517 T32 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 R1062-61/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	91838 93.83	Lung Diseases Research Lung Diseases Research	421,409 604,473 457,464 532,150 317,317 391,925 338,794 554,954 556,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	
Health and Human Services, Department of Direct Health and Human Services, Department of Direct <td>h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital</td> <td>5 R01 HL125555-04 5 R01 HL127203-05 5 R01 HL131608-05 5 R01 HL134369-04 5 R01 HL134369-04 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-02 5 R01 HL140572-02 5 R01 HL137182-03 5 U01 HL13718</td> <td>93.838 93.8</td> <td>Lung Diseases Research Lung Diseases Research</td> <td>604,473 457,464 532,150 317,317 391,925 338,794 544,954 556,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511</td> <td>58,535 - - - 51,257 405,250 42,063</td>	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL125555-04 5 R01 HL127203-05 5 R01 HL131608-05 5 R01 HL134369-04 5 R01 HL134369-04 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-02 5 R01 HL140572-02 5 R01 HL137182-03 5 U01 HL13718	93.838 93.8	Lung Diseases Research Lung Diseases Research	604,473 457,464 532,150 317,317 391,925 338,794 544,954 556,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511	58,535 - - - 51,257 405,250 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Direct <td>h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital</td> <td>5 R01 HL127203-05 5 R01 HL131608-05 5 R01 HL134369-04 5 R01 HL134369-04 5 R01 HL13811-03 5 R01 HL13811-02 5 R01 HL13817-02 5 R01 HL14072-02 5 R01 HL14072-02 5 R01 HL14095-02 5 R01 HL14095-02 5 R01 HL14095-02 5 R01 HL13095-02 5 R01 HL13182-03 5 R01 HL137182-03 5 R0</td> <td>93.838 93.8</td> <td>Lung Diseases Research Lung Diseases Research</td> <td>457,464 532,150 317,317 391,925 338,794 544,954 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744</td> <td>58,535 - - - 51,257 405,250 42,063</td>	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL127203-05 5 R01 HL131608-05 5 R01 HL134369-04 5 R01 HL134369-04 5 R01 HL13811-03 5 R01 HL13811-02 5 R01 HL13817-02 5 R01 HL14072-02 5 R01 HL14072-02 5 R01 HL14095-02 5 R01 HL14095-02 5 R01 HL14095-02 5 R01 HL13095-02 5 R01 HL13182-03 5 R01 HL137182-03 5 R0	93.838 93.8	Lung Diseases Research Lung Diseases Research	457,464 532,150 317,317 391,925 338,794 544,954 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	58,535 - - - 51,257 405,250 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Direct <td>h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital</td> <td>5 R01 HL134369-04 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-02 5 R01 HL1417-02 5 R01 HL144572-02 5 R01 HL144572-02 5 R01 HL14195-02 5 R01 HL14195-02 5 R01 HL137182-03 5 U01 HL137182-03</td> <td>93.838 93.8</td> <td>Lung Diseases Research Lung Diseases Research</td> <td>317,317 391,925 338,794 544,954 596,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 2000,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511</td> <td>58,535 - - - 51,257 405,250 42,063</td>	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL134369-04 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-02 5 R01 HL1417-02 5 R01 HL144572-02 5 R01 HL144572-02 5 R01 HL14195-02 5 R01 HL14195-02 5 R01 HL137182-03 5 U01 HL137182-03	93.838 93.8	Lung Diseases Research Lung Diseases Research	317,317 391,925 338,794 544,954 596,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 2000,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511	58,535 - - - 51,257 405,250 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and Human Services, Department of Pass-Throot<	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL134369-04 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-03 5 R01 HL137816-02 5 R01 HL1417-02 5 R01 HL144572-02 5 R01 HL144572-02 5 R01 HL14195-02 5 R01 HL14195-02 5 R01 HL137182-03 5 U01 HL137182-03	$\begin{array}{c} 93.838\\$	Lung Discases Research Lung Discases Research	317,317 391,925 338,794 544,954 596,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 2000,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511	58,535 - - - 51,257 405,250 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and Human Services, Department of <	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL137816-03 5 R01 HL13817-02 5 R01 HL13817-02 5 R01 HL140572-02 5 R01 HL140572-02 5 R01 HL14195-02 5 R21 HL139156-02 5 R21 HL139156-02 5 U01 HL139152-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL1343-02 5 U01 HL133031-06 7 K08 HL130430-04 7 R08 HL130430-04 7 R01 HL10894-05 T32 HL007517 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007690 138002 001 1621993-11 183434-11 RJ062-61/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.8	Lung Diseases Research Lung Diseases Research	338,794 544,954 596,931 423,665 489,279 271,605 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	58,535 - - - 51,257 405,250 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and Human Services, Department of	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL138013-02 5 R01 HL140572-02 5 R01 HL140572-02 5 R01 HL14195-02 5 R01 HL140995-02 5 R01 HL140995-02 5 R01 HL139156-02 5 R01 HL139152-04 5 U01 HL137182-03 5 U01 HL137182-03 5 U01 HL137182-03 5 U01 HL13301-06 7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007517 T32 HL007517 T32 HL007749 T32 HL007749 T35 HL007749 T36 HL007749 T37 HL007749 T37	93.838 93.8	Lung Diseases Research Lung Diseases Research	544,954 596,931 423,665 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	51,257 405,250 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throo Health and Human Services, Department of <	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL138417-02 5 R01 HL140572-02 5 R01 HL140572-02 5 R01 HL14195-02 5 R21 HL139156-02 5 R21 HL13905-02 5 U01 HL128952-04 5 U01 HL137182-03 5 U01 HL13433-02 5 U01 HL13433-02 5 U01 HL13433-02 5 U01 HL13433-02 5 U01 HL13433-02 5 U01 HL1391453-02 5 U01 HL1391453-02 5 U01 HL13917 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL00760 138002 001 16121993-11 183434-11 R1062-61/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.8	Lung Diseases Research Lung Diseases Research	596,931 423,665 489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	405,250 - 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and Human Services, Department of<	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01 HL140572-02 5 R01HL141195-02 5 R21 HL139156-02 5 R21 HL139156-02 5 U01 HL128952-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL1343-02 5 U01 HL123031-06 7 K08 HL130430-04 7 R01 HL10894-05 T32 HL007517 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 RJ062-61/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838	Lung Diseases Research Lung Diseases Research	423,665 489,279 271,605 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	405,250 - 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throw Health and Human Services, Department of	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R01HL141195-02 5 R21 HL139156-02 5 R21 HL140995-02 5 U01 HL128952-04 5 U01 HL131072-04 5 U01 HL1317182-03 5 U01 HL137182-03 5 U01 HL1331-06 7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007517 T32 HL007749 T32 HL007749 T33 HL007749 T33 HL007749 T33 HL007749 T35 HL007749 T37 HL007749 T37 HL007749 T37 HL007749 T37 HL0077	93.838 93.8	Lung Diseases Research Lung Diseases Research	489,279 271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	405,250 - 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throw Health and Human Services, Department of	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R21 HL139156-02 5 R21 HL14095-02 5 U01 HL128952-04 5 U01 HL128952-04 5 U01 HL131072-04 5 U01 HL14343-02 5 U01 HL14343-02 5 U01 HL14343-02 5 U01 HL14343-02 5 U01 HL143453-02 5 U01 HL143453-02 5 U01 HL10394-05 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007749 T35 HL00760 138002 001 16121993-11 183434-11 R1062-61/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.8	Lung Diseases Research Lung Diseases Research	271,605 108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	405,250 - 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and Human Services,	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 R21 HL140995-02 5 U01 HL128952-04 5 U01 HL13072-04 5 U01 HL137182-03 5 U01 HL137182-03 5 U01 HL13031-06 7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007517 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL00779 138002 001 16121993-11 183434-11 RJ062-01 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838	Lung Diseases Research Lung Diseases Research	108,025 308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	405,250 - 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throo Health and Human Services, Depa	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 U01 HL128952-04 5 U01 HL131072-04 5 U01 HL131072-04 5 U01 HL137182-03 5 U01 HL143453-02 5 U01 HL10331-06 7 K08 HL130430-04 7 K01 HL108949-05 T32 HL007517 T32 HL007717 T32 HL007749 T32 HL007749 T33 HL007749 T35 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	$\begin{array}{c} 93.838\\$	Lung Diseases Research Lung Diseases Research	308,844 828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	405,250 - 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and Human Services, Department of Pass-T	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 U01 HL131072-04 5 U01 HL137182-03 5 U01 HL13433-02 5 U01 HL123031-06 7 K08 HL130430-04 7 K08 HL130430-04 7 K01 HL108949-05 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007749 T35 HL00760 138002 001 16121993-11 183434-11 R1062-G1/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93,838 93,838	Lung Diseases Research Lung Diseases Research	828,013 463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	405,250 - 42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 U01 HL137182-03 5 U01 HL133453-02 5 U01 HL13331-06 7 K08 HL130430-04 7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007749 T32 HL007749 T35 HL007749 T35 HL007769 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838	Lung Diseases Research Lung Diseases Research	463,065 200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	42,063
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throo Health and Human Se	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5 U01 HL143453-02 5U01HL123031-06 7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007749 T32 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research	200,527 425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot H	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	5U01HL123031-06 7 K08 HL130430-04 7 K08 HL130430-04 7 K01 HL108949-05 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 R1062-G1/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research	425,358 122,268 47,784 349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	7 K08 HL130430-04 7 R01 HL108949-05 T32 HL007517 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838 93,838	Lung Diseases Research Lung Diseases Research	122,268 47,784 3349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	7 R01 HL108949-05 T32 HL007517 T32 HL007517 T32 HL007749 T33 HL007690 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research	47,784 349,530 (3,945) 138,781 (5,221) 31,635 15,007 3,511 499,744	-
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throo Hea	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	T32 HL007517 T32 HL007517 T32 HL007749 T35 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research	349,530 (3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	-
Health and Human Services, Department of Direct Health and Human Services, Department of Direct Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	T32 HL007517 T32 HL007749 T33 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research	(3,945) 807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	-
Health and Human Services, Department of Direct Health and Human Services, Department of Direct Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	T32 HL007749 T32 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 R0062-G1/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research	807,940 138,781 (5,221) 31,635 15,007 3,511 499,744	
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throo Health and Human Services, Depar	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	T32 HL007749 T35 HL007690 138002 001 16121993-11 183434-11 RJ062-G1/ AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research	138,781 (5,221) 31,635 15,007 3,511 499,744	-
Health and Human Services, Department of Direct Health and Human Services, Department of Pass-Throot Health and Human Services, Department of Pass-T	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	T35 HL007690 138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research	(5,221) 31,635 15,007 3,511 499,744	- - -
Health and Human Services, Department of Pass-Throu Health and Human Services, Department of Pass-Throu <td>h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital</td> <td>138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1</td> <td>93.838 93.838 93.838 93.838</td> <td>Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research</td> <td>31,635 15,007 3,511 499,744</td> <td>-</td>	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	138002 001 16121993-11 183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research	31,635 15,007 3,511 499,744	-
Health and Human Services, Department of Pass-Throu Health and Human Services, D	h COPD Foundation, Inc Cornell University h Cornell University h Cornell University h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	001 16121993-11 183434-11 RJ062-G1/ AWD-101434-G1 50636-R01-UMICH01 1 R44HE140894 01A1	93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research Lung Diseases Research	15,007 3,511 499,744	-
Health and Human Services, Department of Pass-Throu Health and Human Services, D	h Cornell University Cornell University Goorgia Institute of Technology Hektoen Institute for Medical Research, The ImBio h Massachusetts General Hospital	183434-11 RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838 93.838	Lung Diseases Research Lung Diseases Research	499,744	
Health and Human Services, Department of Pass-Throu Health and Human Services, D	h Georgia Institute of Technology h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	RJ062-G1 / AWD-101434-G1 50636-R01-UMICH01 1 R44HL140894 01A1	93.838			-
Health and Human Services, Department of Pass-Throu Health and Human Services, Department of Pass-Throu <td>h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital</td> <td>50636-R01-UMICH01 1 R44HL140894 01A1</td> <td></td> <td>Lung Diseases Research</td> <td></td> <td>-</td>	h Hektoen Institute for Medical Research, The h ImBio h Massachusetts General Hospital	50636-R01-UMICH01 1 R44HL140894 01A1		Lung Diseases Research		-
Health and Human Services, Department of Pass-Throu Health and Human Services, D	h ImBio h Massachusetts General Hospital	1 R44HL140894 01A1			590,066	-
Health and Human Services, Department of Pass-Throu	h Massachusetts General Hospital		93.838	Lung Diseases Research	89,673	-
Health and Human Services, Department of Pass-Throu			93.838	Lung Diseases Research	78,190	-
Health and Human Services, Department of Pass-Throu	h National Jawish Haalth	224404	93.838	Lung Diseases Research	203,529	-
Health and Human Services, Department of Pass-Throu		20051812	93.838	Lung Diseases Research	94,486	-
Health and Human Services, Department of Pass-Throu		20024306_Mich sub	93.838	Lung Diseases Research	(291)	-
Health and Human Services, Department of Pass-Throu		20114601_Mich sub	93.838	Lung Diseases Research	9,367	-
Health and Human Services, Department of Pass-Throu		20114602_Amd1_Mich sub	93.838	Lung Diseases Research	7,691	-
Health and Human Services, Department of Pass-Throu		33098-01	93.838	Lung Diseases Research	17,558	-
Health and Human Services, Department of Pass-Throu		NIM054043 Route Key No. 3201160619	93.838 93.838	Lung Diseases Research	12,884	-
Health and Human Services, Department of Pass-Throu		10443sc	93.838	Lung Diseases Research Lung Diseases Research	2,000 796,345	-
Health and Human Services, Department of Pass-Throu		W000705540	93.838	Lung Diseases Research	220,483	-
Health and Human Services, Department of Pass-Throu Health and Human Services, Department of Pass-Throu Health and Human Services, Department of Pass-Throu		5111454	93.838	Lung Diseases Research	34,917	-
Health and Human Services, Department of Pass-Throu Health and Human Services, Department of Pass-Throu		565138	93.838	Lung Diseases Research	(349)	
Health and Human Services, Department of Pass-Throu		0024088 (127910-1)	93.838	Lung Diseases Research	(134)	_
		UWSC7902	93.838	Lung Diseases Research	10.435	-
		UWSC9344	93.838	Lung Diseases Research	128,185	-
Health and Human Services, Department of Pass-Throu		WSU16126-A3	93.838	Lung Diseases Research	390,458	-
Health and Human Services, Department of Pass-Throu Pass-Throu		16121993-10	93.838	Lung Diseases Research	4,427	-
Health and Human Services, Department of Pass-Throu		16121993-9	93.838	Lung Diseases Research	15,393	-
Health and Human Services, Department of Pass-Throu		183049-01	93.838	Lung Diseases Research	22,835	-
Health and Human Services, Department of Pass-Throu	h Weill Cornell Medical College of Cornell University	183434-10	93.838	Lung Diseases Research	214,681	-
Health and Human Services, Department of Pass-Throu	h Weill Cornell Medical College of Cornell University	183434-9	93.838	Lung Diseases Research	166,794	-
					\$ 18,675,781	
Health and Human Services, Department of Direct		1 R01 HL146354-01	93.839	Blood Diseases and Resources Research	\$ 41,730	s -
Health and Human Services, Department of Direct		1 R01 HL148333-01	93.839	Blood Diseases and Resources Research	19,032	-
Health and Human Services, Department of Direct		4 R01 HL090775-09	93.839	Blood Diseases and Resources Research	3,489	-
Health and Human Services, Department of Direct		5 K99 HL136784-02	93.839	Blood Diseases and Resources Research	91,792	-
Health and Human Services, Department of Direct		5 F32 HL129491-03	93.839	Blood Diseases and Resources Research	(14,299)	-
Health and Human Services, Department of Direct		5 K01 HL135392-03	93.839	Blood Diseases and Resources Research	166,015	-
Health and Human Services, Department of Direct		5 K08 HL119597-05	93.839	Blood Diseases and Resources Research	276,268	-
Health and Human Services, Department of Direct		5 K08 HL128794-05	93.839	Blood Diseases and Resources Research	241,715	-
Health and Human Services, Department of Direct		5 R01 HL055374-19	93.839 93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	290,181	-
Health and Human Services, Department of Direct Health and Human Services, Department of Direct		5 R01 HL079118-13 5 R01 HL094311-09	93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	389,777 162,459	-
Health and Human Services, Department of Direct Health and Human Services, Department of Direct		5 R01 HL094311-09 5 R01 HL114405-05	93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	(67,530)	-
Health and Human Services, Department of Direct Health and Human Services, Department of Direct		5 R01 HL114405-05 5 R01 HL124232-05	93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	(67,530) 510,934	-
Health and Human Services, Department of Direct Health and Human Services, Department of Direct		5 R01 HL124232-05 5 R01 HL128046-05	93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	446,010	13,633
Health and Human Services, Department of Direct		5 R01 HL128040-05 5 R01 HL132392-04	93.839	Blood Diseases and Resources Research	440,010	7,721
Health and Human Services, Department of Direct Health and Human Services, Department of Direct		5 R01 HL132392-04 5 R01 HL136420-02	93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	436,035 508,538	9,959
Health and Human Services, Department of Direct		5 R01 HL137919-03	93.839	Blood Diseases and Resources Research	570,939	5,780
Health and Human Services, Department of Direct		5 R01 HL137919-05 5 R01 HL141399-02	93.839	Blood Diseases and Resources Research	200,345	- 5,780
Health and Human Services, Department of Direct			93.839	Blood Diseases and Resources Research	379,321	-
Health and Human Services, Department of Direct		5 R01 HL141399-02 5 R01 HL125774-02		Blood Diseases and Resources Research	158,836	91,955

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
lealth and Human Services, Department of	Direct		5 R35 HL135793-03	93.839	Blood Diseases and Resources Research	448,436	-
lealth and Human Services, Department of	Direct		5 U01 HL117658-05	93.839	Blood Diseases and Resources Research	479,206	205,345
lealth and Human Services, Department of	Direct		5 UG1HL069330-19	93.839	Blood Diseases and Resources Research	164,080	-
lealth and Human Services, Department of	Direct		7 UM1 HL120877-05	93.839	Blood Diseases and Resources Research	4,260,639	3,630,054
lealth and Human Services, Department of	Pass-Through	Cincinnati Children's Hospital Medical Center (CCHMC)	302525/PO3100580964	93.839	Blood Diseases and Resources Research	41,190	-
lealth and Human Services, Department of	Pass-Through	Massachusetts General Hospital	230952	93.839	Blood Diseases and Resources Research	7,057	-
lealth and Human Services, Department of	Pass-Through	North Carolina State University	2018-1327-01	93.839	Blood Diseases and Resources Research	93,237	
lealth and Human Services, Department of	Pass-Through	Oklahoma Medical Research Foundation (OMRF)	0280-04/Umich JM	93.839	Blood Diseases and Resources Research	4,887	-
lealth and Human Services, Department of	Pass-Through	State University of New York (SUNY)	1146045-81096	93.839	Blood Diseases and Resources Research	172,543	
lealth and Human Services, Department of	Pass-Through	State University of New York (SUNY)	1146045-81096	93.839	Blood Diseases and Resources Research	19,115	
lealth and Human Services, Department of	Pass-Through	The University of Texas Health Science Center at Houston	0013267E	93.839	Blood Diseases and Resources Research	8,885	
lealth and Human Services, Department of	Pass-Through	University of Georgia	SUB00001636	93.839	Blood Diseases and Resources Research	140,221	-
							-
lealth and Human Services, Department of	Pass-Through	University of Illinois-Urbana-Champaign	092532-17155	93.839	Blood Diseases and Resources Research	100,679	-
lealth and Human Services, Department of	Pass-Through	University of Pennsylvania	564154/10042446/14843/01	93.839	Blood Diseases and Resources Research	97,223	- 2 0 (4 4 4 2
					Translation and Implementation Science Research for Heart,	\$ 10,869,005	\$ 3,964,447
alth and Human Services, Department of	Direct		5 K12 HL138039-03	93.840	Lung, Blood Diseases, and Sleep Disorders	\$ 572,829	s -
alth and Human Services, Department of	Direct		1 K01 AR073340-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research		š -
alth and Human Services, Department of	Direct		1 P30 AR075043-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	16,248	
					Arthritis, Musculoskeletal and Skin Diseases Research		-
alth and Human Services, Department of	Direct		1 R01 AR073022-01A1	93.846	,	161,870	-
alth and Human Services, Department of	Direct		1 R01 AR074930-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	22,302	-
alth and Human Services, Department of	Direct		1 R21 AR066213-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	1,963	-
alth and Human Services, Department of	Direct		1 R21 AR072817-01A1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	2,774	-
lth and Human Services, Department of	Direct		1 R21 AR075197-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	7,618	-
th and Human Services, Department of	Direct		1 R61 AR073523-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	59,572	-
lth and Human Services, Department of	Direct		4 K24 AR063120-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(346)	-
Ith and Human Services, Department of	Direct		4 R01 AR060837-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	946	-
th and Human Services, Department of	Direct		4 R01 AR062030-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(3,962)	_
th and Human Services, Department of	Direct		4 R01 AR062066-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	385,122	-
alth and Human Services, Department of	Direct		4 R01 AR062522-05S1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(58,593)	-
lth and Human Services, Department of	Direct		4 R01 AR063611-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(57,552)	-
lth and Human Services, Department of	Direct		4 R01 AR065183-04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	14,280	-
Ith and Human Services, Department of	Direct		5 F31 AR073677-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	40,608	-
lth and Human Services, Department of	Direct		5 K01 AR064275-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	115,809	-
Ith and Human Services, Department of	Direct		5 K01 AR064765-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(234)	-
alth and Human Services, Department of	Direct		5 K01 AR070281 04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	100,485	-
alth and Human Services, Department of	Direct		5 K01 AR072129-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	95,321	-
alth and Human Services, Department of	Direct		5 K08 AR063668-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(2,737)	
alth and Human Services, Department of	Direct		5 K08 AR066569-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	113,375	_
alth and Human Services, Department of	Direct		5 K24 AR053120-10	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	168,791	
				93.846			-
alth and Human Services, Department of	Direct		5 K99 AR 070903-02		Arthritis, Musculoskeletal and Skin Diseases Research	72,226	-
alth and Human Services, Department of	Direct		5 P30 AR069620-04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	917,623	-
alth and Human Services, Department of	Direct		5 P50 AR070600-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	1,004,360	-
alth and Human Services, Department of	Direct		5 R01 AR042742-22	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	805,940	-
alth and Human Services, Department of	Direct		5 R01 AR044232-24	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	558,943	-
alth and Human Services, Department of	Direct		5 R01 AR054821-09	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	434,548	-
alth and Human Services, Department of	Direct		5 R01 AR059085-09	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	382,018	-
alth and Human Services, Department of	Direct		5 R01 AR060350-08	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	822,731	605,767
alth and Human Services, Department of	Direct		5 R01 AR061402-07	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	122,757	-
Ith and Human Services, Department of	Direct		5 R01 AR062636-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	227,711	
Ith and Human Services, Department of	Direct		5 R01 AR063056-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	16,676	-
Ith and Human Services, Department of	Direct		5 R01 AR065403-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	411,803	-
							-
Ith and Human Services, Department of	Direct		5 R01 AR065409-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	159,911	-
Ith and Human Services, Department of	Direct		5 R01 AR065424-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	487,125	-
h and Human Services, Department of	Direct		5 R01 AR065524-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	395,971	-
th and Human Services, Department of	Direct		5 R01 AR066028-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	885,727	268,217
th and Human Services, Department of	Direct		5 R01 AR066049-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(349)	-
th and Human Services, Department of	Direct		5 R01 AR067744-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	462,891	-
th and Human Services, Department of	Direct		5 R01 AR068428-04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	371,232	-
th and Human Services, Department of	Direct		5 R01 AR068452-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	244,263	4,48
th and Human Services, Department of	Direct		5 R01 AR069071-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	331,674	137,98
th and Human Services, Department of	Direct		5 R01 AR069303-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	359,397	157,90
				93.846			52.05
th and Human Services, Department of	Direct		5 R01 AR070148-02		Arthritis, Musculoskeletal and Skin Diseases Research	315,725	53,95
Ith and Human Services, Department of	Direct		5 R01 AR070470-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	145,618	-
th and Human Services, Department of	Direct		5 R01 AR071379-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	266,614	-
Ith and Human Services, Department of	Direct		5 R01 AR071384-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	473,739	-
lth and Human Services, Department of	Direct		5 R03 AR072107-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	78,794	-
th and Human Services, Department of	Direct		5 R21 AR067330-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(102,974)	-
Ith and Human Services, Department of	Direct		5 R21 AR072284-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	266,867	-
alth and Human Services, Department of	Direct		5 R21 AR072314-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	140,094	-
Ith and Human Services, Department of	Direct		5 R21 AR072336-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	176,900	-
Ith and Human Services, Department of	Direct		5 R21 AR072511-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	125,483	-
							-
alth and Human Services, Department of	Direct		5 R21 AR072931-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	201,279	-
Ith and Human Services, Department of	Direct		5 R21 AR074011-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	86,240	-
			5 R61 AR073014-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	440,733	
alth and Human Services, Department of alth and Human Services, Department of	Direct Direct		5-K24AR063120-07	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	60,422	

Health and Human Services, Department of Health and Human Services, Department of	Direct						
Health and Human Services, Department of			7 R01 AR042047-23	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	473,443	-
	Direct		T32 AR007080	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	110,735	-
Iealth and Human Services, Department of	Direct		T32 AR007080	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	25,920	-
lealth and Human Services, Department of	Direct		T32 AR007197	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	223,018	-
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation (CCF)	985-SUB	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	29,688	-
Iealth and Human Services, Department of	Pass-Through	Dartmouth College	R1016 - Core B	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	2,690	-
Iealth and Human Services, Department of	Pass-Through	IF, LLC	Agreement	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	43,219	-
Iealth and Human Services, Department of	Pass-Through	Johns Hopkins University	2003835464	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	44,283	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60049341 UMich	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(712)	-
Iealth and Human Services, Department of	Pass-Through	State University of New York (SUNY)	68055	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	93,666	-
Health and Human Services, Department of	Pass-Through	Thomas Jefferson University	080-23000-R92203	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(3,046)	-
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000516313-001	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	113,813	-
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000516313-001	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	43	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	572644	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	2,056	-
Health and Human Services, Department of	Pass-Through	University of Wisconsin	000000035	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	112,701	-
Health and Human Services, Department of	Pass-Through	Washington State University	131344 G003907	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	10,351	-
						\$ 14,616,966 \$	\$ 1,070,396
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		1 DP3 DK098129-01	93.847	Research	\$ 373 5	\$ 373
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		1 F32 D5120159-01	93.847	Research	14,279	-
· 1					Diabetes, Digestive, and Kidney Diseases Extramural	, ···	
Health and Human Services, Department of	Direct		1 F32 DK112642-01A1	93.847	Research	1,851	
					Diabetes, Digestive, and Kidney Diseases Extramural	-,	
Health and Human Services, Department of	Direct		1 F32 DK115340-01A1	93.847	Research	63,145	
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		1 F32 DK117522-01A1	93.847	Research	28,582	
ritaria and rianian Services, Department of	Direct		1152 Diti17522 0111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Diabetes, Digestive, and Kidney Diseases Extramural	20,002	
Health and Human Services, Department of	Direct		1 K01 DK111794-01A1	93.847	Research	48,083	_
ricardi and rianan Services, Department of	Direct		r kor Bkritt/)+-onki	22.047	Diabetes, Digestive, and Kidney Diseases Extramural	40,005	
Health and Human Services, Department of	Direct		1 K01 DK114376-01A1	93.847	Research	51,597	
ricatin and riuman Services, Department of	Direct		I KOI DKI14570-01AI	95.047	Diabetes, Digestive, and Kidney Diseases Extramural	51,597	-
Health and Human Services, Department of	Direct		1 R01 DK 119188-01	93.847	Research	77,837	
Health and Human Services, Department of	Direct		1 K01 DK 119188-01	95.047	Diabetes, Digestive, and Kidney Diseases Extramural	//,83/	-
Health and Human Somilars, Department of	Direct		1 R01 DK115408-02	93.847	Research	196,740	
Health and Human Services, Department of	Direct		1 K01 DK113408-02	93.047	Diabetes, Digestive, and Kidney Diseases Extramural	190,740	-
Health and Human Services, Department of	Diment		1 R01 DK117639 01A1	93.847		156,120	
Health and Human Services, Department of	Direct		1 K01 DK11/639 01A1	95.84/	Research Dielecter Disective and Kidney Disecces Extremuted	136,120	-
	D' (1 001 08/110/21 01 11	02.047	Diabetes, Digestive, and Kidney Diseases Extramural	86,844	
Health and Human Services, Department of	Direct		1 R01 DK118731-01A1	93.847	Research	80,844	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		1 R01 DK119219-01	93.847	Research	92,050	-
	D'		1 001 0//100/02 01	02.047	Diabetes, Digestive, and Kidney Diseases Extramural	24.070	
Health and Human Services, Department of	Direct		1 R01 DK120623-01	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	34,079	-
	D'		1 001 0/1011/(01	02.047		34,361	
Health and Human Services, Department of	Direct		1 R01 DK121166-01	93.847	Research	34,361	-
					Diabetes, Digestive, and Kidney Diseases Extramural	102.011	
Health and Human Services, Department of	Direct		1 R56 DK116617-01	93.847	Research	183,941	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2 R01 DK055679-20A1	93.847	Research	58,320	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2 R01 DK068400 15	93.847	Research	67,802	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2 R01 DK070869-11	93.847	Research	56,350	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2 R01 DK071771-11	93.847	Research	491,657	14,932
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2 R56 DK053904-18	93.847	Research	122,819	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2 U01 DK065184-16	93.847	Research	258,965	495
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2 U24 DK100845-07	93.847	Research	18,878	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		2R01DK045776-28	93.847	Research	152,667	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		3 P30DK020572-4281	93.847	Research	2,148,986	107,327
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		3 P30DK081943-12S1	93.847	Research	589,376	38,752
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		3U54DK083912-10S1	93.847	Research	1,295,748	436,483
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		3UM1DK100845-06S1	93.847	Research	1,042,639	632,600
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		4 R01 DK053904-17	93.847	Research	17,189	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		4 R01 DK096972-04	93.847	Research	3,653	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 F30 DK117615-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	40,718	-
Health and Human Services, Department of	Direct		5 F31 DK111194-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	39,386	-
Health and Human Services, Department of	Direct		5 F31 DK113653-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,041	
· ·					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 F31 DK116555- 03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	30,519	-
Health and Human Services, Department of	Direct		5 F31 DK117610-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	39,172	-
Health and Human Services, Department of	Direct		5 F31 DK118811-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	35,831	-
Health and Human Services, Department of	Direct		5 F32 DK108493-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(158)	-
Health and Human Services, Department of	Direct		5 F32 DK112627-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(8,587)	-
Health and Human Services, Department of	Direct		5 F32 DK117545-02	93.847	Research	54,475	-
Health and Human Services, Department of	Direct		5 F32 DK118800-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	59,819	-
Health and Human Services, Department of	Direct		5 F32 DK120111-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	52,503	-
Health and Human Services, Department of	Direct		5 K01 DK106296-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	154,083	-
Health and Human Services, Department of	Direct		5 K01 DK106322-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	141,450	
				93.847	Diabetes, Digestive, and Kidney Diseases Extramural	153,973	
Health and Human Services, Department of	Direct		5 K01 DK107456-04		Research Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 K01 DK111710-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	48,802	-
Health and Human Services, Department of	Direct		5 K01 DK116928-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	67,505	-
Health and Human Services, Department of	Direct		5 K01DK113115-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	6,167	-
Health and Human Services, Department of	Direct		5 K08 DK101755-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	107,034	-
Health and Human Services, Department of	Direct		5 K08 DK102357-05	93.847	Research	(19,314)	-
Health and Human Services, Department of	Direct		5 K08 DK102526-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	164,432	-
Health and Human Services, Department of	Direct		5 K08 DK106523-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	147,004	2,337
Health and Human Services, Department of	Direct		5 K08 DK109116-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	161,817	-
Health and Human Services, Department of	Direct		5 K08DK115891-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	140,013	-
Health and Human Services, Department of	Direct		5 K12 DK111011-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	266,771	
					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 K23 DK097183-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	108,589	-
Health and Human Services, Department of	Direct		5 K23 DK101687-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	182,760	-
Health and Human Services, Department of	Direct		5 K99 DK106664-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	68,184	-
Health and Human Services, Department of	Direct		5 K99 DK110537- 02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	11,755	-
Health and Human Services, Department of	Direct		5 P01 DK062041-15	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	165,975	-
Health and Human Services, Department of	Direct		5 P30 DK020572-40	93.847	Research	(19,815)	(9,951)
Health and Human Services, Department of	Direct		5 P30 DK034933-33	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	794,279	-
Health and Human Services, Department of	Direct		5 P30 DK089503-10	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	968,325	-
Health and Human Services, Department of	Direct		5 P30DK092926-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	537,224	109,410
Health and Human Services, Department of	Direct		5 R00 DK097141-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	110,167	
Health and Human Services, Department of	Direct		5 R00 DK099240-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	105,282	
					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 R01 DK040344-30	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	310,922	-
Health and Human Services, Department of	Direct		5 R01 DK04203-29	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	385,860	-
Health and Human Services, Department of	Direct		5 R01 DK043140-23	93.847	Research	443,825	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 DK045776-27	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	246,147	-
· •					Diabetes, Digestive, and Kidney Diseases Extramural	440,988	
Health and Human Services, Department of	Direct		5 R01 DK046409-26	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 R01 DK046960-27	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	342,890	-
Health and Human Services, Department of	Direct		5 R01 DK047918-25	93.847	Research	135,482	-
Health and Human Services, Department of	Direct		5 R01 DK048280-25	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	438,471	-
Health and Human Services, Department of	Direct		5 R01 DK054222-19	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	532,074	-
					Diabetes, Digestive, and Kidney Diseases Extramural	339,765	
Health and Human Services, Department of	Direct		5 R01 DK054740-19	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 R01 DK055679-19	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	178,552	-
Health and Human Services, Department of	Direct		5 R01 DK056731-21	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	431,961	-
Health and Human Services, Department of	Direct		5 R01 DK058913-14	93.847	Research	(27,827)	-
Health and Human Services, Department of	Direct		5 R01 DK059888-19	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	737,804	-
Health and Human Services, Department of	Direct		5 R01 DK061379-16	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	467,858	
					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 R01 DK061707-15	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(63,661)	-
Health and Human Services, Department of	Direct		5 R01 DK062876-14	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	303,047	-
Health and Human Services, Department of	Direct		5 R01 DK066604-13	93.847	Research	447,753	-
Health and Human Services, Department of	Direct		5 R01 DK068400-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	365,527	142,297
Health and Human Services, Department of	Direct		5 R01 DK069950-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	343,833	27,479
· ·					Diabetes, Digestive, and Kidney Diseases Extramural		21,419
Health and Human Services, Department of	Direct		5 R01 DK070869-10	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	98,109	-
Health and Human Services, Department of	Direct		5 R01 DK072564-24	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	737,848	-
Health and Human Services, Department of	Direct		5 R01 DK073722-13	93.847	Research	430,001	-
Health and Human Services, Department of	Direct		5 R01 DK077966-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	909,076	9,355
Health and Human Services, Department of	Direct		5 R01 DK078056-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(7,266)	
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R01 DK079392-14	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	388,102	-
Health and Human Services, Department of	Direct		5 R01 DK083491-09	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	210,419	-
Health and Human Services, Department of	Direct		5 R01 DK089763-08	93.847	Research	683,617	347,410
Health and Human Services, Department of	Direct		5 R01 DK089933-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	512,701	-
Health and Human Services, Department of	Direct		5 R01 DK090262-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	413,787	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R01 DK091191-14	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	316,184	-
Health and Human Services, Department of	Direct		5 R01 DK091267-08	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	435,140	-
Health and Human Services, Department of	Direct		5 R01 DK091591-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(11,020)	-
Health and Human Services, Department of	Direct		5 R01 DK093513-07	93.847	Research	368,004	54,485
Health and Human Services, Department of	Direct		5 R01 DK094777-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	770,369	-
Health and Human Samiana Danastmant of					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R01 DK095201-08	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	367,205	-
Health and Human Services, Department of	Direct		5 R01 DK095210-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(582)	(582)
Health and Human Services, Department of	Direct		5 R01 DK095782-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(84,175)	-
Health and Human Services, Department of	Direct		5 R01 DK095782-07	93.847	Research	344,340	-
Health and Human Services, Department of	Direct		5 R01 DK097027-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	55,489	-
Health and Human Services, Department of	Direct		5 R01 DK097449-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	167,133	
ricana and rianan Scivices, Department 01	Direct		5 K01 DK07/77705	23.047	Resource	107,155	-

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Health and Human Services, Department of	Direct		5 R01 DK098205-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	769	
Health and Human Services, Department of	Direct		5 R01 DK098853-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(403)	
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R01 DK099034-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(11,043)	-
Health and Human Services, Department of	Direct		5 R01 DK099593-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	184,140	-
Health and Human Services, Department of	Direct		5 R01 DK100449-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	446,753	-
Health and Human Services, Department of	Direct		5 R01 DK100722-08	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(3,642)	-
Health and Human Services, Department of	Direct		5 R01 DK101423-05	93.847	Research	398,466	108,534
Health and Human Services, Department of	Direct		5 R01 DK101473-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	163,495	103,542
Health and Human Services, Department of	Direct		5 R01 DK101591-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	339,353	-
Health and Human Services, Department of	Direct		5 R01 DK102456-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	343,673	
Health and Human Services, Department of	Direct		5 R01 DK102532-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	61,876	25,596
					Diabetes, Digestive, and Kidney Diseases Extramural		25,590
Health and Human Services, Department of	Direct		5 R01 DK102643-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	224,133	-
Health and Human Services, Department of	Direct		5 R01 DK102663-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	90,549	-
Health and Human Services, Department of	Direct		5 R01 DK102850-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	266,515	-
Health and Human Services, Department of	Direct		5 R01 DK103877-04	93.847	Research	(1,536)	-
Health and Human Services, Department of	Direct		5 R01 DK104733-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	705,044	-
Health and Human Services, Department of	Direct		5 R01 DK104999-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	491,473	-
Health and Human Services, Department of	Direct		5 R01 DK105393-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	265,220	-
	Direct		5 R01 DK106188- 05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural	228,054	
Health and Human Services, Department of					Research Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 R01 DK106618-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	383,555	-
Health and Human Services, Department of	Direct		5 R01 DK106621-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	973,093	159,413
Health and Human Services, Department of	Direct		5 R01 DK107282-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	447,066	-
Health and Human Services, Department of	Direct		5 R01 DK107535-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	341,378	-
Health and Human Services, Department of	Direct		5 R01 DK107583-04	93.847	Research	275,357	-
Health and Human Services, Department of	Direct		5 R01 DK107652-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	513,251	-
Health and Human Services, Department of	Direct		5 R01 DK107730-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	587,211	-
Health and Human Services, Department of	Direct		5 R01 DK107904-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	818,184	135,669
Health and Human Services, Department of	Direct		5 R01 DK107956-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	505,942	-
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R01 DK108805-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	313,444	26,481
Health and Human Services, Department of	Direct		5 R01 DK108901-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	239,241	-
Health and Human Services, Department of	Direct		5 R01 DK108921-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	344,040	-
Health and Human Services, Department of	Direct		5 R01 DK109032-04	93.847	Research	484,909	114,320
Health and Human Services, Department of	Direct		5 R01 DK109948-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	696,456	-
Health and Human Services, Department of	Direct		5 R01 DK109995-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	526,824	-
Health and Human Services, Department of	Direct		5 R01 DK110273-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	353,123	-
Health and Human Services, Department of	Direct		5 R01 DK110436-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	551,060	
					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 R01 DK111174-04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	612,325	-
Health and Human Services, Department of	Direct		5 R01 DK111465-04	93.847	Research	358,439	27,436

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Health and Human Services, Department of	Direct		5 R01 DK112755-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	71,621	-
					Diabetes, Digestive, and Kidney Diseases Extramural	429,751	
Health and Human Services, Department of	Direct		5 R01 DK112800-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		5 R01 DK114131-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	321,282	-
Health and Human Services, Department of	Direct		5 R01 DK115190-03	93.847	Research	689,231	-
Health and Human Services, Department of	Direct		5 R01 DK115474-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	453,130	9,546
Health and Human Services, Department of	Direct		5 R01 DK115526-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	262,894	
Health and Human Services, Department of	Direct		5 R01 DK115583-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	349,507	
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R01 DK115646-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	403,132	-
Health and Human Services, Department of	Direct		5 R01 DK115687-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	443,551	-
Health and Human Services, Department of	Direct		5 R01 DK115844-02	93.847	Research	538,175	55,522
Health and Human Services, Department of	Direct		5 R01 DK116548-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	619,758	-
Health and Human Services, Department of	Direct		5 R01 DK116715-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	511,422	
Health and Human Services, Department of	Direct		5 R01 DK117565-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	333,974	
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R01 DK117960-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	362,626	-
Health and Human Services, Department of	Direct		5 R01 DK118023-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	314,106	-
Health and Human Services, Department of	Direct		5 R01 DK118024-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	519,904	-
Health and Human Services, Department of	Direct		5 R01 DK118154-02	93.847	Research	184,882	
Health and Human Services, Department of	Direct		5 R01 DK120047-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	256,285	-
Health and Human Services, Department of	Direct		5 R01 DK120330-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	310,992	110,999
					Diabetes, Digestive, and Kidney Diseases Extramural		110,777
Health and Human Services, Department of	Direct		5 R01DK114220-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	443,040	-
Health and Human Services, Department of	Direct		5 R03 DK102480-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(614)	-
Health and Human Services, Department of	Direct		5 R21 DK101654-02	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	33,729	-
Health and Human Services, Department of	Direct		5 R21 DK106647-02	93.847	Research	13,506	-
Health and Human Services, Department of	Direct		5 R21 DK109447-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	173,407	-
Health and Human Services, Department of	Direct		5 R21 DK110146-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	70,904	-
Health and Human Services, Department of	Direct		5 R21 DK117446-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	115,871	10,287
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 R24 DK082841-10	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	1,947,189	418,724
Health and Human Services, Department of	Direct		5 R25 DK088752-09	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	97,361	-
Health and Human Services, Department of	Direct		5 R37 DK056731-19	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(20,273)	-
Health and Human Services, Department of	Direct		5 U01 DK061028-17	93.847	Research	(124,906)	6,217
Health and Human Services, Department of	Direct		5 U01 DK062370-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(125,875)	11,918
Health and Human Services, Department of	Direct		5 U01 DK062456-17	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	4,681,990	3,612,797
Health and Human Services, Department of	Direct		5 U01 DK065184-15	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	10,671	
					Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct		5 U01 DK082345-10	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	894,311	-
Health and Human Services, Department of	Direct		5 U01 DK082863-12	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	472,751	22,723
Health and Human Services, Department of	Direct		5 U01 DK099932-05	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	80,440	-
Health and Human Services, Department of	Direct		5 U01 DK103141-05S1	93.847	Research	401,937	140,804
Health and Human Services, Department of	Direct		5 U01 DK106893-05S1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	671,077	-

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Health and Human Services, Department of	Direct		5 U01DK061028-19	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	772,039	-
Health and Human Services, Department of	Direct		5 U01DK119083 02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	122,440	-
Health and Human Services, Department of	Direct		5 U2C DK110768-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,251,248	-
Health and Human Services, Department of	Direct		5 UG3 DK114907-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	625,711	306,905
Health and Human Services, Department of	Direct		5P30DK081943-10	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	120,293	76,755
Health and Human Services, Department of	Direct		5-R01DK062027-15	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	399,615	-
			5U01DK062370-16		Diabetes, Digestive, and Kidney Diseases Extramural		
Health and Human Services, Department of	Direct			93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	530,544	16,301
Health and Human Services, Department of	Direct		7 R01 DK061379-14	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(16,447)	-
Health and Human Services, Department of	Direct		7 R01 DK070332-14	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	283,223	-
Health and Human Services, Department of	Direct		7 R21 DK110688-03	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	57,762	23,900
Health and Human Services, Department of	Direct		R01DK121170 01	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	146,320	-
Health and Human Services, Department of	Direct		T32 DK007245	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	294,323	-
Health and Human Services, Department of	Direct		T32 DK007378	93.847	Research	417,580	-
Health and Human Services, Department of	Direct		T32 DK007782	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,321	-
Health and Human Services, Department of	Direct		T32 DK062708	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	167,189	-
Health and Human Services, Department of	Direct		T32 DK062708	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(14,815)	-
Health and Human Services, Department of	Direct		T32 DK071212	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	166,221	
Health and Human Services, Department of	Direct		T32 DK094775	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	266,895	
· ·					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Direct		T32 DK101357	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	209,581	-
Health and Human Services, Department of	Direct		T32 DK108740	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	305,821	-
Health and Human Services, Department of	Pass-Through	Albert Einstein College of Medicine, Inc.,	310780	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(4,196)	-
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	Apendix J	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	10,791	-
Health and Human Services, Department of	Pass-Through	Augusta University	30835-35	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	87,370	-
Health and Human Services, Department of	Pass-Through	Augusta University	30835-44	93.847	Research	21,023	-
Health and Human Services, Department of	Pass-Through	Augusta University	32307-20	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	13,658	-
Health and Human Services, Department of	Pass-Through	Augusta University	32307-44	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	5,086	-
Health and Human Services, Department of	Pass-Through	Baylor College of Medicine	Research Subaward Agreement	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	31,078	-
Health and Human Services, Department of	Pass-Through	BLR Bio, L.L.C.	Roundtable Research Agreement	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	8,926	-
Health and Human Services, Department of	Pass-Through	Boston Medical Center	0577601	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,862	
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	114935	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	35,258	
					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	119074	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	184,323	-
Health and Human Services, Department of	6	Broad Institute	5000100-5500000844	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	40,518	-
Health and Human Services, Department of	Pass-Through	Broad Institute	5216273-5500000917	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(18,449)	-
Health and Human Services, Department of	Pass-Through	Broad Institute	GENFD0001324559	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	35,626	-
Health and Human Services, Department of	Pass-Through	Broad Institute	GENFD0001516209	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	6,344	-
Health and Human Services, Department of	Pass-Through	Broad Institute	Subaward No. 5216274-550000122	93.847	Research	182,592	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	1172-SUB	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	38,813	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512236	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,471	_

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Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512851	93.847	Research	26,049	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512883	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(1,761)	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES513296	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	224,843	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES513297	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,605	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES514024	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	18,061	
Health and Human Services, Department of	Pass-Through	Central Michigan University	F62720	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	8,789	-
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation	1059-SUB	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	10,312	
Health and Human Services, Department of	-				Diabetes, Digestive, and Kidney Diseases Extramural		
· •	Pass-Through	Columbia University	1 (GG013026)	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	121,164	-
Health and Human Services, Department of	Pass-Through	Columbia University	2(GG015009-01)	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	13,016	-
Health and Human Services, Department of	Pass-Through	Curl Bio, LLC	Subcontract Award Letter	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	178,909	-
Health and Human Services, Department of	Pass-Through	Duke University	2033652	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	26,962	-
Health and Human Services, Department of	Pass-Through	Duke University	Duke Univ U01 DK065176	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	5,658	-
Health and Human Services, Department of	Pass-Through	Emory University	T953463	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	169,187	-
Health and Human Services, Department of	Pass-Through	George Washington University	S-DPP1920-JC04	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	1,723	-
Health and Human Services, Department of	Pass-Through	George Washington University	S-GRD1718-MD27	93.847	Research	46,325	-
Health and Human Services, Department of	Pass-Through	George Washington University	S-GRD1718-MD39	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	37,958	-
Health and Human Services, Department of	Pass-Through	George Washington University	S-GRD1819-LU27	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	401,730	-
Health and Human Services, Department of	Pass-Through	George Washington University	S-GRD1819-LU39	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	233,568	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000958797	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	14,272	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN-4687635-MICH	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	29,128	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4689775UM	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	211,075	
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2004001437	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	15,234	
					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	100061	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	149,551	-
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	100061	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	27,092	-
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	1987203-1	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(155)	-
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	1987203-3	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	(13,895)	-
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	19-880-10	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	80,722	-
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Northern California	RNG209397-01	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	390,343	-
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Research Foundation Institute	115-9249-021-484	93.847	Research	465	-
Health and Human Services, Department of	Pass-Through	Maine Medical Center	ROSEN R24-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	339,724	-
Health and Human Services, Department of	Pass-Through	Massachusetts General Hospital	233274	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	13,562	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC104839UM	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	21,661	-
Health and Human Services, Department of	Pass-Through	Mount Sinai Hospital	Subaward Agreement	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,517	-
Health and Human Services, Department of	Pass-Through	NorthShore University HealthSystem	EH13-094-S1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	10,803	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60042628 UM	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	28,892	_
					Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	60062217/PO#RF01500664	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	9,457	-
Health and Human Services, Department of	Pass-Through	Sanford Burnham Prebys Medical Research Institute	59630-12824-UM	93.847	Research Diabetes, Digestive, and Kidney Diseases Extramural	239,048	-
Health and Human Services, Department of	Pass-Through	Sanford Burnham Prebys Medical Research Institute	59630-12824-UM	93.847	Research	(59,915)	-

InductoriesNumber of the strength of	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title Diabetes, Digestive, and Kidney Diseases Extramural	Federal Expenditures	Pass-Through
Initial and set of the set	Health and Human Services, Department of	Pass-Through	State University of New York (SUNY)	1098984-76334	93.847	Research	13,537	-
Instantion beinscher Mann der Auton Verster VersterSchle Weiter Verster Vers	Health and Human Services, Department of	Pass-Through	State University of New York (SUNY)	1098984-76334	93.847	Research	12,200	-
Indual materials AgencialNameNameName frameName frameSecond	Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0255-1942-4609	93.847	Research	39,315	-
Indual dama for begin series of the serie	Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0255-A941-4609	93.847	Research	13,088	
Idaha Maraya SuparantaNo.Tanga<	Health and Human Services, Department of	Pass-Through	The Nemours Foundation	3002707020	93.847		15,024	-
Altara Harak Mana Marka Mana Marka Mana Marka Mana Marka Mana Mana Mana Mana Mana Mana Mana Ma	Health and Human Services, Department of	Pass-Through	The University of Texas Health Science Center at Houston	0014327A	93.847		7,809	-
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Habadi Habarian, ExpansionNorthing Horizon (Marco Marco Ma						Diabetes, Digestive, and Kidney Diseases Extramural		
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Halan Huma Sevies, PapermentRealing and particularResult and partinResult and particul	Health and Human Services, Department of	Pass-Through	University of California - San Francisco	9082sc	93.847		(20,491)	-
Halt huma Srvios, DepartmentPair TwopWensing OkageProbate, Problem on the pair of t	Health and Human Services, Department of	Pass-Through	University of California-Santa Cruz	A17-0039-S002-P0630740	93.847		89,288	-
Half ham Sarviso, Dapament of pair-base of service Data services, Dapament of pair-base data services, Da	Health and Human Services, Department of	Pass-Through	University of Chicago	FP053842-02	93.847	Research	17,162	-
Halman Service, Department of partners of service Appartment of partners of Marge Department Marge Departmen	Health and Human Services, Department of	Pass-Through	University of Chicago	FP068366-01 C	93.847	Research	32,976	-
Hait Huma Service, DepartmentPair-Two Isservice, DepartmentJoinshy Order Gardina Chapel HillSoln PairPair Construct Micho Desair Althou De	Health and Human Services, Department of	Pass-Through	University of Ghana	5U54DK116913-08	93.847	Research	27,572	-
Halta Marana Service, DepartmentPace-TraneNearchingNearchingRearchi	Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5101189	93.847	Research	(4,809)	-
Heah ad Huma Service, DepartnerPas-ThrougUniversity OrNot Carolina ad Loge HullS10736PasserPas	Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5101564	93.847	Research	47,792	-
Hella Alfama Sarvises, Department Pass-Three University of Neurois Langual Hall 51071 Pass-Three Research Supervises (Neurois Miching Dessents Extramutal Intervises, Department of Pass-Three) Pass-Three Pass-Th	Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5107938	93.847	Research	42,101	-
Heah and Human Services, Department of Pass-Throug University of Pennsylvania Services	Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5110771	93.847	Research	41,618	-
Halh and Huana Srevices, Department of Pas-Throug University of Pennsylvania Season	Health and Human Services, Department of	Pass-Through	University of Pennsylvania	565718	93.847	Research	7,757	-
Handa Muman Services, Department Pass Through Indirects, Department Pass Through Indirects, Page and Pass Through Pass T	Health and Human Services, Department of	Pass-Through	University of Pennsylvania	568355	93.847		10,481	10,481
Handam dam and services, Department of Pass-Through University of Pennsybania S703/RPO/#13798 Pass-Rino Research Construction Pass-Rino	Health and Human Services, Department of	Pass-Through	University of Pennsylvania	572695	93.847		72,080	-
Hahh and Human Services, Department of Health	Health and Human Services, Department of	Pass-Through	University of Pennsylvania	575038/PO#4137988	93.847		49.836	
Health and Human Services, Department of Health and Human Services, Department ofPass-ThrougUniversity of Southeer California73735617 80965568Besserts 20347Research Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural77,2919Health and Human Services, Department ofPass-ThrougUniversity of Texas Southwestern Medical Center6MO 16023493.847Research Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural82,1156Health and Human Services, Department ofPass-ThrougUniversity of Tuxas Southwestern Medical Center6MO 16023493.847Research Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural82,1156Health and Human Services, Department ofPass-ThrougUniversity of Utah1004520-0393.847Research Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural(491)9Health and Human Services, Department ofPass-ThrougUniversity of Virginia601256.0P #2108545593.847Research Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural(491)9Health and Human Services, Department ofPass-ThrougUniversity of WashingtonUNIVERDIAWSC101987Research Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney D		-				Diabetes, Digestive, and Kidney Diseases Extramural		-
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Health and Human Services, Department of Health		-				Diabetes, Digestive, and Kidney Diseases Extramural		-
Health and Human Services, Department of Pass-Through University of Washington UWSC 1098 93.847 Research Diabetes, Digestive, and Kidney Diseases Extramural 6,713 - Health and Human Services, Department of Pass-Through University of Washington UWSC 1098 93.847 Research Diabetes, Digestive, and Kidney Diseases Extramural 1,21,2,964 -	Health and Human Services, Department of	Pass-Through						-
Health and Human Services, Department of Pass-Through University of Washington UWSC10198//BPO26988 Po18-87 Research Diabetes, Digestive, and Kidney Diseases Extramural 1,21,2,964 - Health and Human Services, Department of Pass-Through Virginia Commonwealth University FP00005212_SA002 93.847 Research Diabetes, Digestive, and Kidney Diseases Extramural 84,825 - Health and Human Services, Department of Pass-Through Wake Forest University WFUHS 114580 93.847 Research Diabetes, Digestive, and Kidney Diseases Extramural 8,637 -		-	University of Virginia					-
Health and Human Services, Department of Pass-Through Virginia Commonwealth University FP000521_SA002 93.847 Research Diabetes, Digestive, and Kidney Diseases Extramural Health and Human Services, Department of Pass-Through Wake Forest University WFUHS 114580 93.847 Research Diabetes, Digestive, and Kidney Diseases Extramural 8,637	Health and Human Services, Department of	Pass-Through	University of Washington	UWSC10198	93.847		6,713	-
Health and Human Services, Department of Pass-Through Virginia Commonwealth University FP00005212_SA002 93.847 Research 84,825 93.847 Health and Human Services, Department of Pass-Through Wake Forest University WFUHS 114580 93.847 Research 8,637 - Diabetes, Digestive, and Kidney Diseases Extramural Diabetes, Digestive, and Kidney Diseases Extramural 8,637 -	Health and Human Services, Department of	Pass-Through	University of Washington	UWSC10198/BPO26988	93.847		1,212,964	-
Health and Human Services, Department of Pass-Through Wake Forest University WFUHS 114580 93.847 Research 8,637 - Diabetes, Digestive, and Kidney Diseases Extramural - - - - -	Health and Human Services, Department of	Pass-Through	Virginia Commonwealth University	FP00005212_SA002	93.847	Research	84,825	-
	Health and Human Services, Department of	Pass-Through	Wake Forest University	WFUHS 114580	93.847	Research	8,637	-
	Health and Human Services, Department of	Pass-Through	Wake Forest University	WFUHS 114580	93.847		3,344	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title Diabetes, Digestive, and Kidney Diseases Extramural	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through Wayne State Univ	versity	WSU16006	93.847	Research	59,247	-
Health and Human Services, Department of	Pass-Through Wayne State Univ	versity	WSU16145-A3	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	21,599	-
Health and Human Services, Department of	Pass-Through Wayne State Univ	versity	WSU16146, 301197	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	12,087	-
Health and Human Services, Department of	Pass-Through Yale University	-	GR102060 (CON-80001142)	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	4,228	
reaction and reaction of	Tub Though Tub Oniversity			201011		\$ 69,310,039	\$ 7,448,072
Health and Human Services, Department of	Direct		1 F31 NS108510-01	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and	\$ 20,333	\$ -
Health and Human Services, Department of	Direct		1 F31 NS110206-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	12,662	-
Health and Human Services, Department of	Direct		1 F31 NS111847-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	6,896	-
Health and Human Services, Department of	Direct		1 F31 NS111906-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	4,136	-
Health and Human Services, Department of	Direct		1 F32 NS110196-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	26,023	-
Health and Human Services, Department of	Direct		1 K99 NS111000-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	11,863	-
Health and Human Services, Department of	Direct		1 R01 NS107463-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	43,722	-
Health and Human Services, Department of	Direct		1 R01 NS107496-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	103,801	-
Health and Human Services, Department of	Direct		1 R01 NS109170-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	189,224	-
Health and Human Services, Department of	Direct		1 R21 NS101030-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	237,048	-
Health and Human Services, Department of	Direct		1 R21 NS107781-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	31,717	-
Health and Human Services, Department of	Direct		1 R21 NS107894-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	29,592	-
Health and Human Services, Department of	Direct		1 R21 NS111154-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	5,566	-
Health and Human Services, Department of	Direct		1 R21 NS111191-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	34,372	-
Health and Human Services, Department of	Direct		1 R21 NS111205-01	93.853	Neurological Disorders	70,584	-
Health and Human Services, Department of	Direct		1 R21 NS112394 1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and	1,592	-
Health and Human Services, Department of	Direct		1 R21 NS113127-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	46,136	-
Health and Human Services, Department of	Direct		1 R21 NS113518-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	19,895	-
Health and Human Services, Department of	Direct		1 R56 NS103845-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	193,257	-
Health and Human Services, Department of	Direct		1 R56 NS109227-01	93.853	Neurological Disorders	41,209	-
Health and Human Services, Department of	Direct		1 U01 NS090526-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(29,928)	-
Health and Human Services, Department of	Direct		1 U01 NS099043-01A1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	1,570,106	658,735
Health and Human Services, Department of	Direct		1 U01 NS099046 01A1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	3,013,147	743,890
Health and Human Services, Department of	Direct		1 UF1 NS107659-01	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	455,951	239
Health and Human Services, Department of	Direct		1R21NS088062-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	1,950	-
Health and Human Services, Department of	Direct		1R21NS104774 02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	117,421	-
Health and Human Services, Department of	Direct		2 R01 NS038916-21	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	150,582	-
Health and Human Services, Department of	Direct		2 R01 NS085054-06A1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	76,313	-
Health and Human Services, Department of	Direct		3 K08 NS101054-03S1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	190,664	-
Health and Human Services, Department of	Direct		3 R01 GM081772-11S1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	48,619	25,200
Health and Human Services, Department of	Direct		4 K08 NS072183-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(11,178)	-
Health and Human Services, Department of	Direct		4 R01 NS073595-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	64,747	-
Health and Human Services, Department of	Direct		4 R01 NS075066-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	1,776	

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Health and Human Services, Department of	Direct		4 R01 NS077946-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	6,953	7,914
Health and Human Services, Department of	Direct		4 R01 NS079157-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	4,688	-
Health and Human Services, Department of	Direct		4 R33 NS101030 02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	247,740	
Health and Human Services, Department of	Direct		4 R37 NS094804-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	513,855	
	Direct		5 F30 NS098571-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	4,753	
Health and Human Services, Department of					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 F31 NS100302-03	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	37,281	-
Health and Human Services, Department of	Direct		5 F31 NS100391-03	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	49,469	-
Health and Human Services, Department of	Direct		5 F31 NS103377-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	34,684	-
Health and Human Services, Department of	Direct		5 F31 NS103378-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	39,756	-
Health and Human Services, Department of	Direct		5 F31 NS103500-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	15,075	-
Health and Human Services, Department of	Direct		5 F32 NS098611-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	(3,518)	-
Health and Human Services, Department of	Direct		5 F99 NS108549-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	38,951	-
Health and Human Services, Department of	Direct		5 F99 NS108556-02	93.853	Neurological Disorders	40,012	-
Health and Human Services, Department of	Direct		5 K08 NS082597-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	121,204	-
Health and Human Services, Department of	Direct		5 K08 NS099379-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	199,882	
Health and Human Services, Department of	Direct		5 K08 NS099427-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	161,814	-
Health and Human Services, Department of	Direct		5 K08 NS109289-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	126,976	-
Health and Human Services, Department of	Direct		5 K23 NS079417-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(1,240)	
Health and Human Services, Department of	Direct		5 P50 NS091856-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	1,740,348	
Health and Human Services, Department of	Direct		5 R01 NS034509-22	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	429,871	
Health and Human Services, Department of	Direct		5 R01 NS038712-21	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	575,455	75,059
					Extramural Research Programs in the Neurosciences and		15,059
Health and Human Services, Department of	Direct		5 R01 NS038916-20	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	614,021	-
Health and Human Services, Department of	Direct		5 R01 NS055746-13	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	600,636	130,840
Health and Human Services, Department of	Direct		5 R01 NS058585-10	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	359,180	-
Health and Human Services, Department of	Direct		5 R01 NS062792-10	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	223,538	-
Health and Human Services, Department of	Direct		5 R01 NS063967-11	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	414,110	-
Health and Human Services, Department of	Direct		5 R01 NS064015-10	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	213,239	-
Health and Human Services, Department of	Direct		5 R01 NS069844-09	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	406,680	-
Health and Human Services, Department of	Direct		5 R01 NS074387-06	93.853	Neurological Disorders	(619)	-
Health and Human Services, Department of	Direct		5 R01 NS077730-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(84,150)	-
Health and Human Services, Department of	Direct		5 R01 NS077933-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(21,332)	-
Health and Human Services, Department of	Direct		5 R01 NS077933-07	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	222,091	-
Health and Human Services, Department of	Direct		5 R01 NS082304-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(239,742)	54,542
Health and Human Services, Department of	Direct		5 R01 NS082311-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	59,288	-
Health and Human Services, Department of	Direct		5 R01 NS085054-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	16,565	2,564
Health and Human Services, Department of	Direct		5 R01 NS086810-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	242,748	2,504
· •			5 R01 NS086810-05		Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct			93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	547,311	-
Health and Human Services, Department of	Direct		5 R01 NS088571-04	93.853	Neurological Disorders	696,636	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 NS089585-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	265,315	-
Health and Human Services, Department of	Direct		5 R01 NS089896-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	387,016	-
Health and Human Services, Department of	Direct		5 R01 NS090925-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	368,418	_
				93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	593,552	
Health and Human Services, Department of	Direct		5 R01 NS091112-05		Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 R01 NS092706-04	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	563,571	134,764
Health and Human Services, Department of	Direct		5 R01 NS094399-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	348,449	29,591
Health and Human Services, Department of	Direct		5 R01 NS094413-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	485,808	-
Health and Human Services, Department of	Direct		5 R01 NS094678-03	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	78,422	-
Health and Human Services, Department of	Direct		5 R01 NS096756-04	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	349,891	-
Health and Human Services, Department of	Direct		5 R01 NS096785-09	93.853	Neurological Disorders	795,838	-
Health and Human Services, Department of	Direct		5 R01 NS096917-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	351,876	-
Health and Human Services, Department of	Direct		5 R01 NS097498-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	344,423	6,486
Health and Human Services, Department of	Direct		5 R01 NS097525-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	521,445	-
Health and Human Services, Department of	Direct		5 R01 NS097542-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	467,556	
Health and Human Services, Department of			5 R01 NS099160-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	194,523	
	Direct				Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 R01 NS099280-04	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	496,152	-
Health and Human Services, Department of	Direct		5 R01 NS099340-03	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	518,921	4,893
Health and Human Services, Department of	Direct		5 R01 NS099535-03	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	814,052	-
Health and Human Services, Department of	Direct		5 R01 NS100156-04	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	456,106	-
Health and Human Services, Department of	Direct		5 R01 NS101597-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	486,721	-
Health and Human Services, Department of	Direct		5 R01 NS102715-03	93.853	Neurological Disorders	637,670	75,698
Health and Human Services, Department of	Direct		5 R01 NS104299-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	258,178	-
Health and Human Services, Department of	Direct		5 R01 NS104776-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	480,730	-
Health and Human Services, Department of	Direct		5 R01 NS105132-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	242,996	-
Health and Human Services, Department of	Direct		5 R01 NS105385-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	465,730	96,378
Health and Human Services, Department of	Direct		5 R01 NS105556-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	441,211	20,825
Health and Human Services, Department of	Direct		5 R01 NS106616-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	308,345	20,025
					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 R01 NS10674-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	523,011	-
Health and Human Services, Department of	Direct		5 R01 NS108042-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	316,691	-
Health and Human Services, Department of	Direct		5 R01NS091242-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	444,545	248,098
Health and Human Services, Department of	Direct		5 R01-NS100687-03	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	1,523,938	-
Health and Human Services, Department of	Direct		5 R03 NS096484-02	93.853	Neurological Disorders	64,159	-
Health and Human Services, Department of	Direct		5 R21 NS091545-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	85,478	
Health and Human Services, Department of	Direct		5 R21 NS093121-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(673)	-
Health and Human Services, Department of	Direct		5 R21 NS093399-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(385)	
Health and Human Services, Department of	Direct		5 R21 NS094047-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(705)	
Health and Human Services, Department of	Direct		5 R21 NS094091-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(15,310)	-
Health and Human Services, Department of					Extramural Research Programs in the Neurosciences and		
meann and runnan services, Department of	Direct		5 R21 NS098003-02	93.853	Neurological Disorders	150,133	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R21 NS098066-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(10,116)	-
Health and Human Services, Department of	Direct		5 R21 NS098200-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	49,590	-
Health and Human Services, Department of	Direct		5 R21 NS098211-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(3,376)	
· ·					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 R21 NS099684-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	134,770	-
Health and Human Services, Department of	Direct		5 R21 NS099783-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	88,162	-
Health and Human Services, Department of	Direct		5 R21 NS102924-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	190,095	-
Health and Human Services, Department of	Direct		5 R21 NS102960-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	144,885	-
Health and Human Services, Department of	Direct		5 R21 NS103215-02	93.853	Neurological Disorders	225,519	-
Health and Human Services, Department of	Direct		5 R21 NS103754-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	157,380	-
Health and Human Services, Department of	Direct		5 R21 NS104584-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	210,459	-
Health and Human Services, Department of	Direct		5 R21 NS104663-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	106,737	-
Health and Human Services, Department of	Direct		5 R21 NS107879-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	189,042	
					Extramural Research Programs in the Neurosciences and		
Health and Human Services, Department of	Direct		5 R21 NS108783-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	200,842	-
Health and Human Services, Department of	Direct		5 R25 NS088248-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	329,073	87,633
Health and Human Services, Department of	Direct		5 R25 NS089450-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	37,467	-
Health and Human Services, Department of	Direct		5 R25 NS107159-02	93.853	Neurological Disorders	91,735	-
Health and Human Services, Department of	Direct		5 R37 NS076752-07	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	577,732	-
Health and Human Services, Department of	Direct		5 U01 NS056975-10	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	219,972	-
Health and Human Services, Department of	Direct		5 U01 NS090364-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	675,978	-
Health and Human Services, Department of	Direct		5 U01 NS094375-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	386,287	57,461
Health and Human Services, Department of	Direct		5 U01 NS100611-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	377,717	_
					Extramural Research Programs in the Neurosciences and	465,588	
Health and Human Services, Department of	Direct		5 U01 NS106670-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 U10 NS086526-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	36,159	-
Health and Human Services, Department of	Direct		5 U24 NS100659-03	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	538,894	74,848
Health and Human Services, Department of	Direct		5 U24 NS107158-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	179,996	-
Health and Human Services, Department of	Direct		5 U24 NS107214-02	93.853	Neurological Disorders	253,521	-
Health and Human Services, Department of	Direct		5 UH3 NS092981-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	344,666	136,661
Health and Human Services, Department of	Direct		5R01 NS103946-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	370,267	-
Health and Human Services, Department of	Direct		T32 NS007222	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	301,051	-
Health and Human Services, Department of	Direct		T32 NS076401	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	219,252	
		T.L. i			Extramural Research Programs in the Neurosciences and		
Health and Human Services, Department of	Pass-Through Case Western Rese		1077-SUB	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	47,672	-
Health and Human Services, Department of	Pass-Through Case Western Rese	rve University	841-SUB	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	(44,581)	-
Health and Human Services, Department of	Pass-Through Case Western Rese	rve University	RES512072	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	164,518	-
Health and Human Services, Department of	Pass-Through Colorado School of	Mines	401419-5802	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	105,447	-
Health and Human Services, Department of	Pass-Through Columbia Universi	ty	2 (GG010337-01)	93.853	Neurological Disorders	7,505	-
Health and Human Services, Department of	Pass-Through Hennepin Healthca	re Research Institute (HHRI)	15007-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	489,859	-
Health and Human Services, Department of	Pass-Through Houston Methodist	Research Institute	AGMT00000657	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	22,281	-
-	-				Extramural Research Programs in the Neurosciences and		

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
and and the second s	Deer Theresh	LA BioMed	21027 134	02.952	Extramural Research Programs in the Neurosciences and	51 550	
alth and Human Services, Department of	Pass-Through	LA BioMed	31037-UM	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	51,550	-
Ith and Human Services, Department of	Pass-Through	Mayo Clinic	5P01NS044233-10	93.853	Neurological Disorders	548	-
an and Haman Services, Department of	russ rinougn	Mayo chine	5101110011255 10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Extramural Research Programs in the Neurosciences and	510	
th and Human Services, Department of	Pass-Through	Research Foundation of City University of New York (CUNY)	CM0002996-00	93.853	Neurological Disorders	24,890	-
	8	, , , , , , , , , , , , , , , , , , ,			Extramural Research Programs in the Neurosciences and		
th and Human Services, Department of	Pass-Through	Temple University	360908-05430-02	93.853	Neurological Disorders	31,505	-
					Extramural Research Programs in the Neurosciences and		
th and Human Services, Department of	Pass-Through	University of California - Los Angeles	1580 G UE874	93.853	Neurological Disorders	65,661	-
	D 771 1		10000	02.052	Extramural Research Programs in the Neurosciences and	41.440	
th and Human Services, Department of	Pass-Through	University of California - San Francisco	10069	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	41,449	-
th and Human Services, Department of	Pass-Through	University of California - San Francisco	10180sc	93.853	Neurological Disorders	116,700	_
in and Haman Ber (1965), Department of	russ rinougn	Sintersky of Camorinal San Francisco	1010050	751000	Extramural Research Programs in the Neurosciences and	110,700	
h and Human Services, Department of	Pass-Through	University of California - San Francisco	10180sc	93.853	Neurological Disorders	(138,121)	661,500
* *	U				Extramural Research Programs in the Neurosciences and		
h and Human Services, Department of	Pass-Through	University of California - San Francisco	7938sc	93.853	Neurological Disorders	1,776	-
					Extramural Research Programs in the Neurosciences and		
h and Human Services, Department of	Pass-Through	University of Minnesota	N004631406	93.853	Neurological Disorders	66,468	-
	D 771 1		21007254201	02.052	Extramural Research Programs in the Neurosciences and	16 207	
th and Human Services, Department of	Pass-Through	University of Minnesota	N007254301	93.853	Neurological Disorders	16,297	-
th and Human Services, Department of	Pass-Through	University of Minnesota	P006124701	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	22,882	
in and Human Services, Department of	rass-mough	University of Minnesota	P000124701	95.655	Extramural Research Programs in the Neurosciences and	22,862	-
th and Human Services, Department of	Pass-Through	University of Virginia	GB10094 PO 2167241	93.853	Neurological Disorders	29,805	-
in and Haman Ber (1965), Department of	russ rinougn	om enský or v nghina	051007110 2107211	751000	Extramural Research Programs in the Neurosciences and	29,000	
th and Human Services, Department of	Pass-Through	University of Virginia	GB10094-147355	93.853	Neurological Disorders	588,207	-
	-				Extramural Research Programs in the Neurosciences and		
th and Human Services, Department of	Pass-Through	University of Virginia	GC12107-149698	93.853	Neurological Disorders	763,561	-
					Extramural Research Programs in the Neurosciences and		
h and Human Services, Department of	Pass-Through	Vanderbilt University	UNIV59892	93.853	Neurological Disorders	279,133	-
	D 771 1	W Contraction in	WGU10027	02.052	Extramural Research Programs in the Neurosciences and	(117.455)	
th and Human Services, Department of	Pass-Through	Wayne State University	WSU18027	93.853	Neurological Disorders	(117,455) \$ 39,997,790	\$ 3,333,819
th and Human Services, Department of	Direct		1 F30 AI136315-01	93.855	Allergy and Infectious Diseases Research	\$ 39,997,790	
h and Human Services, Department of	Direct		1 F31 AI136615-01	93.855	Allergy and Infectious Diseases Research	33,223	
th and Human Services, Department of	Direct		1 F31 AI140618-01	93.855	Allergy and Infectious Diseases Research	33,155	_
h and Human Services, Department of	Direct		1 K01 AI137123-01A1	93.855	Allergy and Infectious Diseases Research	56,502	-
th and Human Services, Department of	Direct		1 K01 AI141579-01	93.855	Allergy and Infectious Diseases Research	42,267	
h and Human Services, Department of	Direct		1 R01 AI 140133-01A1	93.855	Allergy and Infectious Diseases Research	14,276	
h and Human Services, Department of	Direct		1 R01 AI134999-01A1	93.855	Allergy and Infectious Diseases Research	15,993	-
h and Human Services, Department of	Direct		1 R01 AI136941-01A1	93.855	Allergy and Infectious Diseases Research	20,736	-
th and Human Services, Department of	Direct		1 R01 AI136977-01A1	93.855	Allergy and Infectious Diseases Research	41,213	8,85
th and Human Services, Department of	Direct		1 R01 AI143852-01	93.855	Allergy and Infectious Diseases Research	70,310	-
h and Human Services, Department of	Direct		1 R21 AI138177-01A1	93.855	Allergy and Infectious Diseases Research	35,253	-
th and Human Services, Department of	Direct		1 R21 AI138180-01A1	93.855	Allergy and Infectious Diseases Research	32,246	-
th and Human Services, Department of	Direct		1 R21 AI141832-01	93.855	Allergy and Infectious Diseases Research	13,598	-
th and Human Services, Department of	Direct		1 R21 AI141835-01	93.855	Allergy and Infectious Diseases Research	65,480	-
h and Human Services, Department of	Direct		1 R21 AI142032-01A1	93.855	Allergy and Infectious Diseases Research	91,115	-
h and Human Services, Department of	Direct		1 R21 AI142047 - 01	93.855	Allergy and Infectious Diseases Research	29,848	-
h and Human Services, Department of	Direct		1 R21 AI142073-01A1	93.855	Allergy and Infectious Diseases Research	14,019	-
h and Human Services, Department of h and Human Services, Department of	Direct Direct		1 R21 AI143276-01 1 R56 AI123262-01	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	84,652 (6,866)	-
h and Human Services, Department of	Direct		1 R56 A1123262-01 1 R56 A1130004-01A1	93.855	Allergy and Infectious Diseases Research	(0,800) 218,193	-
and Human Services, Department of	Direct		1 R56 AI130130-01	93.855	Allergy and Infectious Diseases Research	424,133	174,81
h and Human Services, Department of	Direct		1 R56AI129428-01	93.855	Allergy and Infectious Diseases Research	86,803	
h and Human Services, Department of	Direct		1 UM1 AI144298-01	93.855	Allergy and Infectious Diseases Research	3,190	-
and Human Services, Department of	Direct		2 R01 AI044115-19	93.855	Allergy and Infectious Diseases Research	104,768	-
and Human Services, Department of	Direct		2 R21 AI119463-02	93.855	Allergy and Infectious Diseases Research	(20)	-
and Human Services, Department of	Direct		2 R56 AI097150-05	93.855	Allergy and Infectious Diseases Research	70,396	-
h and Human Services, Department of	Direct		2R56AI101285-06A1	93.855	Allergy and Infectious Diseases Research	282,441	-
and Human Services, Department of	Direct		4 R01 AI101155-05	93.855	Allergy and Infectious Diseases Research	289,190	245,03
and Human Services, Department of	Direct		4 R33 AI127492-03	93.855	Allergy and Infectious Diseases Research	159,325	-
and Human Services, Department of	Direct		5 F31 AI126651-03	93.855	Allergy and Infectious Diseases Research	10,712	-
n and Human Services, Department of	Direct		5 F31 AI129697-02	93.855	Allergy and Infectious Diseases Research	46,551	-
and Human Services, Department of	Direct		5 F31 AI131957-03	93.855	Allergy and Infectious Diseases Research	34,720	-
h and Human Services, Department of h and Human Services, Department of	Direct		5 F31 AI134287-02 5 F32 AI134016-02	93.855 93.855	Allergy and Infectious Diseases Research	38,598 58,633	-
h and Human Services, Department of h and Human Services, Department of	Direct Direct		5 F32 AI134016-02 5 K08 AI119182-04	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	58,633 226,898	-
h and Human Services, Department of h and Human Services, Department of	Direct		5 K08 A1119182-04 5 K08 A1128006-02	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	226,898 176,987	-
	Direct		5 K08 AI128000-02 5 K08 AI130362-2	93.855	Allergy and Infectious Diseases Research	198,012	-
h and Human Services. Department of			5 K08 AI130302-2 5 K23 AI108951-05	93.855	Allergy and Infectious Diseases Research	198,012 194,196	
	Direct						
Ith and Human Services, Department of	Direct Direct		5 K23 AI123595-03	93.855	Allergy and Infectious Diseases Research	144,908	-
Ith and Human Services, Department of Ith and Human Services, Department of Ith and Human Services, Department of Ith and Human Services, Department of							-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier 5 R01 AI046675-19	CFDA Number		Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 A1046675-19 5 R01 A1060584-13	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	429,789 489,666	-
Health and Human Services, Department of	Direct		5 R01 AI063331-14	93.855	Allergy and Infectious Diseases Research	333,400	-
Health and Human Services, Department of	Direct		5 R01 AI064296-13	93.855	Allergy and Infectious Diseases Research	268,061	-
Health and Human Services, Department of	Direct		5 R01 AI071727-13	93.855	Allergy and Infectious Diseases Research	619,281	31,045
Health and Human Services, Department of	Direct		5 R01 AI080870-10	93.855	Allergy and Infectious Diseases Research	417,993	-
Health and Human Services, Department of	Direct		5 R01 AI091627-07	93.855	Allergy and Infectious Diseases Research	(12,773)	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AI091721-05 5 R01 AI097134-05	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	(23,820) 110,025	4,895
Health and Human Services, Department of	Direct		5 R01 AI101285-05	93.855	Allergy and Infectious Diseases Research	(6,166)	-,055
Health and Human Services, Department of	Direct		5 R01 AI105068-05	93.855	Allergy and Infectious Diseases Research	184,167	-
Health and Human Services, Department of	Direct		5 R01 AI106806-03	93.855	Allergy and Infectious Diseases Research	69,534	-
Health and Human Services, Department of	Direct		5 R01 AI110780-05	93.855	Allergy and Infectious Diseases Research	601,949	228,638
Health and Human Services, Department of	Direct		5 R01 AI112626-05	93.855	Allergy and Infectious Diseases Research	540,060	92,586
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AI117229-05 5 R01 AI118886-04	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	411,388 353,540	-
Health and Human Services, Department of	Direct		5 R01 AI119446-06	93.855	Allergy and Infectious Diseases Research	615,733	-
Health and Human Services, Department of	Direct		5 R01 AI120526-04	93.855	Allergy and Infectious Diseases Research	442,443	-
Health and Human Services, Department of	Direct		5 R01 AI120607-04	93.855	Allergy and Infectious Diseases Research	429,856	62,100
Health and Human Services, Department of	Direct		5 R01 AI120997-0.	93.855	Allergy and Infectious Diseases Research	875,634	530,549
Health and Human Services, Department of	Direct		5 R01 AI121302-04	93.855	Allergy and Infectious Diseases Research	495,870	69,590
Health and Human Services, Department of	Direct Direct		5 R01 AI123093-04	93.855 93.855	Allergy and Infectious Diseases Research	951,669 322,564	457,736
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 AI123957-04 5 R01 AI125307-03	93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	479,451	14,944
Health and Human Services, Department of	Direct		5 R01 AI127070-04	93.855	Allergy and Infectious Diseases Research	523,725	-
Health and Human Services, Department of	Direct		5 R01 AI129958-03	93.855	Allergy and Infectious Diseases Research	836,930	-
Health and Human Services, Department of	Direct		5 R01 AI130025-03	93.855	Allergy and Infectious Diseases Research	591,120	-
Health and Human Services, Department of	Direct		5 R01 AI132372-03	93.855	Allergy and Infectious Diseases Research	639,746	241,346
Health and Human Services, Department of	Direct		5 R01 AI134678-02	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	623,807	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AI137085 02 5 R01 AI138347-02	93.855	Allergy and Infectious Diseases Research	176,500 671,369	7,499
Health and Human Services, Department of	Direct		5 R01 AI138347-02	93.855	Allergy and Infectious Diseases Research	392,277	-
Health and Human Services, Department of	Direct		5 R01 AI33935-02	93.855	Allergy and Infectious Diseases Research	326,076	-
Health and Human Services, Department of	Direct		5 R01 Al059722-14	93.855	Allergy and Infectious Diseases Research	257,320	-
Health and Human Services, Department of	Direct		5 R01 Al116791-04	93.855	Allergy and Infectious Diseases Research	714,775	-
Health and Human Services, Department of	Direct		5 R01AI121156-04	93.855	Allergy and Infectious Diseases Research	485,136	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R03 AI130610-02 5 R03 AI137658 02	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	80,748 57,512	-
Health and Human Services, Department of	Direct		5 R05 AI157058 02 5 R21 AI110907-02	93.855	Allergy and Infectious Diseases Research	(386)	-
Health and Human Services, Department of	Direct		5 R21 AI117371-02	93.855	Allergy and Infectious Diseases Research	77,063	-
Health and Human Services, Department of	Direct		5 R21 AI117561-02	93.855	Allergy and Infectious Diseases Research	(352)	-
Health and Human Services, Department of	Direct		5 R21 AI120599-02	93.855	Allergy and Infectious Diseases Research	1,161	-
Health and Human Services, Department of	Direct		5 R21 AI120815-02	93.855	Allergy and Infectious Diseases Research	(4,369)	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R21 AI121721-02 5 R21 AI122098-02	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	27,142 79,306	-
Health and Human Services, Department of	Direct		5 R21 AI122098-02 5 R21 AI122244-02	93.855	Allergy and Infectious Diseases Research	197,771	-
Health and Human Services, Department of	Direct		5 R21 AI126054-02	93.855	Allergy and Infectious Diseases Research	185,475	-
Health and Human Services, Department of	Direct		5 R21 AI127492-02	93.855	Allergy and Infectious Diseases Research	129,079	-
Health and Human Services, Department of	Direct		5 R21 AI128120-02	93.855	Allergy and Infectious Diseases Research	203,882	-
Health and Human Services, Department of	Direct		5 R21 AI130328 02	93.855	Allergy and Infectious Diseases Research	175,087	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R21 AI132379-02 5 R21 AI135403-02	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	97,136 276,733	-
Health and Human Services, Department of	Direct		5 R21 AI135405-02 5 R21 AI135559-02	93.855	Allergy and Infectious Diseases Research	201,919	34,756
Health and Human Services, Department of	Direct		5 R21 AI136657-02	93.855	Allergy and Infectious Diseases Research	233,984	20,123
Health and Human Services, Department of	Direct		5 R21 AI137535-02	93.855	Allergy and Infectious Diseases Research	106,656	22,104
Health and Human Services, Department of	Direct		5 R21 AI137669-02	93.855	Allergy and Infectious Diseases Research	274,811	-
Health and Human Services, Department of	Direct		5 R33 AI116158-05	93.855	Allergy and Infectious Diseases Research	438,494	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R33 AI116190-05 5 U01 AI124255-04	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	509,594 2,360,374	160,626
Health and Human Services, Department of	Direct		5 U19 AI110502-05	93.855	Allergy and Infectious Diseases Research	212,094	17,145
Health and Human Services, Department of	Direct		5 U19 AI116482-05	93.855	Allergy and Infectious Diseases Research	1,545,475	207,645
Health and Human Services, Department of	Direct		5 UH2 AI128900-02	93.855	Allergy and Infectious Diseases Research	13,291	-
Health and Human Services, Department of	Direct		5 UH3AI128900 04	93.855	Allergy and Infectious Diseases Research	120,564	-
Health and Human Services, Department of	Direct		5 UM1 AI110557-05	93.855	Allergy and Infectious Diseases Research	80,250	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5-R21AI137222-02 7 R13AI096720 09	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	144,122	5,913
Health and Human Services, Department of	Direct		BTSAI	93.855	Allergy and Infectious Diseases Research	89,494	-
Health and Human Services, Department of	Direct		T32 AI007413	93.855	Allergy and Infectious Diseases Research	371,864	-
Health and Human Services, Department of	Direct		T32 AI007413	93.855	Allergy and Infectious Diseases Research	318,903	-
Health and Human Services, Department of	Direct		T32 AI007528	93.855	Allergy and Infectious Diseases Research	328,898	-
Health and Human Services, Department of	Pass-Through	Benaroya Research Institute at Virginia Mason (BRI)	FY15ITN079	93.855	Allergy and Infectious Diseases Research	9,724	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass Through	Benaroya Research Institute at Virginia Mason (BRI) Benaroya Research Institute at Virginia Mason (BRI)	FY17ITN211 FY19ITN079	93.855	Allergy and Infectious Diseases Research	64,576 7 368	-
ricarui anu riuman Scivices, Department of	Pass-Through	Center for Infectious Disease Research	FY19ITN079	93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	7,368 (1,890)	-
	Pass-Through		Umich-10135-D				
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Columbia University	Umich-10135-D 4(GG011022-01)	93.855 93.855	Allergy and Infectious Diseases Research	30,888	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	r CFDA Program Title	Federal Expendit	ures P:	ass-Through
Health and Human Services, Department of	Pass-Through	FHI 360 Headquarters	PO16001198	93.855	Allergy and Infectious Diseases Research	• 2	2,811	-
Health and Human Services, Department of	Pass-Through	Henry Ford Health System	P01 AI089473	93.855	Allergy and Infectious Diseases Research		(197)	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000951968	93.855	Allergy and Infectious Diseases Research	2	0,522	
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000962952	93.855	Allergy and Infectious Diseases Research		4,709	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2004030292	93.855	Allergy and Infectious Diseases Research		3,081	_
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	LDR 01 MOD 06	93.855	Allergy and Infectious Diseases Research		3,056	
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	UM1AI068632 / JHU PI - Nachman	93.855	Allergy and Infectious Diseases Research		9,101	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC105644UofM	93.855	Allergy and Infectious Diseases Research		3,175	-
Health and Human Services, Department of Health and Human Services, Department of			RC10564408IM RC107329UM	93.855	Allergy and Infectious Diseases Research		0,894	-
	Pass-Through	Michigan State University						-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC107329UM	93.855	Allergy and Infectious Diseases Research		4,569	-
Health and Human Services, Department of	Pass-Through	New York University	iB00153609	93.855	Allergy and Infectious Diseases Research		2,011	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60047274RUM	93.855	Allergy and Infectious Diseases Research		6,167	-
Health and Human Services, Department of	Pass-Through	NOTA Laboratories LLC	Roundtable Research Agreement	93.855	Allergy and Infectious Diseases Research		0,595	-
Health and Human Services, Department of	Pass-Through	Pennsylvania State University	5869-UM-DHHS-0856	93.855	Allergy and Infectious Diseases Research		2,916	-
Health and Human Services, Department of	Pass-Through	Rush University Medical Center	Sub award 14102310-MICH	93.855	Allergy and Infectious Diseases Research		4,281	-
Health and Human Services, Department of	Pass-Through	Rutgers University	0795	93.855	Allergy and Infectious Diseases Research		4,578	-
Health and Human Services, Department of	Pass-Through	St. Jude Children's Research Hospital	112525010-7883641	93.855	Allergy and Infectious Diseases Research		7,442	-
Health and Human Services, Department of	Pass-Through	State University of New York (SUNY)	1136031/76463	93.855	Allergy and Infectious Diseases Research		6,338	-
Health and Human Services, Department of	Pass-Through	State University of New York (SUNY)	R1056568	93.855	Allergy and Infectious Diseases Research	3	1,438	-
Health and Human Services, Department of	Pass-Through	Sustainable Sciences Institute	Subaward Agreement	93.855	Allergy and Infectious Diseases Research		4,963	-
Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0255-1351-4609	93.855	Allergy and Infectious Diseases Research	3	0,346	-
Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0255-B001-4609	93.855	Allergy and Infectious Diseases Research		9,454	-
Health and Human Services, Department of	Pass-Through	Therapeutics System Research Lab, Inc. (TSRL, Inc.)	Subcontract 19-PAF01327	93.855	Allergy and Infectious Diseases Research		3,623	-
Health and Human Services, Department of	Pass-Through	Tufts University	100610-00001	93.855	Allergy and Infectious Diseases Research		0,282	
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	0000421524-005	93.855	Allergy and Infectious Diseases Research		(1,286)	_
Health and Human Services, Department of	Pass-Through	University of California - Berkeley	0000421324-003	93.855	Allergy and Infectious Diseases Research		0,250	-
Health and Human Services, Department of Health and Human Services, Department of		University of California - Berkeley University of California - Davis	A19-2105-S001	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research		0,250 5,586	-
	Pass-Through	University of California - Davis University of California - San Francisco	7196sc	93.855 93.855			5,586 8,739	-
Health and Human Services, Department of	Pass-Through				Allergy and Infectious Diseases Research			-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	8246SC	93.855	Allergy and Infectious Diseases Research		9,797	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	8808sc	93.855	Allergy and Infectious Diseases Research	12	2,599	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	8808sc	93.855	Allergy and Infectious Diseases Research		425	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	8970sc	93.855	Allergy and Infectious Diseases Research		7,073	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	9433sc	93.855	Allergy and Infectious Diseases Research	17	5,413	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	9438sc	93.855	Allergy and Infectious Diseases Research	18	5,187	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	Subaward 7196sc	93.855	Allergy and Infectious Diseases Research	(1	3,229)	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	56811375	93.855	Allergy and Infectious Diseases Research		8,032	
Health and Human Services, Department of	Pass-Through	University of Florida, The	SUB00001658 - Project P0105695	93.855	Allergy and Infectious Diseases Research		5,310	
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	574524/4145570PO4338198	93.855	Allergy and Infectious Diseases Research		9.649	
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	Subaward 573861/ PO 4218003	93.855	Allergy and Infectious Diseases Research		9,049 1,644	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0050569 (127631-2)	93.855	Allergy and Infectious Diseases Research		5,738	-
								-
Health and Human Services, Department of	Pass-Through	Vanderbilt University	VUMC64255	93.855	Allergy and Infectious Diseases Research		3,294	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University	VUMC67195	93.855	Allergy and Infectious Diseases Research		1,746	-
Health and Human Services, Department of	Pass-Through	VLP Biotech, Inc	Award Letter	93.855	Allergy and Infectious Diseases Research		7,422	-
Health and Human Services, Department of	Pass-Through	Washington University in St. Louis	WU-19-228	93.855	Allergy and Infectious Diseases Research		3,265	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17079	93.855	Allergy and Infectious Diseases Research	5	4,824	-
Health and Human Services, Department of	Pass-Through	Western Michigan University	500.008	93.855	Allergy and Infectious Diseases Research		6,269	-
Health and Human Services, Department of	Pass-Through	Western Michigan University	500.009-A	93.855	Allergy and Infectious Diseases Research	1	7,629	-
	0					\$ 31.59	9.169 \$	2.637.948
Health and Human Services, Department of	Direct		1 F31 GM131631-01	93.859	Biomedical Research and Research Training	\$ 2	0,279 \$	-
Health and Human Services, Department of	Direct		1 K99 GM120457-01	93.859	Biomedical Research and Research Training		0,860	
Health and Human Services, Department of	Direct		1 R01 GM121656-03	93.859	Biomedical Research and Research Training		4,287	81,371
Health and Human Services, Department of	Direct		1 R01 GM127030-03	93.859	Biomedical Research and Research Training		.4,287 18,080	01,571
Health and Human Services, Department of Health and Human Services, Department of	Direct		1 R01 GM12/787-01A1 1 R01 GM130763-01	93.859	Biomedical Research and Research Training Biomedical Research and Research Training		4,876	-
				93.859 93.859			4,876	62 522
Health and Human Services, Department of	Direct		1 R01 GM130997-01		Biomedical Research and Research Training			62,523
Health and Human Services, Department of	Direct		1 R35 GM130183-01	93.859	Biomedical Research and Research Training		2,934	-
Health and Human Services, Department of	Direct		1 R35 GM130292 01S1	93.859	Biomedical Research and Research Training		5,188	-
Health and Human Services, Department of	Direct		1 R35 GM130587-01	93.859	Biomedical Research and Research Training		4,563	-
Health and Human Services, Department of	Direct		1 R35 GM131720-01	93.859	Biomedical Research and Research Training		9,603	-
Health and Human Services, Department of	Direct		1 R35 GM131744-01	93.859	Biomedical Research and Research Training		8,809	-
Health and Human Services, Department of	Direct		1 R35 GM131772-01	93.859	Biomedical Research and Research Training	1	8,826	-
Health and Human Services, Department of	Direct		1 R35 GM131835 01	93.859	Biomedical Research and Research Training		0,750	-
Health and Human Services, Department of	Direct		1 R35 GM131919-01	93.859	Biomedical Research and Research Training		3,573	-
Health and Human Services, Department of	Direct		1 R35 GM131922-01	93.859	Biomedical Research and Research Training		4,326	-
Health and Human Services, Department of	Direct		1R01GM126028-01A1	93.859	Biomedical Research and Research Training		1,083	
Health and Human Services, Department of	Direct		2 R01 GM077430 13	93.859	Biomedical Research and Research Training		3,546	-
Health and Human Services, Department of	Direct		2 R01 GM083107-13	93.859	Biomedical Research and Research Training		5,487	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		2 R01 GM083107-13 2 R01 GM083241-09	93.859	Biomedical Research and Research Training Biomedical Research and Research Training		1,420	-
					Biomedical Research and Research Training Biomedical Research and Research Training		0,262	-
Health and Human Services, Department of	Direct		3 R35 GM128592-02S1	93.859				-
Health and Human Services, Department of	Direct		3 R35 GM128637-02S1	93.859	Biomedical Research and Research Training		3,267	-
Health and Human Services, Department of	Direct		4 P50 GM103297-05	93.859	Biomedical Research and Research Training		2,281)	-
Health and Human Services, Department of	Direct		4 R01 GM049500-18	93.859	Biomedical Research and Research Training		8,504	-
Health and Human Services, Department of	Direct		4 R01 GM097117-05	93.859	Biomedical Research and Research Training		9,530	-
Health and Human Services, Department of	Direct		4 R01 GM099549-04	93.859	Biomedical Research and Research Training		1,696)	(285)
Health and Human Services, Department of	Direct		4 R01 GM102829-04	93.859	Biomedical Research and Research Training	(1	4,507)	-
Health and Human Services, Department of	Direct		4 R01 GM103232-04	93.859	Biomedical Research and Research Training		9,051	-
Health and Human Services, Department of	Direct		4 R01 GM105942-04	93.859	Biomedical Research and Research Training	(6,793)	-
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Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier 4 R01 GM108022-09	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
alth and Human Services, Department of alth and Human Services, Department of	Direct Direct		4 R01 GM108022-09 4 R01 GM106180-04	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	(48,135) (3,412)	-
alth and Human Services, Department of	Direct		4 R25 GM058641-17	93.859	Biomedical Research and Research Training	(5,412) 116,584	-
alth and Human Services, Department of	Direct		5 R01 GM105920-04	93.859	Biomedical Research and Research Training	120,166	-
alth and Human Services, Department of	Direct		5 R01 GM111486-05	93.859	Biomedical Research and Research Training	258,007	-
alth and Human Services, Department of	Direct		5 F32 FM126635-02	93.859	Biomedical Research and Research Training	46,415	-
alth and Human Services, Department of	Direct		5 F32 GM115198-03	93.859	Biomedical Research and Research Training	36,095	-
alth and Human Services, Department of	Direct		5 F32 GM122357-02	93.859	Biomedical Research and Research Training	43,199	-
alth and Human Services, Department of	Direct		5 F32 GM130010-02	93.859	Biomedical Research and Research Training	48,343	-
alth and Human Services, Department of	Direct		5 K08 GM109105-04	93.859	Biomedical Research and Research Training	76,310	-
alth and Human Services, Department of	Direct		5 K08 GM115859-04	93.859	Biomedical Research and Research Training	183,995	-
alth and Human Services, Department of	Direct		5 K12 GM111725-04	93.859	Biomedical Research and Research Training	753,955	106,35
alth and Human Services, Department of	Direct Direct		5 K23 GM104354-05	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	183,525 143,325	-
alth and Human Services, Department of alth and Human Services, Department of	Direct		5 K23 GM126317-02 5 K99 GM120511-02	93.859	Biomedical Research and Research Training	24,271	-
alth and Human Services, Department of	Direct		5 R00 GM111767-05	93.859	Biomedical Research and Research Training	185,515	
lth and Human Services, Department of	Direct		5 R00 GM117268-05	93.859	Biomedical Research and Research Training	291,059	_
alth and Human Services, Department of	Direct		5 R01 GM024872-42	93.859	Biomedical Research and Research Training	454,994	-
alth and Human Services, Department of	Direct		5 R01 GM037554-28	93.859	Biomedical Research and Research Training	279,165	-
alth and Human Services, Department of	Direct		5 R01 GM040602-29	93.859	Biomedical Research and Research Training	322,779	-
alth and Human Services, Department of	Direct		5 R01 GM053396-29	93.859	Biomedical Research and Research Training	751,907	-
alth and Human Services, Department of	Direct		5 R01 GM053536-20	93.859	Biomedical Research and Research Training	125,146	-
alth and Human Services, Department of	Direct		5 R01 GM056398-20	93.859	Biomedical Research and Research Training	378,074	-
Ith and Human Services, Department of	Direct		5 R01 GM065330-13	93.859	Biomedical Research and Research Training	337,790	-
lth and Human Services, Department of	Direct		5 R01 GM065372-11	93.859	Biomedical Research and Research Training	313,619	-
Ith and Human Services, Department of	Direct		5 R01 GM076477-12	93.859	Biomedical Research and Research Training	313,005	-
th and Human Services, Department of	Direct		5 R01 GM077430-12	93.859	Biomedical Research and Research Training	(657,453)	-
lth and Human Services, Department of	Direct		5 R01 GM079533-09	93.859	Biomedical Research and Research Training	(2,989)	-
lth and Human Services, Department of	Direct		5 R01 GM081702-08	93.859	Biomedical Research and Research Training	229,001	-
Ith and Human Services, Department of	Direct		5 R01 GM082856-09	93.859	Biomedical Research and Research Training	543	-
Ith and Human Services, Department of	Direct Direct		5 R01 GM084018-08 5 R01 GM084127-09	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	345,010 460,177	-
Ith and Human Services, Department of	Direct		5 R01 GM084127-09 5 R01 GM086596-07	93.859	5		-
Ith and Human Services, Department of Ith and Human Services, Department of	Direct		5 R01 GM086596-07	93.859	Biomedical Research and Research Training Biomedical Research and Research Training	(87,161) 373,205	-
Ith and Human Services, Department of	Direct		5 R01 GM086610-10	93.859	Biomedical Research and Research Training	463,358	
Ith and Human Services, Department of	Direct		5 R01 GM088242-10	93.859	Biomedical Research and Research Training	50,923	_
Ith and Human Services, Department of	Direct		5 R01 GM093088-08	93.859	Biomedical Research and Research Training	263,741	-
alth and Human Services, Department of	Direct		5 R01 GM094231 10	93.859	Biomedical Research and Research Training	250,959	-
alth and Human Services, Department of	Direct		5 R01 GM09423105-08	93.859	Biomedical Research and Research Training	77,395	27,00
alth and Human Services, Department of	Direct		5 R01 GM095832-08	93.859	Biomedical Research and Research Training	514,352	-
lth and Human Services, Department of	Direct		5 R01 GM098578-08	93.859	Biomedical Research and Research Training	294,732	-
Ith and Human Services, Department of	Direct		5 R01 GM101171-07	93.859	Biomedical Research and Research Training	276,119	-
Ith and Human Services, Department of	Direct		5 R01 GM102236-04	93.859	Biomedical Research and Research Training	(303)	-
alth and Human Services, Department of	Direct		5 R01 GM103695-11	93.859	Biomedical Research and Research Training	718,192	207,2
lth and Human Services, Department of	Direct		5 R01 GM104130-06	93.859	Biomedical Research and Research Training	201,792	-
lth and Human Services, Department of	Direct		5 R01 GM105671-06	93.859	Biomedical Research and Research Training	70,458	24,4
Ith and Human Services, Department of	Direct		5 R01 GM105948-05	93.859	Biomedical Research and Research Training	(63,353)	
Ith and Human Services, Department of	Direct		5 R01 GM107146-04	93.859	Biomedical Research and Research Training	163,898	-
Ith and Human Services, Department of	Direct		5 R01 GM107148-05	93.859	Biomedical Research and Research Training	197,297	-
Ith and Human Services, Department of Ith and Human Services, Department of	Direct		5 R01 GM107233-04 5 R01 GM107312-05	93.859	Biomedical Research and Research Training Biomedical Research and Research Training	251,665	
Ith and Human Services, Department of Ith and Human Services, Department of	Direct Direct		5 R01 GM107312-05 5 R01 GM108468-04	93.859 93.859	Biomedical Research and Research Training	138,428 310,749	
Ith and Human Services, Department of	Direct		5 R01 GM108408-04 5 R01 GM108722-05	93.859	Biomedical Research and Research Training	286,424	
Ith and Human Services, Department of	Direct		5 R01 GM100722-05	93.859	Biomedical Research and Research Training	185,747	47,0
th and Human Services, Department of	Direct		5 R01 GM110019-04	93.859	Biomedical Research and Research Training	154,572	2,6
th and Human Services, Department of	Direct		5 R01 GM110052-05	93.859	Biomedical Research and Research Training	304,126	_,.
th and Human Services, Department of	Direct		5 R01 GM110215-04	93.859	Biomedical Research and Research Training	(89,034)	
th and Human Services, Department of	Direct		5 R01 GM110289-04	93.859	Biomedical Research and Research Training	249,014	
th and Human Services, Department of	Direct		5 R01 GM111293-03	93.859	Biomedical Research and Research Training	61,387	
th and Human Services, Department of	Direct		5 R01 GM111305-04	93.859	Biomedical Research and Research Training	294,313	
th and Human Services, Department of	Direct		5 R01 GM111400-04	93.859	Biomedical Research and Research Training	362,593	16,
th and Human Services, Department of	Direct		5 R01 GM111735-05	93.859	Biomedical Research and Research Training	57,188	
h and Human Services, Department of	Direct		5 R01 GM111997-05	93.859	Biomedical Research and Research Training	370,199	
h and Human Services, Department of	Direct		5 R01 GM112455-04	93.859	Biomedical Research and Research Training	62,904	
h and Human Services, Department of	Direct		5 R01 GM112786-04	93.859	Biomedical Research and Research Training	341,039	
h and Human Services, Department of	Direct		5 R01 GM112794-05	93.859	Biomedical Research and Research Training	407,123	
th and Human Services, Department of	Direct		5 R01 GM112799-04	93.859	Biomedical Research and Research Training	299,289	
th and Human Services, Department of	Direct		5 R01 GM112992-03	93.859	Biomedical Research and Research Training	169,630	
th and Human Services, Department of	Direct		5 R01 GM113188-05	93.859	Biomedical Research and Research Training	161,640	
th and Human Services, Department of	Direct		5 R01 GM113722-04	93.859	Biomedical Research and Research Training	323,879	
th and Human Services, Department of	Direct		5 R01 GM115481-03 5 R01 GM115508 05	93.859	Biomedical Research and Research Training	296,101	100
th and Human Services, Department of	Direct		5 R01 GM115598-05	93.859	Biomedical Research and Research Training	437,092	188,
th and Human Services, Department of	Direct		5 R01 GM116204-04 5 R01 GM116960-04	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	393,632 438,883	149,
Ith and Human Services, Department of	Direct Direct			93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training		194,1
Ith and Human Services, Department of	Direct		5 R01 GM117141-05 5 R01 GM118308-04	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	210,052 210,698	
th and Human Services, Department of							

Cluster Title/Federal Grantor/Program ealth and Human Services, Department of	Type Direct	Pass-Through Grantor	Award Identifier 5 R01 GM118329-03	CFDA Number 93.859	CFDA Program Title Biomedical Research and Research Training	Federal Expenditures 222,621	Pass-Throug
ealth and Human Services, Department of	Direct		5 R01 GM118329-05 5 R01 GM118475-04	93.859	Biomedical Research and Research Training	457,359	-
alth and Human Services, Department of	Direct		5 R01 GM118524-03	93.859	Biomedical Research and Research Training	343,798	-
lth and Human Services, Department of	Direct		5 R01 GM118644-04	93.859	Biomedical Research and Research Training	318,637	-
th and Human Services, Department of	Direct		5 R01 GM118647-04	93.859	Biomedical Research and Research Training	477,966	-
alth and Human Services, Department of	Direct		5 R01 GM118751-04	93.859	Biomedical Research and Research Training	473,794	-
lth and Human Services, Department of	Direct		5 R01 GM118928-04	93.859	Biomedical Research and Research Training	503,538	-
alth and Human Services, Department of	Direct		5 R01 GM120056-03	93.859	Biomedical Research and Research Training	314,294	-
alth and Human Services, Department of	Direct		5 R01 GM120093-04	93.859	Biomedical Research and Research Training	564,731	-
alth and Human Services, Department of	Direct		5 R01 GM120094-04	93.859	Biomedical Research and Research Training	387,979	-
alth and Human Services, Department of	Direct		5 R01 GM120110-03S1	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	328,237 292,994	-
alth and Human Services, Department of alth and Human Services, Department of	Direct Direct		5 R01 GM120142-05 5 R01 GM120767-14	93.859	Biomedical Research and Research Training	414,533	-
alth and Human Services, Department of	Direct		5 R01 GM120707-14 5 R01 GM121919-02	93.859	Biomedical Research and Research Training	349,385	-
alth and Human Services, Department of	Direct		5 R01 GM122803-03	93.859	Biomedical Research and Research Training	417,889	57,5
alth and Human Services, Department of	Direct		5 R01 GM122005 05	93.859	Biomedical Research and Research Training	463,624	
alth and Human Services, Department of	Direct		5 R01 GM123513-03	93.859	Biomedical Research and Research Training	493,658	58,7
alth and Human Services, Department of	Direct		5 R01 GM12403-02	93.859	Biomedical Research and Research Training	292,003	
alth and Human Services, Department of	Direct		5 R01 GM124174-02	93.859	Biomedical Research and Research Training	163,463	-
lth and Human Services, Department of	Direct		5 R01 GM124248-03	93.859	Biomedical Research and Research Training	538,437	
lth and Human Services, Department of	Direct		5 R01 GM124251-03	93.859	Biomedical Research and Research Training	320,304	154,2
lth and Human Services, Department of	Direct		5 R01 GM124283-03	93.859	Biomedical Research and Research Training	264,929	
Ith and Human Services, Department of	Direct		5 R01 GM124571-03S1	93.859	Biomedical Research and Research Training	366,780	
lth and Human Services, Department of	Direct		5 R01 GM127367-02	93.859	Biomedical Research and Research Training	60,795	
Ith and Human Services, Department of	Direct		5 R01 GM127774-02	93.859	Biomedical Research and Research Training	275,275	
Ith and Human Services, Department of	Direct		5 R01 GM129123-02	93.859	Biomedical Research and Research Training	277,215	
Ith and Human Services, Department of	Direct		5 R01GM062357-17	93.859	Biomedical Research and Research Training	394,091	
Ith and Human Services, Department of	Direct		5 R01GM070862-13S1	93.859	Biomedical Research and Research Training	416,807	64,
Ith and Human Services, Department of	Direct		5 R01GM073836-14	93.859	Biomedical Research and Research Training	258,254	
Ith and Human Services, Department of	Direct		5 R01GM110432-05	93.859	Biomedical Research and Research Training	133,100	
Ith and Human Services, Department of	Direct		5 R01GM111476-05	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	193,238 365,337	
Ith and Human Services, Department of	Direct Direct		5 R01GM117425-04 5 R01GM118651-04	93.859	Biomedical Research and Research Training	295,684	
th and Human Services, Department of th and Human Services, Department of	Direct		5 R01-GM125881-03	93.859	Biomedical Research and Research Training	303,995	
Ith and Human Services, Department of	Direct		5 R13 GM117845-03	93.859	Biomedical Research and Research Training	16,406	
Ith and Human Services, Department of	Direct		5 R21 GM128022 02	93.859	Biomedical Research and Research Training	156,646	
Ith and Human Services, Department of	Direct		5 R25 GM086262-11	93.859	Biomedical Research and Research Training	398,550	
Ith and Human Services, Department of	Direct		5 R35 GM118101-04	93.859	Biomedical Research and Research Training	200,512	
alth and Human Services, Department of	Direct		5 R35 GM119688-04	93.859	Biomedical Research and Research Training	481,148	
alth and Human Services, Department of	Direct		5 R35 GM122506-03	93.859	Biomedical Research and Research Training	824,946	
lth and Human Services, Department of	Direct		5 R35 GM124875-03	93.859	Biomedical Research and Research Training	396,074	
Ith and Human Services, Department of	Direct		5 R35 GM124880-03	93.859	Biomedical Research and Research Training	291,881	
lth and Human Services, Department of	Direct		5 R35 GM126917-02	93.859	Biomedical Research and Research Training	417,182	
Ith and Human Services, Department of	Direct		5 R35 GM126983-02	93.859	Biomedical Research and Research Training	419,973	
Ith and Human Services, Department of	Direct		5 R35 GM127303-02	93.859	Biomedical Research and Research Training	231,370	
Ith and Human Services, Department of	Direct		5 R35 GM128768-02	93.859	Biomedical Research and Research Training	187,525	
Ith and Human Services, Department of	Direct		5 R35 GM128819-02	93.859	Biomedical Research and Research Training	243,813	
Ith and Human Services, Department of	Direct		5 R35 GM128830-02	93.859	Biomedical Research and Research Training	306,255	
Ith and Human Services, Department of	Direct		5 R35 GM128836-02	93.859	Biomedical Research and Research Training	158,016	
Ith and Human Services, Department of Ith and Human Services, Department of	Direct		5 R35GM118073-04 5 R35GM118133-04	93.859	Biomedical Research and Research Training Biomedical Research and Research Training	416,000 495,274	
	Direct		5 R35GM118133-04 5 R37 GM039451-33	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training		
Ith and Human Services, Department of	Direct					362,414	
Ith and Human Services, Department of Ith and Human Services, Department of	Direct Direct		5 R37 GM062261-19 5 R37 GM076343-15	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	414,119 369,938	
th and Human Services, Department of	Direct		5 U01 GM110712-05	93.859	Biomedical Research and Research Training	421,734	
th and Human Services, Department of	Direct		5 U54GM103297-07	93.859	Biomedical Research and Research Training	5,155,617	3,798
th and Human Services, Department of	Direct		5R01GM103297-07	93.859	Biomedical Research and Research Training	325,806	5,798
th and Human Services, Department of	Direct		7 R01 GM122434-03	93.859	Biomedical Research and Research Training	186,352	28
th and Human Services, Department of	Direct		T32 GM007315	93.859	Biomedical Research and Research Training	664,669	
h and Human Services, Department of	Direct		T32 GM007544	93.859	Biomedical Research and Research Training	540,082	
h and Human Services, Department of	Direct		T32 GM007544	93.859	Biomedical Research and Research Training	41,395	
h and Human Services, Department of	Direct		T32 GM007767	93.859	Biomedical Research and Research Training	524,668	
h and Human Services, Department of	Direct		T32 GM007863	93.859	Biomedical Research and Research Training	1,391,164	
h and Human Services, Department of	Direct		T32 GM008322	93.859	Biomedical Research and Research Training	264,443	
h and Human Services, Department of	Direct		T32 GM008353	93.859	Biomedical Research and Research Training	467,962	
h and Human Services, Department of	Direct		T32 GM008597	93.859	Biomedical Research and Research Training	326,842	
th and Human Services, Department of	Direct		T32 GM008616	93.859	Biomedical Research and Research Training	145,658	
h and Human Services, Department of	Direct		T32 GM070449	93.859	Biomedical Research and Research Training	387,472	
th and Human Services, Department of	Direct		T32 GM103730	93.859	Biomedical Research and Research Training	117,298	
th and Human Services, Department of	Direct		T32 GM113900	93.859	Biomedical Research and Research Training	214,436	
Ith and Human Services, Department of	Pass-Through ATGC, Inc		Research Agreement	93.859	Biomedical Research and Research Training	77,885	
Ith and Human Services, Department of	Pass-Through Boston University		4500002268	93.859	Biomedical Research and Research Training	67,795	
Ith and Human Services, Department of	Pass-Through Case Western Reserve University	niversity	897-SUB	93.859	Biomedical Research and Research Training	35,935	
Ith and Human Services, Department of	Pass-Through Emory University Dage Through Georgia Institute of Tech	n alaan	T855282	93.859	Biomedical Research and Research Training	196,172	
Ith and Human Services, Department of	Pass-Through Georgia Institute of Tech Pass-Through Hutchinson, Fred, Cancer		AWD-101737-G1 0000815003/Project 215916	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	237,121 154,992	
alth and Human Services, Department of							

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000815018/Project 215917	93.859	Biomedical Research and Research Training	24,772	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000815339/Project 215920	93.859	Biomedical Research and Research Training	60,701	-
Health and Human Services, Department of	Pass-Through	Li-Cor, Inc	Subaward under NIH Contract 2R	93.859	Biomedical Research and Research Training	42,883	-
Health and Human Services, Department of	Pass-Through	Long Island University	3	93.859	Biomedical Research and Research Training	1,977	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC105133UM	93.859	Biomedical Research and Research Training	7,500	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC105935A	93.859	Biomedical Research and Research Training	82,035	-
Health and Human Services, Department of	Pass-Through	New York Hall of Science	Agreement	93.859	Biomedical Research and Research Training	7,090	-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	60048848	93.859	Biomedical Research and Research Training	6,219	-
Health and Human Services, Department of	Pass-Through	Stanford University	61574013-130764	93.859	Biomedical Research and Research Training	50,741	-
Health and Human Services, Department of	Pass-Through	The University of Kansas Medical Center (KUMC)	ZAL00000	93.859	Biomedical Research and Research Training	46,257	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	10836sc	93.859	Biomedical Research and Research Training	41,756	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	11282SC	93.859	Biomedical Research and Research Training	27,867	-
Health and Human Services, Department of	Pass-Through	University of Chicago	FP056334	93.859	Biomedical Research and Research Training	1,161	-
Health and Human Services, Department of	Pass-Through	University of Chicago	FP066905-A	93.859	Biomedical Research and Research Training	156,745	-
Health and Human Services, Department of	Pass-Through	University of Georgia	SUB00000389	93.859	Biomedical Research and Research Training	80,085	-
Health and Human Services, Department of	Pass-Through	University of Illinois-Urbana-Champaign	084206-16671	93.859	Biomedical Research and Research Training	291,296	-
Health and Human Services, Department of	Pass-Through	University of Kentucky Research Foundation	3048112251-15-165	93.859	Biomedical Research and Research Training	262,007	-
Health and Human Services, Department of	Pass-Through	University of Maryland, Baltimore	HHS00022-01	93.859	Biomedical Research and Research Training	91,246	-
Health and Human Services, Department of	Pass-Through	University of Maryland, The	0000015164	93.859	Biomedical Research and Research Training	90,481	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0056812 (131534-9)	93.859	Biomedical Research and Research Training	191,989	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU19024	93.859	Biomedical Research and Research Training	78,775	-
Health and Human Services, Department of	Pass-Through	William Marsh Rice University	R22841	93.859	Biomedical Research and Research Training	105,188	-
						\$ 51,200,412	\$ 5,267,753
Health and Human Services, Department of	Direct		1 DP2 HD091949-01	93.865	Child Health and Human Development Extramural Research	\$ 556,209	s -
Health and Human Services, Department of	Direct		1 F31 HD098804-01	93.865	Child Health and Human Development Extramural Research	4,707	-
Health and Human Services, Department of	Direct		1 F31 HD098870-01	93.865	Child Health and Human Development Extramural Research	4,136	-
Health and Human Services, Department of	Direct		1 F32 HD091938-01	93.865	Child Health and Human Development Extramural Research	4,814	-
Health and Human Services, Department of	Direct		1 R01 HD093570-01A1	93.865	Child Health and Human Development Extramural Research	81,148	-
Health and Human Services, Department of	Direct		1 R01 HD095053-01A1	93.865	Child Health and Human Development Extramutal Research	21,825	2,317
Health and Human Services, Department of					Child Health and Human Development Extramutal Research		2,517
	Direct		1 R01 HD097096-01	93.865		158,222	-
Health and Human Services, Department of	Direct		1 R01 HD097107- 01	93.865	Child Health and Human Development Extramural Research	2,123	-
Health and Human Services, Department of	Direct		1 R01 HD098233-01	93.865	Child Health and Human Development Extramural Research	22,554	-
Health and Human Services, Department of	Direct		1 R03 HD084708-02	93.865	Child Health and Human Development Extramural Research	(1,864)	-
Health and Human Services, Department of	Direct		1 R03 HD092516-01	93.865	Child Health and Human Development Extramural Research	106,886	-
Health and Human Services, Department of	Direct		1 R03 HD096189 01A1	93.865	Child Health and Human Development Extramural Research	5,591	-
Health and Human Services, Department of	Direct		1 R03 HD097704-01	93.865	Child Health and Human Development Extramural Research	1,732	-
Health and Human Services, Department of	Direct		1 R21 HD094051-01	93.865	Child Health and Human Development Extramural Research	204,525	-
Health and Human Services, Department of	Direct		1 R21 HD095501-01A1	93.865	Child Health and Human Development Extramural Research	62,486	-
Health and Human Services, Department of	Direct		1 R21 HD097663-01	93.865	Child Health and Human Development Extramural Research	24,223	-
Health and Human Services, Department of	Direct		1 UH2 HD08797901-03	93.865	Child Health and Human Development Extramural Research	3,065	-
Health and Human Services, Department of	Direct		3 P50 HD044406-15S1	93.865	Child Health and Human Development Extramural Research	29,359	21,601
Health and Human Services, Department of	Direct		4 R01 HD015434-33	93.865	Child Health and Human Development Extramural Research	(83,291)	21,001
Health and Human Services, Department of	Direct		4 R01 HD070950-05	93.865	Child Health and Human Development Extramutal Research	12,348	12 201
							13,381
Health and Human Services, Department of	Direct		5 F30 HD088055-04	93.865	Child Health and Human Development Extramural Research	50,783	-
Health and Human Services, Department of	Direct		5 F30 HD097961-02	93.865	Child Health and Human Development Extramural Research	36,032	-
Health and Human Services, Department of	Direct		5 F31 HD094480-02	93.865	Child Health and Human Development Extramural Research	42,097	-
Health and Human Services, Department of	Direct		5 F31 HD097830-02	93.865	Child Health and Human Development Extramural Research	28,469	-
Health and Human Services, Department of	Direct		5 F32 HD088029-03	93.865	Child Health and Human Development Extramural Research	61,217	-
Health and Human Services, Department of	Direct		5 F32 HD093145-03	93.865	Child Health and Human Development Extramural Research	59,859	-
Health and Human Services, Department of	Direct		5 F32 HD095620-05	93.865	Child Health and Human Development Extramural Research	55,836	-
Health and Human Services, Department of	Direct		5 K01 HD074706-05	93.865	Child Health and Human Development Extramural Research	85,687	-
Health and Human Services, Department of	Direct		5 K01 HD079554-05	93.865	Child Health and Human Development Extramural Research	142,544	-
Health and Human Services, Department of	Direct		5 K08 HD078506-04	93.865	Child Health and Human Development Extramural Research	113,070	-
Health and Human Services, Department of	Direct		5 K12 HD028820-25	93.865	Child Health and Human Development Extramural Research	(589)	
Health and Human Services, Department of	Direct		5 K12 HD028820-27	93.865	Child Health and Human Development Extramural Research	440,489	-
Health and Human Services, Department of	Direct		5 K12 HD065257-10	93.865	Child Health and Human Development Extramural Research	324,786	-
Health and Human Services, Department of	Direct		5 K23 HD083527-04	93.865	Child Health and Human Development Extramural Research	174,537	-
Health and Human Services, Department of	Direct		5 K23 HD083527-04 5 K23 HD084744-03	93.865	Child Health and Human Development Extramutal Research	163,514	_
Health and Human Services, Department of	Direct		5 K23 HD092626-03	93.865	Child Health and Human Development Extramular Research	173,990	-
· ·							-
Health and Human Services, Department of	Direct		5 K23 HD093815-02	93.865	Child Health and Human Development Extramural Research	121,513	-
Health and Human Services, Department of	Direct		5 P01 HD087155-04	93.865	Child Health and Human Development Extramural Research	1,071,574	68,877
Health and Human Services, Department of	Direct		5 P2C HD041028-18	93.865	Child Health and Human Development Extramural Research	650,703	-
Health and Human Services, Department of	Direct		5 R00 HD084758-05	93.865	Child Health and Human Development Extramural Research	322,918	-
Health and Human Services, Department of	Direct		5 R01 DK041469-18	93.865	Child Health and Human Development Extramural Research	280,924	-
Health and Human Services, Department of	Direct		5 R01 HD006656-41	93.865	Child Health and Human Development Extramural Research	(9,339)	-
Health and Human Services, Department of	Direct		5 R01 HD015434-36	93.865	Child Health and Human Development Extramural Research	565,456	-
Health and Human Services, Department of	Direct		5 R01 HD034283-23	93.865	Child Health and Human Development Extramural Research	607,536	-
Health and Human Services, Department of	Direct		5 R01 HD041469-16	93.865	Child Health and Human Development Extramural Research	53,292	-
Health and Human Services, Department of	Direct		5 R01 HD052646-09	93.865	Child Health and Human Development Extramural Research	126,713	26,596
Health and Human Services, Department of	Direct		5 R01 HD052646-11	93.865	Child Health and Human Development Extramural Research	1,134,419	-
Health and Human Services, Department of	Direct		5 R01 HD05204011 5 R01 HD067184-05	93.865	Child Health and Human Development Extramutal Research	41,274	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 HD067184-05 5 R01 HD069609-09	93.865	Child Health and Human Development Extramural Research	1,246,310	-
							-
Health and Human Services, Department of	Direct		5 R01 HD069702-09	93.865	Child Health and Human Development Extramural Research	422,818	-
Health and Human Services, Department of	Direct		5 R01 HD073475-05	93.865	Child Health and Human Development Extramural Research	89,470	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 HD074559-05	93.865	Child Health and Human Development Extramural Research	434,115	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 HD075655- 05	93.865 93.865	Child Health and Human Development Extramural Research	130,918 592,477	95,660
Health and Human Services, Department of	Direct Direct		5 R01 HD075806-05 5 R01 HD078131-04	93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	527,618	42,829
Health and Human Services, Department of	Direct		5 R01 HD078397-05	93.865	Child Health and Human Development Extramutal Research	466,309	100,903
Health and Human Services, Department of	Direct		5 R01 HD079467-03	93.865	Child Health and Human Development Extramutal Research	(2,443)	(53)
Health and Human Services, Department of	Direct		5 R01 HD075407-05 5 R01 HD081129-03	93.865	Child Health and Human Development Extramural Research	95,078	68,737
Health and Human Services, Department of	Direct		5 R01 HD081122-05	93.865	Child Health and Human Development Extramural Research	622,037	401,772
Health and Human Services, Department of	Direct		5 R01 HD082162 05	93.865	Child Health and Human Development Extramural Research	688,504	-
Health and Human Services, Department of	Direct		5 R01 HD084526-04	93.865	Child Health and Human Development Extramural Research	540,680	62,378
Health and Human Services, Department of	Direct		5 R01 HD084652-04	93.865	Child Health and Human Development Extramural Research	413,259	154,610
Health and Human Services, Department of	Direct		5 R01 HD085233-05	93.865	Child Health and Human Development Extramural Research	1,282,790	1,082,173
Health and Human Services, Department of	Direct		5 R01 HD086583-03	93.865	Child Health and Human Development Extramural Research	443,042	201,815
Health and Human Services, Department of	Direct		5 R01 HD088506-04	93.865	Child Health and Human Development Extramural Research	381,139	103,588
Health and Human Services, Department of	Direct		5 R01 HD088521-04	93.865	Child Health and Human Development Extramural Research	736,528	-
Health and Human Services, Department of	Direct		5 R01 HD088638-03	93.865	Child Health and Human Development Extramural Research	615,190	76,200
Health and Human Services, Department of	Direct		5 R01 HD088712-03	93.865	Child Health and Human Development Extramural Research	636,452	85,391
Health and Human Services, Department of	Direct		5 R01 HD091323-02	93.865	Child Health and Human Development Extramural Research	115,231	-
Health and Human Services, Department of	Direct		5 R01 HD092498-02	93.865	Child Health and Human Development Extramural Research	328,437	-
Health and Human Services, Department of	Direct		5 R01 HD093450-02	93.865	Child Health and Human Development Extramural Research	535,088	297,265
Health and Human Services, Department of	Direct		5 R01 HD093611-02	93.865	Child Health and Human Development Extramural Research	196,647	-
Health and Human Services, Department of	Direct		5 R01 HD093733-02	93.865	Child Health and Human Development Extramural Research	312,121	-
Health and Human Services, Department of	Direct		5 R01 HD094736-02	93.865	Child Health and Human Development Extramural Research	381,769	-
Health and Human Services, Department of	Direct		5 R01 HD094954-02	93.865	Child Health and Human Development Extramural Research	180,666	-
Health and Human Services, Department of	Direct		5 R01 HD095463-02	93.865	Child Health and Human Development Extramural Research	358,285	-
Health and Human Services, Department of	Direct		5 R01 HD095920-02	93.865	Child Health and Human Development Extramural Research	157,753	-
Health and Human Services, Department of	Direct		5 R01 HD096277-02	93.865	Child Health and Human Development Extramural Research	280,472	-
Health and Human Services, Department of	Direct		5 R01HD093626-02	93.865	Child Health and Human Development Extramural Research	343,979	5,858
Health and Human Services, Department of	Direct		5 R03 HD083397-02	93.865	Child Health and Human Development Extramural Research	37,106	-
Health and Human Services, Department of	Direct		5 R03 HD086301-02	93.865	Child Health and Human Development Extramural Research	37,710	18,915
Health and Human Services, Department of	Direct		5 R03 HD087520-02	93.865	Child Health and Human Development Extramural Research	14,712	-
Health and Human Services, Department of	Direct		5 R03 HD091480-02	93.865	Child Health and Human Development Extramural Research	41,132	-
Health and Human Services, Department of	Direct		5 R03 HD092639-02	93.865	Child Health and Human Development Extramural Research	40,632	-
Health and Human Services, Department of	Direct		5 R03 HD092855-02	93.865	Child Health and Human Development Extramural Research	84,492	-
Health and Human Services, Department of	Direct		5 R03 HD093876-02	93.865	Child Health and Human Development Extramural Research	29,565	-
Health and Human Services, Department of	Direct		5 R03 HD094077-02	93.865	Child Health and Human Development Extramural Research	75,027	-
Health and Human Services, Department of	Direct		5 R03 HD095717-02	93.865	Child Health and Human Development Extramural Research	29,613	3,918
Health and Human Services, Department of	Direct		5 R21 HD079908-02	93.865	Child Health and Human Development Extramural Research	(3,772)	-
Health and Human Services, Department of	Direct		5 R21 HD083409-02	93.865	Child Health and Human Development Extramural Research	(5)	-
Health and Human Services, Department of	Direct		5 R21 HD086696-02	93.865	Child Health and Human Development Extramural Research	16,737	-
Health and Human Services, Department of	Direct		5 R21 HD087071-02	93.865	Child Health and Human Development Extramural Research	85,634	-
Health and Human Services, Department of	Direct		5 R21 HD087840-02	93.865	Child Health and Human Development Extramural Research	72,299	-
Health and Human Services, Department of	Direct		5 R21 HD087881-02	93.865	Child Health and Human Development Extramural Research	29,480	-
Health and Human Services, Department of	Direct		5 R21 HD090366-02	93.865	Child Health and Human Development Extramural Research	185,935	-
Health and Human Services, Department of	Direct		5 R21 HD090371-02	93.865	Child Health and Human Development Extramural Research	234,871	19,765
Health and Human Services, Department of	Direct		5 R21 HD090567-02	93.865	Child Health and Human Development Extramural Research	238,975	-
Health and Human Services, Department of	Direct		5 R21 HD092526-02	93.865	Child Health and Human Development Extramural Research	184,654	-
Health and Human Services, Department of	Direct		5 R21 HD092614-02	93.865	Child Health and Human Development Extramural Research	241,700	-
Health and Human Services, Department of	Direct		5 R21 HD093835-02	93.865	Child Health and Human Development Extramural Research	156,201	-
Health and Human Services, Department of	Direct		5 R21 HD096251-02	93.865	Child Health and Human Development Extramural Research	171,197	-
Health and Human Services, Department of	Direct		5 R24 HD087149-03 5 R25 HD078226 05	93.865 93.865	Child Health and Human Development Extramural Research	822,960	152,591
Health and Human Services, Department of	Direct		5 R25 HD078226-05	93.865	Child Health and Human Development Extramural Research	130,667	95,534
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R25 HD082971-05 5 R25 HD083146-04	93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	250,266 198,117	95,534 22,294
				93.865			22,294
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R25 HD084385-04 5 R37 HD034860-23	93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	160,895 712,811	-
Health and Human Services, Department of	Direct		5 K37 HD034860-23 5 U24 HD048404-15	93.865	Child Health and Human Development Extramural Research	746,811	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 U24 HD048404-15 5 UH3 HD087979-05	93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	746,811 583,621	-
Health and Human Services, Department of	Direct		5R03HD092609-02	93.865	Child Health and Human Development Extramural Research	81,158	-
Health and Human Services, Department of	Direct		7 K01 HD071949-05	93.865	Child Health and Human Development Extramural Research	(32,604)	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		T32 HD007109	93.865	Child Health and Human Development Extramural Research	(32,604) 310,045	-
Health and Human Services, Department of	Direct		T32 HD007109	93.865	Child Health and Human Development Extramural Research	538,036	-
Health and Human Services, Department of	Direct		T32 HD007339	93.865	Child Health and Human Development Extramural Research	302,100	-
Health and Human Services, Department of	Direct		T32 HD07505	93.865	Child Health and Human Development Extramular Research	177,130	-
Health and Human Services, Department of	Direct		T32 HD079342	93.865	Child Health and Human Development Extramutal Research	8,909	-
Health and Human Services, Department of	Direct		T32 HD079342 T32 HD079350	93.865	Child Health and Human Development Extramural Research	256,215	-
Health and Human Services, Department of	Pass-Through	Albert Einstein College of Medicine, Inc.,	310897	93.865	Child Health and Human Development Extramural Research	236,213 51,870	-
Health and Human Services, Department of	Pass-Through	Albert Einstein College of Medicine, Inc.,	310897	93.865	Child Health and Human Development Extramular Research	300	-
Health and Human Services, Department of	Pass-Through	Ann and Robert H. Lurie Children's Hospital of Chicago	Subaward No. 901548-UM	93.865	Child Health and Human Development Extramular Research	174,742	-
Health and Human Services, Department of	Pass-Through Pass-Through	Bowling Green State University	10008712-UMICH	93.865	Child Health and Human Development Extramural Research	1/4,/42 125,144	-
Health and Human Services, Department of	Pass-Through Pass-Through	Brandeis University	403519	93.865	Child Health and Human Development Extramural Research	123,144 162,052	-
ricardi and rialian Services, Department Of	1 ass-1 mough		403317				-
Health and Human Services, Department of	Pass-Through	Brown University	00001324	93.865	Child Health and Human Development Extramural Research	9,583	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	California Polytechnic State University	2019-7-58223	93.865	Child Health and Human Development Extramural Research	40,043	-
Health and Human Services, Department of	Pass-Through	Central Michigan University	F63376	93.865	Child Health and Human Development Extramural Research	32,994	-
Health and Human Services, Department of	Pass-Through	Children's Research Institute	30004900-04	93.865	Child Health and Human Development Extramural Research	1,582	-
Health and Human Services, Department of	Pass-Through	Cornell University	83328-11165	93.865	Child Health and Human Development Extramural Research	47,106	-
Health and Human Services, Department of	Pass-Through	Duke University	203-6211	93.865	Child Health and Human Development Extramural Research	112,759	-
Health and Human Services, Department of	Pass-Through	Eastern Michigan University	R70507-3215	93.865	Child Health and Human Development Extramural Research	222,674	-
Health and Human Services, Department of	Pass-Through	Emory University	T502357	93.865	Child Health and Human Development Extramural Research	7,014	-
Health and Human Services, Department of	Pass-Through	Emory University	T852991	93.865	Child Health and Human Development Extramural Research	61,662	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Florida State University Florida State University	R01930 R02030	93.865 93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	(57) 11,433	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	George Washington University	17-M102	93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	11,433	-
Health and Human Services, Department of	Pass-Through	Georgia Technology Research Corporation	RJ381-G1	93.865	Child Health and Human Development Extramular Research	32,284	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4381950UM	93.865	Child Health and Human Development Extramular Research	(279)	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	JHU Checklist# 5957, Task Orde	93.865	Child Health and Human Development Extramular Research	390,512	
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	JHU Checklist# 5957, Task Orde	93.865	Child Health and Human Development Extramutal Research	121,195	_
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	Task Order #5	93.865	Child Health and Human Development Extramural Research	232,163	-
Health and Human Services, Department of	Pass-Through	Massachusetts General Hospital	233249	93.865	Child Health and Human Development Extramural Research	138,781	-
Health and Human Services, Department of	Pass-Through	Mayo Clinic	THE-208735	93.865	Child Health and Human Development Extramural Research	23,452	-
Health and Human Services, Department of	Pass-Through	Medical University of South Carolina	MUSC17-038-8B465	93.865	Child Health and Human Development Extramural Research	2,938	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106674B	93.865	Child Health and Human Development Extramural Research	336,489	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106691C	93.865	Child Health and Human Development Extramural Research	172,287	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC107642UM	93.865	Child Health and Human Development Extramural Research	442,192	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC109029UM	93.865	Child Health and Human Development Extramural Research	1,840	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC109180UM	93.865	Child Health and Human Development Extramural Research	2,484	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC109609UM	93.865	Child Health and Human Development Extramural Research	1,552	-
Health and Human Services, Department of	Pass-Through	Pennsylvania State University	5469-UM-DHHS-0659	93.865	Child Health and Human Development Extramural Research	194,652	-
Health and Human Services, Department of	Pass-Through	Princeton University	SUB0000060	93.865	Child Health and Human Development Extramural Research	60,624	-
Health and Human Services, Department of	Pass-Through	Tulane University	TUL-HSC-554777-16/17	93.865	Child Health and Human Development Extramural Research	21,310	-
Health and Human Services, Department of	Pass-Through	Tulane University	TUL-HSC-556514-18/19 Year 4	93.865	Child Health and Human Development Extramural Research	31,316	-
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000509380-SP004-002	93.865	Child Health and Human Development Extramural Research	4	-
Health and Human Services, Department of	Pass-Through	University of California - Irvine	2017-3508	93.865	Child Health and Human Development Extramural Research	1,211,938	-
Health and Human Services, Department of	Pass-Through	University of California - Los Angeles	1920 G RA109	93.865	Child Health and Human Development Extramural Research	(86)	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	9564sc	93.865	Child Health and Human Development Extramural Research	45,385	-
Health and Human Services, Department of	Pass-Through	University of Colorado	FY14.613.006	93.865	Child Health and Human Development Extramural Research	3,131	-
Health and Human Services, Department of	Pass-Through	University of Denver	SC37627-01-00	93.865	Child Health and Human Development Extramural Research	52,006	-
Health and Human Services, Department of	Pass-Through	University of Florida, The	SUB00001724	93.865	Child Health and Human Development Extramural Research	91,564	-
Health and Human Services, Department of	Pass-Through	University of Maryland, The	70933-Z0191201	93.865	Child Health and Human Development Extramural Research	26,166	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	H004209501 P006823101	93.865 93.865	Child Health and Human Development Extramural Research	49,463	-
Health and Human Services, Department of	Pass-Through	University of Minnesota University of Minnesota	P006823101 P006823101	93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	105,762 50,952	-
Health and Human Services, Department of	Pass-Through		5105611	93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research		-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of North Carolina at Chapel Hill University of North Carolina at Chapel Hill	5103611 5107710	93.865	Child Health and Human Development Extramural Research	(13,790) 128,856	157,080
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5108802	93.865	Child Health and Human Development Extramutal Research	(73,498)	157,080
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5110652	93.865	Child Health and Human Development Extramular Research	569,157	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5111112	93.865	Child Health and Human Development Extramutal Research	963,606	364,377
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5113151	93.865	Child Health and Human Development Extramular Research	21,430	504,577
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	2639	93.865	Child Health and Human Development Extramutal Research	112,567	-
Health and Human Services, Department of	Pass-Through	University of South Carolina	17-3195/13580-FB41	93.865	Child Health and Human Development Extramural Research	14,578	-
Health and Human Services, Department of	Pass-Through	University of Texas Medical Branch at Galveston (UTMB)	17-069	93.865	Child Health and Human Development Extramural Research	2,496	-
Health and Human Services, Department of	Pass-Through	University of Texas Medical Branch at Galveston (UTMB)	17-072	93.865	Child Health and Human Development Extramural Research	(2,663)	-
Health and Human Services, Department of	Pass-Through	University of Texas Medical Branch at Galveston (UTMB)	18-83439-09	93.865	Child Health and Human Development Extramural Research	215,633	-
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 161107	93.865	Child Health and Human Development Extramural Research	(28,103)	-
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 16117 PO#000000735C	93.865	Child Health and Human Development Extramural Research	61,609	-
Health and Human Services, Department of	Pass-Through	University of Utah	10036366-05 PO U000146236	93.865	Child Health and Human Development Extramural Research	14,815	-
Health and Human Services, Department of	Pass-Through	University of Utah	10041755-01	93.865	Child Health and Human Development Extramural Research	29,521	-
Health and Human Services, Department of	Pass-Through	University of Virginia	GB10015 154834	93.865	Child Health and Human Development Extramural Research	322,104	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC10068	93.865	Child Health and Human Development Extramural Research	26,682	-
Health and Human Services, Department of	Pass-Through	Washington University in St. Louis	WU-14-232	93.865	Child Health and Human Development Extramural Research	240	-
						\$ 36,231,541	
Health and Human Services, Department of	Direct		1 R01 AG058717-01A1	93.866	Aging Research	\$ 36,478	s -
Health and Human Services, Department of	Direct		1 R01 AG060936-01	93.866	Aging Research	8,399	-
Health and Human Services, Department of	Direct		1 R01 AG062477-01	93.866	Aging Research	3,138	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R01 AG063371 01 1 R03 AG057838-02	93.866 93.866	Aging Research Aging Research	63,580 65,855	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		1 R03 AG05/838-02 1 R03 AG063222-01	93.866	Aging Research	65,855 19,005	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		1 R03 AG063222-01 1 R21 AG053561-01	93.866	Aging Research	27,839	-
Health and Human Services, Department of	Direct		1 R21 AG053501-01 1 R21 AG054818-01A1	93.866	Aging Research	165,585	9,537
Health and Human Services, Department of	Direct		1 R21 AG058862-01A1	93.866	Aging Research	51,870	-
Health and Human Services, Department of	Direct		1 R21 AG061839-01A1	93.866	Aging Research	53,300	-
Health and Human Services, Department of	Direct		1 R21 AG062844-01	93.866	Aging Research	581	-
Health and Human Services, Department of	Direct		1 R56 AG059576-01	93.866	Aging Research	301,673	-
Health and Human Services, Department of	Direct		1 R56 AG062225-01	93.866	Aging Research	184,163	-
Health and Human Services, Department of	Direct		1 RF0 AG057540-01	93.866	Aging Research	940,395	144,365

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number		CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 RF1 AG051710-01 1 RF1 AG057928-01	93.866 93.866	Aging Research Aging Research		381,889 666,628	171,614
Health and Human Services, Department of	Direct		1 RF1 AG057723-01	93.866	Aging Research		54,553	-
Health and Human Services, Department of	Direct		1R01AG058724-02	93.866	Aging Research		260,555	-
Health and Human Services, Department of	Direct		2 R01 AG010026-25	93.866	Aging Research		4,598	-
Health and Human Services, Department of	Direct		2 R01 AG030593 11	93.866	Aging Research		214,772	-
Health and Human Services, Department of	Direct		3 U01 AG022303-15S1	93.866	Aging Research		1,170,323	
Health and Human Services, Department of	Direct		4 P01 AG029409-10	93.866	Aging Research		1,830,570	1,271,907
Health and Human Services, Department of	Direct		4 P30 AG015281-20	93.866	Aging Research		57,903 40,314	35,421
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 F31 AG057205-02 5 F31 AG060663-02	93.866 93.866	Aging Research Aging Research		40,314 31,787	-
Health and Human Services, Department of	Direct		5 F32 AG052320-03	93.866	Aging Research		(9,311)	-
Health and Human Services, Department of	Direct		5 F32 AG059362-02	93.866	Aging Research		60,251	-
Health and Human Services, Department of	Direct		5 K01 AG050706-04	93.866	Aging Research		117,624	-
Health and Human Services, Department of	Direct		5 K01 AG054615-03	93.866	Aging Research		115,924	-
Health and Human Services, Department of	Direct		5 K01 AG056557-03	93.866	Aging Research		127,066	-
Health and Human Services, Department of	Direct		5 K01 AG057833-02	93.866	Aging Research		104,939	-
Health and Human Services, Department of	Direct Direct		5 K01 AG059829-02 5 K01AG057820-02	93.866 93.866	Aging Research		95,430 99,947	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 K07 AG05/020-02	93.866	Aging Research Aging Research		137,296	-
Health and Human Services, Department of	Direct		5 K08 AG047252-05	93.866	Aging Research		201,219	-
Health and Human Services, Department of	Direct		5 K08 AG048321-04	93.866	Aging Research		(107,779)	-
Health and Human Services, Department of	Direct		5 K08 AG049684-04	93.866	Aging Research		143,734	-
Health and Human Services, Department of	Direct		5 K08 AG056591-03	93.866	Aging Research		167,908	-
Health and Human Services, Department of	Direct		5 K23 AG056638-03	93.866	Aging Research		141,582	-
Health and Human Services, Department of	Direct		5 K23 AG059890 02	93.866	Aging Research		102,896	-
Health and Human Services, Department of	Direct		5 K24 AG050685-05	93.866	Aging Research		175,843	-
Health and Human Services, Department of	Direct		5 K99 AG056599-02	93.866 93.866	Aging Research		160,945	1 2 4 2 795
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 P01 AG051442-04 5 P30 AG012846-25	93.866	Aging Research Aging Research		1,961,336 948,383	1,242,785 96,100
Health and Human Services, Department of	Direct		5 P30 AG0122840-25	93.866	Aging Research		502,545	180,248
Health and Human Services, Department of	Direct		5 P30 AG024824-15	93.866	Aging Research		945,670	18,308
Health and Human Services, Department of	Direct		5 P30 AG053760-04S1	93.866	Aging Research		1,942,073	89,722
Health and Human Services, Department of	Direct		5 P30 AG059300-02	93.866	Aging Research		420,009	103,494
Health and Human Services, Department of	Direct		5 R00 AG045200-05	93.866	Aging Research		156,799	-
Health and Human Services, Department of	Direct		5 R00 AG047963-05	93.866	Aging Research		285,011	247,253
Health and Human Services, Department of	Direct		5 R01 AG028516-10	93.866	Aging Research		35,560	-
Health and Human Services, Department of	Direct Direct		5 R01 AG030593-1081 5 R01 AG039434-07	93.866 93.866	Aging Research		96,387 182,984	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 AG040213-09	93.866	Aging Research Aging Research		2,947,097	-
Health and Human Services, Department of	Direct		5 R01 AG040635-04	93.866	Aging Research		1,301	-
Health and Human Services, Department of	Direct		5 R01 AG041780-05	93.866	Aging Research		(7,122)	-
Health and Human Services, Department of	Direct		5 R01 AG045423-05	93.866	Aging Research		140,483	-
Health and Human Services, Department of	Direct		5 R01 AG047167-03	93.866	Aging Research		20,888	-
Health and Human Services, Department of	Direct		5 R01 AG047178-05	93.866	Aging Research		365,482	23,108
Health and Human Services, Department of	Direct		5 R01 AG047203-04	93.866	Aging Research		546,004	94,384
Health and Human Services, Department of	Direct		5 R01 AG047932-05	93.866	Aging Research		579,207	25,815
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AG048072-05 5 R01 AG04871-05	93.866 93.866	Aging Research Aging Research		207,565 659,455	-
Health and Human Services, Department of	Direct		5 R01 AG049624-05	93.866	Aging Research		301,873	-
Health and Human Services, Department of	Direct		5 R01 AG049634-03	93.866	Aging Research		57,342	15,088
Health and Human Services, Department of	Direct		5 R01 AG049716-04	93.866	Aging Research		316,506	123,990
Health and Human Services, Department of	Direct		5 R01 AG050509-05	93.866	Aging Research		419,895	66,393
Health and Human Services, Department of	Direct		5 R01 AG050523-04	93.866	Aging Research		412,802	-
Health and Human Services, Department of	Direct		5 R01 AG050676-04	93.866	Aging Research		616,856	365,700
Health and Human Services, Department of	Direct		5 R01 AG051142-04S1	93.866	Aging Research		970,505	-
Health and Human Services, Department of	Direct		5 R01 AG051439-05	93.866	Aging Research		473,577	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AG051649-04 5 R01 AG051827-04	93.866 93.866	Aging Research Aging Research		379,525 816,327	112,244
Health and Human Services, Department of	Direct		5 R01 AG051849-04	93.866	Aging Research		420,992	-
Health and Human Services, Department of	Direct		5 R01 AG052934-04	93.866	Aging Research		407,833	-
Health and Human Services, Department of	Direct		5 R01 AG054371-04	93.866	Aging Research		1,167,681	-
Health and Human Services, Department of	Direct		5 R01 AG054835-03	93.866	Aging Research		360,990	-
Health and Human Services, Department of	Direct		5 R01 AG055406-03	93.866	Aging Research		450,936	43,785
Health and Human Services, Department of	Direct		5 R01 AG056407-02	93.866	Aging Research		539,110	48,261
Health and Human Services, Department of	Direct		5 R01 AG057510-02	93.866	Aging Research		207,513	-
Health and Human Services, Department of	Direct		5 R01 AG057701-02 5 R01 AG058599 02	93.866	Aging Research		158,106 149,028	16,400
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AG058599-02 5 R01 AG059583-02	93.866 93.866	Aging Research Aging Research		318,747	23,003
Health and Human Services, Department of	Direct		5 R01 AG059585-02 5 R01 AG059733-02	93.866	Aging Research		171,351	-
Health and Human Services, Department of	Direct		5 R01 AG059743-02	93.866	Aging Research		248,795	66,654
Health and Human Services, Department of	Direct		5 R01AG045136-05	93.866	Aging Research		(37,554)	-
Health and Human Services, Department of	Direct		5 R01AG048934-04	93.866	Aging Research		360,092	-
Health and Human Services, Department of	Direct		5 R01AG059823-02	93.866	Aging Research		108,494	84,363
Health and Human Services, Department of	Direct		5 R03 AG047860-02	93.866	Aging Research		(29,914)	-
Health and Human Services, Department of	Direct		5 R03 AG060404-02	93.866	Aging Research		88,828	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R21 AG047931-02 5 R21 AG048500-02	93.866 93.866	Aging Research Aging Research		(383) (2,609)	-
Health and Human Services, Department of	Direct		5 R21 AG048500-02 5 R21 AG052709-02	93.866	Aging Research		87,093	-
Health and Human Services, Department of	Direct		5 R21 AG052707-02 5 R21 AG053186-02	93.866	Aging Research		76,954	-
Health and Human Services, Department of	Direct		5 R21 AG055090-02	93.866	Aging Research		177,114	36,868
Health and Human Services, Department of	Direct		5 R21 AG055379-02	93.866	Aging Research		153,902	-
Health and Human Services, Department of	Direct		5 R21 AG056912-05	93.866	Aging Research		229,324	27,049
Health and Human Services, Department of	Direct		5 R21 AG059117-02	93.866	Aging Research		168,383	-
Health and Human Services, Department of	Direct		5 R21 AG060277-02	93.866	Aging Research		78,438	-
Health and Human Services, Department of	Direct		5 R21AG055863-02	93.866	Aging Research		283,738	
Health and Human Services, Department of	Direct		5 R24 AG045061-05	93.866	Aging Research		276,175	166,956
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R25 AG053227-04 5 U01 AG009740-28S1	93.866 93.866	Aging Research Aging Research		129,908 (306,520)	-
Health and Human Services, Department of	Direct		5 U01 AG009740-2881 5 U01 AG009740-30	93.866	Aging Research		22,872,496	4,584,438
Health and Human Services, Department of	Direct		5 U01 AG012495-25	93.866	Aging Research		1,120,928	55,027
Health and Human Services, Department of	Direct		5 U01 AG017719-19	93.866	Aging Research		961,758	94,438
Health and Human Services, Department of	Direct		5 U01 AG057562-02	93.866	Aging Research		441,832	-
Health and Human Services, Department of	Direct		5 U01 AG058499-02	93.866	Aging Research		425,135	50,367
Health and Human Services, Department of	Direct		5 U01NR004061-24	93.866	Aging Research		296,611	-
Health and Human Services, Department of	Direct		5 U24 AG056918-03	93.866	Aging Research		1,005,539	-
Health and Human Services, Department of	Direct		5R03AG060073-02	93.866	Aging Research		33,717	-
Health and Human Services, Department of	Direct		7 R01 AG028082-10	93.866	Aging Research		62,069	-
Health and Human Services, Department of	Direct		T32 AG000114	93.866	Aging Research		419,034	-
Health and Human Services, Department of	Direct		T32 AG000221	93.866	Aging Research		583,678	-
Health and Human Services, Department of	Direct		T32 AG027708	93.866	Aging Research		49,323	-
Health and Human Services, Department of	Pass-Through	Banner Health	0435-02-71283	93.866	Aging Research		15,032	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Banner Health Boston University	No. 0435-02-61926 4500002967	93.866 93.866	Aging Research Aging Research		95,725 8,301	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Boston University Brigham and Women's Hospital	111014	93.866	Aging Research		128,782	-
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	113049	93.866	Aging Research		147,136	
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	115359	93.866	Aging Research		16,954	_
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	120036	93.866	Aging Research		32,061	-
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	120037	93.866	Aging Research		19,014	-
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	CA for STRIDE Protocol	93.866	Aging Research		40,860	
Health and Human Services, Department of	Pass-Through	California Pacific Medical Center	280201018-S232	93.866	Aging Research		232,306	-
Health and Human Services, Department of	Pass-Through	Columbia University	1(GG012904-01)	93.866	Aging Research		18,634	-
Health and Human Services, Department of	Pass-Through	Columbia University	1(GG012967-01)	93.866	Aging Research		187,874	-
Health and Human Services, Department of	Pass-Through	Columbia University	2(GG012967-02)	93.866	Aging Research		85,681	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1012 - Core B	93.866	Aging Research		(8,295)	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1013 - Project 1	93.866	Aging Research		(8,205)	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1014 - Project 2	93.866 93.866	Aging Research		(2,765)	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Dartmouth College Dartmouth College	R1076 R1076	93.866	Aging Research Aging Research		129,111 41,057	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1138	93.866	Aging Research		7,449	
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1160	93.866	Aging Research		68,523	
Health and Human Services, Department of	Pass-Through	Dartmouth College	R143	93.866	Aging Research		(25,176)	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4683234UM	93.866	Aging Research		19,310	
Health and Human Services, Department of	Pass-Through	Indiana University	IN4683237MICH PO#2299375	93.866	Aging Research		72,314	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2002394114	93.866	Aging Research		185,621	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2003150570	93.866	Aging Research		21,740	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2003318486	93.866	Aging Research		(37,092)	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2003889369	93.866	Aging Research		14,442	-
Health and Human Services, Department of	Pass-Through	Keck School of Medicine of USC University of Southern California	111265871	93.866	Aging Research		53,688	-
Health and Human Services, Department of	Pass-Through	Massachusetts General Hospital	232963	93.866	Aging Research		66,517	-
Health and Human Services, Department of	Pass-Through	Mayo Clinic	66648732 THE 216068	93.866	Aging Research		6,933	-
Health and Human Services, Department of	Pass-Through Pass Through	Mayo Clinic Mayo Clinic	THE-216968	93.866 93.866	Aging Research		34,210	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Mayo Clinic Michigan State University	UOM-250202 RC106375A	93.866	Aging Research Aging Research		7,718 41,346	-
Health and Human Services, Department of	Pass-Through	National Bureau of Economic Research	33-4157-UMich	93.866	Aging Research		214,849	-
Health and Human Services, Department of	Pass-Through	National Bureau of Economic Research	33-4157-Umich	93.866	Aging Research		104,799	_
Health and Human Services, Department of	Pass-Through	New York Medical College	123440	93.866	Aging Research		83,339	-
Health and Human Services, Department of	Pass-Through	New York University School of Medicine	17-A1-00-006174-01 Pr #108238	93.866	Aging Research		60,313	-
Health and Human Services, Department of	Pass-Through	New York University School of Medicine	17-A1-00-006174-01 Proj #10823	93.866	Aging Research		(3,647)	-
Health and Human Services, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI2015-08	93.866	Aging Research		136,937	-
Health and Human Services, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI2015-08	93.866	Aging Research		13,209	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60040682 UM	93.866	Aging Research		22,842	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60040682 UM	93.866	Aging Research		(248)	-
	Pass-Through	Northwestern University	60048330 UM	93.866	Aging Research		107,089	-
Health and Human Services, Department of		Northwestern University	60048330 UM	93.866	Aging Research		556	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through							-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	Northwestern University	60048332 UM	93.866	Aging Research		28,255	
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Northwestern University Oregon Health and Science University	1008469 UMI	93.866	Aging Research		(953)	-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through Pass-Through	Northwestern University Oregon Health and Science University Oregon Health and Science University	1008469 UMI 1008640_UMI	93.866 93.866	Aging Research Aging Research		(953) 212,403	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through	Northwestern University Oregon Health and Science University Oregon Health and Science University Oregon Health and Science University	1008469 UMI 1008640_UMI 1008640_UMI	93.866 93.866 93.866	Aging Research Aging Research Aging Research		(953) 212,403 (12,746)	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	Northwestern University Oregon Health and Science University Oregon Health and Science University Oregon Health and Science University Oregon Health and Science University	1008469 UMI 1008640_UMI 1008640_UMI 1010251_UMI	93.866 93.866 93.866 93.866	Aging Research Aging Research Aging Research Aging Research		(953) 212,403 (12,746) 199,359	
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through	Northwestern University Oregon Health and Science University Oregon Health and Science University Oregon Health and Science University	1008469 UMI 1008640_UMI 1008640_UMI	93.866 93.866 93.866	Aging Research Aging Research Aging Research		(953) 212,403 (12,746)	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1011170_UMI	93.866	Aging Research		40,918	-
Health and Human Services, Department of	Pass-Through	President and Fellows of Harvard College	150173.5080550.0024	93.866	Aging Research		34,140	-
Health and Human Services, Department of	Pass-Through	RAND Corporation	9920170017	93.866	Aging Research		131,297	-
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000521075-SC001	93.866	Aging Research		139,013	-
Health and Human Services, Department of	Pass-Through	University of California - Irvine	2015-3301	93.866	Aging Research		176,039	-
Health and Human Services, Department of	Pass-Through	University of California - Irvine	2018-3595	93.866 93.866	Aging Research		86,582 69,859	-
Health and Human Services, Department of	Pass-Through	University of California - Los Angeles	1557 G WA554		Aging Research			-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	University of California- Riverside University of California-Santa Cruz	S-001052 A00-0516-S003-S0184287	93.866 93.866	Aging Research		34,420	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Florida, The	UFDSP00011879	93.866	Aging Research Aging Research		34,354	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	H004986802	93.866	Aging Research		41,338	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	R01AG057679	93.866	Aging Research		23,337	-
Health and Human Services, Department of	Pass-Through	University of New Mexico	045446-871E	93.866	Aging Research		107,615	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0047610 (127173-3)	93.866	Aging Research		66,728	
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0058745 (131435-1)	93.866	Aging Research		9,333	_
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	CNVA00047610 (132499-3)	93.866	Aging Research		12,963	_
Health and Human Services, Department of	Pass-Through	University of Southern California	68597182	93.866	Aging Research		30,542	-
Health and Human Services, Department of	Pass-Through	University of Southern California	84432482	93.866	Aging Research		39,732	-
Health and Human Services, Department of	Pass-Through	University of Southern California	94683653	93.866	Aging Research		226,633	-
Health and Human Services, Department of	Pass-Through	University of Southern California	97307437	93.866	Aging Research		39,531	-
Health and Human Services, Department of	Pass-Through	University of Southern California	100995188	93.866	Aging Research		20,753	-
Health and Human Services, Department of	Pass-Through	University of Southern California	105622532	93.866	Aging Research		45,201	-
Health and Human Services, Department of	Pass-Through	University of Southern California	105622532	93.866	Aging Research		7,181	-
Health and Human Services, Department of	Pass-Through	University of Southern California	107774911	93.866	Aging Research		47,398	-
Health and Human Services, Department of	Pass-Through	University of Southern California	107936883	93.866	Aging Research		50,423	-
Health and Human Services, Department of	Pass-Through	University of Southern California	109990895	93.866	Aging Research		36,806	-
Health and Human Services, Department of	Pass-Through	University of Southern California	107774911 PO#50769513	93.866	Aging Research		42,687	-
Health and Human Services, Department of	Pass-Through	University of Southern California	157933 PO 10553983	93.866	Aging Research		(303)	-
Health and Human Services, Department of	Pass-Through	University of Southern Mississippi	USM-8006130-02	93.866	Aging Research		23,351	-
Health and Human Services, Department of	Pass-Through	University of Texas at Austin	UTA15-001096	93.866	Aging Research		134,333	-
Health and Human Services, Department of	Pass-Through	University of Texas at Austin	UTA18-00522	93.866	Aging Research		22,308	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC9900	93.866	Aging Research		27,439	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC9900	93.866	Aging Research		3,689	-
Health and Human Services, Department of	Pass-Through	University of Wisconsin	757K595	93.866	Aging Research		(1,145)	-
Health and Human Services, Department of	Pass-Through	University of Wisconsin	833K103	93.866	Aging Research		14,627	-
Health and Human Services, Department of	Pass-Through	Washington University in St. Louis	WU-14-207/PO# 2923238X	93.866	Aging Research		(33,097)	-
Health and Human Services, Department of	Pass-Through	Washington University in St. Louis	WU-15-138	93.866	Aging Research		81,045	-
Health and Human Services, Department of	Pass-Through	Washington University in St. Louis	WU-18-295-Mod 1	93.866	Aging Research		26,870	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17146	93.866	Aging Research		160,589	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU18065	93.866	Aging Research		64,334	-
Health and Human Services, Department of	Pass-Through	Yale University	GR105475 (CON-80001681)	93.866	Aging Research		5,219	-
							\$ 65,887,479	
Health and Human Services, Department of	Direct		1 K08 EY029362-01	93.867	Vision Research		\$ 127,011	s -
Health and Human Services, Department of	Direct		1 R21 EY025719-02	93.867	Vision Research		19,881	-
Health and Human Services, Department of	Direct		1 R21 EY030363 01	93.867	Vision Research		19,277	-
Health and Human Services, Department of	Direct		2 R01 EY020823 06A1	93.867	Vision Research		273,215	-
Health and Human Services, Department of	Direct		5 K08 EY023982-05	93.867	Vision Research		112,046	-
Health and Human Services, Department of	Direct		5 K08 EY026654-03	93.867 93.867	Vision Research Vision Research		287,312	-
Health and Human Services, Department of	Direct		5 K12 EY022299-05	93.867	Vision Research		(10,127) 298,789	-
Health and Human Services, Department of	Direct		5 K12 EY022299-07 5 K23 EY023596-05	93.867	Vision Research		298,789	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 K23 EY023396-05 5 K23 EY025320-04	93.867	Vision Research Vision Research		257,455	-
	Direct		5 K23 EY026985-04	93.867	Vision Research		257,455	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 K23 EY026985-04 5 K23 EY027848-03	93.867	Vision Research		2/1,642 209,357	-
Health and Human Services, Department of	Direct		5 K23 E1027848-05 5 K23EY027849 02	93.867	Vision Research		117,641	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R23E 1027849 02 5 P30 EY007003-33	93.867	Vision Research		580,274	-
Health and Human Services, Department of	Direct		5 R00 EY025732-04	93.867	Vision Research		282,445	-
Health and Human Services, Department of	Direct		5 R01 EY007060-28	93.867	Vision Research		399,684	_
Health and Human Services, Department of	Direct		5 R01 EY008850-25	93.867	Vision Research		135,609	-
Health and Human Services, Department of	Direct		5 R01 E1008850-25 5 R01 EY008976-25	93.867	Vision Research		402,571	-
Health and Human Services, Department of	Direct		5 R01 EY012021-21	93.867	Vision Research		468,600	-
Health and Human Services, Department of	Direct		5 R01 EY014126-16	93.867	Vision Research		476,431	-
Health and Human Services, Department of	Direct		5 R01 EY014120-10	93.867	Vision Research		394,536	
Health and Human Services, Department of	Direct		5 R01 EY020582-09	93.867	Vision Research		562,457	34,020
Health and Human Services, Department of	Direct		5 R01 EY023660-05	93.867	Vision Research		118,456	-
Health and Human Services, Department of	Direct		5 R01 EY024996-03	93.867	Vision Research		256,255	-
Health and Human Services, Department of	Direct		5 R01 EY026641-04	93.867	Vision Research		553,871	241,933
Health and Human Services, Department of	Direct		5 R01 EY027310-03	93.867	Vision Research		290,239	-
Health and Human Services, Department of	Direct		5 R01 EY028350-02	93.867	Vision Research		390,281	-
Health and Human Services, Department of	Direct		5 R01 EY029159-02	93.867	Vision Research		364,913	-
Health and Human Services, Department of	Direct		5 R01 EY029349-02	93.867	Vision Research		342,499	-
Health and Human Services, Department of	Direct		5 R01 RY020895-08	93.867	Vision Research		500,365	-
Health and Human Services, Department of	Direct		5 R21 EY028997-02	93.867	Vision Research		155,052	-
Health and Human Services, Department of	Direct		5 R21 EY029452-02	93.867	Vision Research		133,038	-
Health and Human Services, Department of	Direct		5-K08 -EY- 027458 - 02	93.867	Vision Research		183,838	-
Health and Human Services, Department of	Direct		7 R01 EY022931-05	93.867	Vision Research		906,711	355,335
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Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
lealth and Human Services, Department of	Direct		T32 EY013934	93.867	Vision Research	114,680	-
lealth and Human Services, Department of	Direct		T32 EY013934	93.867	Vision Research	(2,917)	-
ealth and Human Services, Department of	Pass-Through	Case Western Reserve University	RES509735	93.867	Vision Research	76,320	-
ealth and Human Services, Department of	Pass-Through	Columbia University	1 (GG008092-01)	93.867	Vision Research	5,086	-
ealth and Human Services, Department of	Pass-Through	Jaeb Center for Health Research (JCHR)	Addendum to Agreement for U10E	93.867	Vision Research	25,034	-
alth and Human Services, Department of	Pass-Through	Massachusetts Eye and Ear	2300142-07 Subcontracts	93.867	Vision Research	22,492	-
alth and Human Services, Department of	Pass-Through	Michigan State University	RC107343UM	93.867	Vision Research	36,714	-
Ith and Human Services, Department of	Pass-Through	University of California - Irvine	2019-1212	93.867	Vision Research	82,634	-
alth and Human Services, Department of	Pass-Through	University of Kansas	FY2019-038	93.867	Vision Research	181,808	
Ith and Human Services, Department of	Pass-Through	Washington University in St. Louis	WU-16-117	93.867	Vision Research	3,718	_
Ith and Human Services, Department of	Pass-Through	Washington University in St. Louis	WU-16-117-MOD-5	93.867	Vision Research	2.060	
Ith and Human Services, Department of	Pass-Through	Wayne State University	WSU17063	93.867	Vision Research	29,995	-
ith and Human Services, Department of	Pass-1 nrougn	wayne State University	wSU1/063	93.80/	Vision Research	\$ 10,579,267	\$ 631,288
	D' (1 1/01 1 1/010720 01 11	03.070			
Ith and Human Services, Department of	Direct		1 K01 LM012739-01A1	93.879	Medical Library Assistance	φ 101,015	5 -
th and Human Services, Department of	Direct		5 K01 LM012528-03	93.879	Medical Library Assistance	162,829	-
th and Human Services, Department of	Pass-Through	Indiana University	IN4687289UM	93.879	Medical Library Assistance	103,370	-
th and Human Services, Department of	Pass-Through	Medstar Health Research Institute, Inc.	GM005924	93.879	Medical Library Assistance	8,295	-
th and Human Services, Department of	Pass-Through	The University of Texas Health Science Center at Houston	0010479A	93.879	Medical Library Assistance	62,690	-
th and Human Services, Department of	Pass-Through	University of Pennsylvania	572635	93.879	Medical Library Assistance	39,133	-
h and Human Services, Department of	Pass-Through	Weill Cornell Medical College of Cornell University	182509	93.879	Medical Library Assistance	25,138	-
· ·	e e	с ,				\$ 505,468	s -
th and Human Services, Department of	Pass-Through	University of Texas Health Science Center at San Antonio	164875/164873	93.884	Grants for Primary Care Training and Enhancement	\$ 7,117	\$ -
th and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171181-002	93.889	National Bioterrorism Hospital Preparedness Program	\$ (4.023)	
and ruman services, Department of	1 ass-1 mough	mempan, succes, nearly and munan services, popartment of	1201/1101-002	25.009	Cooperative Agreements to Support Comprehensive School	φ (4,023)	φ -
					Health Programs to Prevent the Spread of HIV and Other		
	D		5 F20 C1 201011 02	02.020		e 21.5	e
th and Human Services, Department of	Direct		5 F30 CA221011-03	93.938	Important Health Problems	\$ 34,877	\$ -
					HIV Demonstration, Research, Public and Professional		
th and Human Services, Department of	Pass-Through	Emory University	A031305	93.941	Education Projects	\$ 153,253	s -
					HIV Demonstration, Research, Public and Professional		
th and Human Services, Department of	Pass-Through	Emory University	A035402	93.941	Education Projects	67,976	-
· ·	e e				HIV Demonstration, Research, Public and Professional		
h and Human Services, Department of	Pass-Through	Emory University	T727372	93.941	Education Projects	59,591	
in and Human Bervices, Department of	r ass-r mough	Enory Oniversity	1727572	JJ.J41	HIV Demonstration, Research, Public and Professional	57,571	
hand Haman Camilan Devertment of	D Thursen	En en Universite	T873284	93.941	Education Projects	23.834	
h and Human Services, Department of	Pass-Through	Emory University	18/3284	93.941	Education Projects		-
						\$ 304,654	
h and Human Services, Department of	Direct		4 D43 TW009310-05	93.989	International Research and Research Training	\$ 136,837	
h and Human Services, Department of	Direct		5 D43 TW009883-05	93.989	International Research and Research Training	157,908	56,503
h and Human Services, Department of	Direct		5 U2 RTW010110-05	93.989	International Research and Research Training	264,934	-
th and Human Services, Department of	Pass-Through	Columbia University	3(GG009218)/G012910	93.989	International Research and Research Training	32,660	
th and Human Services, Department of	Pass-Through	Michigan State University	RC108046UM	93,989	International Research and Research Training	44,983	
th and Human Services, Department of	Pass-Through	University of Washington	UWSC9899	93.989	International Research and Research Training	130.080	
							-
th and Human Services, Department of	Pass-Through	University of Washington	UWSC9905	93.989	International Research and Research Training	12,753	-
th and Human Services, Department of	Pass-Through	University of Washington	UWSC9906	93.989	International Research and Research Training	1,872	-
			Total Health and Human Services, Depa	rtment of		\$ 782,027 \$ 654,454,814	
oration for National and Community Service	Pass-Through	Northeast Michigan Community Service Agency, Inc (NEMCSA)	Grant Award	94.021	Volunteer Generation Fund	\$ 7,065	<u>s</u> -
					National Service and Civic Engagement Research		
oration for National and Community Service	Direct		17REHMI001	94.026	Competition	\$ 22,306	s -
			Total Corporation for National and Corr	munity Service		\$ 29,371	\$ -
				-			
Security Administration	Pass-Through	Boston College	5107171-S1	96.002	Social Security Retirement Insurance	\$ 1,139	s -
l Security Administration	Direct		2 RRC08098401-10-00	96.007	Social Security Research and Demonstration	\$ 1,053,528	
l Security Administration	Direct		5 RDR18000002-02-00	96.007	Social Security Research and Demonstration	514,420	÷ 557,54.
		University of Wisconsin	862K396	96.007	Social Security Research and Demonstration	37.314	-
l Security Administration	Pass-Through	University of Wisconsin	802 N .390	96.007	Social Security Research and Demonstration		-
						\$ 1,605,262	
			Total Social Security Administration			\$ 1,606,401	\$ 537,342
eland Security, Department of	Direct		D15PC00302	97.RD		\$ (20,544)	\$ 14,771
land Security, Department of	Pass-Through	Adventium Labs	1048-UMI-UMI CLIN 0030	97.RD		3 (20,344) 25,371	÷ 17,//
							-
eland Security, Department of	Pass-Through	Innovision LLC	Research Agreement	97.RD		3,131	-
	Pass-Through	National Strategic Research Institute	HSHQDC-13-C-B0036/001	97.RD		(1,553)	-
	Pass-Through	Radiation Monitoring Devices, Inc.	C19-14	97.RD		186,943	-
eland Security, Department of		Radiation Monitoring Devices, Inc.	HSHQDN16-C-00024/RMD Contract	97.RD		(30)	-
land Security, Department of	Pass-Through Pass-Through					\$ 193,318	\$ 14,771
land Security, Department of		radiation Monitoring Devices, no.					s -
land Security, Department of land Security, Department of	Pass-Through		PDMC-PL-05-MI-2015-002	97.047	Pre-Disaster Mitigation	\$ 40.898	
land Security, Department of land Security, Department of		Michigan, State of, State Police	PDMC-PL-05-MI-2015-002	97.047	Pre-Disaster Mitigation Homeland Security Research, Development, Testing,	\$ 40,898	÷
land Security, Department of land Security, Department of	Pass-Through		PDMC-PL-05-MI-2015-002	97.047	Homeland Security Research, Development, Testing,	\$ 40,898	
land Security, Department of land Security, Department of land Security, Department of	Pass-Through Pass-Through				Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to		
land Security, Department of land Security, Department of land Security, Department of	Pass-Through		PDMC-PL-05-MI-2015-002	97.047 97.077	Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection	\$ 40,898 \$ 123,229	
and Security, Department of and Security, Department of and Security, Department of	Pass-Through Pass-Through				Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection Homeland Security Research, Development, Testing,		
land Security, Department of and Security, Department of land Security, Department of	Pass-Through Pass-Through Direct		15DNARI00015-05-00	97.077	Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to	\$ 123,229	
land Security, Department of eland Security, Department of eland Security, Department of eland Security, Department of	Pass-Through Pass-Through				Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection		
eland Security, Department of eland Security, Department of eland Security, Department of eland Security, Department of	Pass-Through Pass-Through Direct		15DNARI00015-05-00	97.077	Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to	\$ 123,229	
eland Security, Department of eland Security, Department of eland Security, Department of eland Security, Department of	Pass-Through Pass-Through Direct		15DNARI00015-05-00	97.077	Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection Homeland Security Research, Development, Testing,	\$ 123,229	
eland Security, Department of seland Security, Department of seland Security, Department of neland Security, Department of neland Security, Department of seland Security, Department of	Pass-Through Pass-Through Direct		15DNARI00015-05-00	97.077	Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection	\$ 123,229	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
					Homeland Security Research, Development, Testing,		
	D 771 1		100702 C1	07.077	Evaluation, and Demonstration of Technologies Related to	00 740	
omeland Security, Department of	Pass-Through	Georgia Technology Research Corporation	AWD-100703-G1	97.077	Nuclear Threat Detection Homeland Security Research, Development, Testing,	89,740	-
					Evaluation, and Demonstration of Technologies Related to		
lomeland Security, Department of	Pass-Through	Pennsylvania State University	5427-UM-USDHS-7803	97.077	Nuclear Threat Detection	124,728	_
ometand Security, Department of	1 uss-1 litough	remisjivana state oniversity	5427-0M-03DH5-7005	71.011	Nuclear Finear Detection	\$ 706,435	\$ -
			Total Homeland Security, Department of			\$ 940,651	\$ 14,77
nited States Agency for International Development	Pass-Through	Georgia Institute of Technology	RH089-S1	98.RD		\$ 87,652	s
nited States Agency for International Development	Pass-Through	International Foundation for Electoral Systems (IFES)	S-18-090	98.RD		3 87,032	· ·
ited States Agency for International Development	Pass-Through	Navrongo Health Research Centre	Navrongo Payment Form	98.RD		4,843	
ited States Agency for International Development	Pass-Through	Oregon State University	RD011G-B	98.RD		(6)	-
0 9	0	5				\$ 105,637	s -
ited States Agency for International Development	Direct		AID-641-14-00008	98.001	USAID Foreign Assistance for Programs Overseas	\$ (5,585)	
ited States Agency for International Development	Direct		AID-OAA-A-15-00075	98.001	USAID Foreign Assistance for Programs Overseas	268,288	200,78
ted States Agency for International Development	Pass-Through	University of California - Davis University of California - Davis	201121454-28 201700999-01	98.001 98.001	USAID Foreign Assistance for Programs Overseas USAID Foreign Assistance for Programs Overseas	181,885 127,088	-
ited States Agency for International Development	Pass-Through	University of California - Davis	201700999-01	98.001	USAID Foreign Assistance for Programs Overseas	\$ 571,676	\$ 200,78
			Total United States Agency for Internationa	l Development		\$ 677,313	
				-			
onsumer Financial Protection Bureau	Direct		IPA - New Agreement	99.RD		\$ 1,550	
			Total Consumer Financial Protection Bureau	u		\$ 1,550	s -
rector of National Intelligence, Office of the	Direct		2017-17012600004/CLIN 0001	99.RD		\$ 220,845	s -
ector of National Intelligence, Office of the	Direct		2018-18020600001/CLIN 0001	99.RD		266,824	
ector of National Intelligence, Office of the	Direct		2018-18032000001/CLIN 0001	99.RD		264,605	-
ector of National Intelligence, Office of the	Pass-Through	Duke University	Subaward 313-0640	99.RD		50,692	-
rector of National Intelligence, Office of the	Pass-Through	SRI International	Subcontract No. PO18259	99.RD		247,063	-
			Total Director of National Intelligence, Office	ce of the		\$ 1,050,029	\$ -
esident, Executive Office of the	Pass-Through	Washtenaw, County of	PO# 20181183	99.RD		\$ 110.000	s -
sident, Executive Office of the	Pass-Through	Washtenaw, County of	PO#20181378	99.RD		74,589	-
	5		Total President, Executive Office of the			\$ 184,589	ş -
			Total research and development cluster			\$ 953,428,952	\$ 99,361,600
HER PROGRAMS							
efense, Department of	Direct		W81XWH-15-1-0661	12.400	Military Construction, National Guard	\$ 141,428	\$ 101,752
			Total Defense, Department of			\$ 141,428	\$ 101,752
erior, Department of the	Direct		L13AC00158	15.231	Fish, Wildlife and Plant Conservation Resource Management	\$ (1.707)	e.
chor, Department of the	Direct		Total Interior, Department of the	15.251	Fish, whunte and Flant Conservation Resource Management	\$ (1,707)	*
						• (1,1,1)	*
tional Endowment for the Humanities	Pass-Through	Michigan Humanities Council	HU069-18	45.129	Promotion of the Humanities Federal/State Partnership	\$ 370	
			Total National Endowment for the Humanit	ies		\$ 370	ş -
					Supporting Effective Instruction State Grants (formerly		
acation, Department of	Pass-Through	Michigan, State of, Education, Department of	170290-004	84.367	Improving Teacher Quality State Grants)	\$ 117,773	\$ 19,867
	C C				Supporting Effective Instruction State Grants (formerly		
cation, Department of	Pass-Through	National Writing Project	00-MI03-SEED2017-HNEval	84.367	Improving Teacher Quality State Grants)	1,585	-
					Supporting Effective Instruction State Grants (formerly		
acation, Department of	Pass-Through	National Writing Project	00-MI03-SEED2017-ILI	84.367	Improving Teacher Quality State Grants)	(874)	
			Total Education, Department of			\$ 118,484	\$ 19,80
		Michigan, State of, Health and Human Services, Department of	E20192403-001 / Q	93.268	Immunization Cooperative Agreements	\$ 22,721	s -
lth and Human Services, Department of	Pass-Through				Head Start	\$ 397,236	\$ -
	Pass-Through Pass-Through	Genesee Intermediate School District	05HP000104-01-00	93.600			
alth and Human Services, Department of alth and Human Services, Department of	Pass-Through Pass-Through	Genesee Intermediate School District Wayne State University	05HP000104-01-00 90YR0092	93.600	Head Start	44,397	-
alth and Human Services, Department of alth and Human Services, Department of	Pass-Through	Genesee Intermediate School District	05HP000104-01-00			44,397 28,199	-
lth and Human Services, Department of lth and Human Services, Department of lth and Human Services, Department of	Pass-Through Pass-Through Pass-Through	Genesee Intermediate School District Wayne State University Wayne State University	05HP000104-01-00 90YR0092 WSU17120	93.600 93.600	Head Start Head Start	44,397 28,199 \$ 469,832	
alth and Human Services, Department of alth and Human Services, Department of alth and Human Services, Department of alth and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through	Genesee Intermediate School District Wayne State University Wayne State University Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 18000002065	93.600 93.600 93.767	Head Start Head Start Children's Health Insurance Program	44,397 28,199 <u>\$ 469,832</u> <u>\$ 6,410</u>	
Ith and Human Services, Department of Ith and Human Services, Department of Ith and Human Services, Department of Ith and Human Services, Department of	Pass-Through Pass-Through Pass-Through	Genesee Intermediate School District Wayne State University Wayne State University	05HP000104-01-00 90YR0092 WSU17120	93.600 93.600	Head Start Head Start	44,397 28,199 \$ 469,832 \$ 6,410 692	\$ - -
Ith and Human Services, Department of Ith and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through	Genesee Intermediate School District Wayne State University Wayne State University Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 18000002065	93.600 93.600 93.767	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants	44,397 28,199 \$ 469,832 \$ 6,410 692 \$ 7,102 \$ (37,208)	\$ - - \$ -
Ith and Human Services, Department of alth and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	Genesee Intermediate School District Wayne State University Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 180000002065 190000001755 E20180243-002	93.600 93.600 93.767 93.767 93.917	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with	44,397 28,199 \$ 469,832 \$ 6,410 692 \$ 7,102 \$ (37,208)	\$ - - \$ - \$ -
Ith and Human Services, Department of Ith and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct	Genesee Intermediate School District Wayne State University Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 180000002065 19000001755 E20180243-002 5 H76HA00182-23-00	93.600 93.600 93.767 93.767 93.917 93.918	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease	44,397 28,199 \$ 469,832 \$ 6,410 692 \$ 7,102 \$ 7,102 \$ (37,208) \$ 559,542	S - S - S - S -
Ith and Human Services, Department of Ith and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct Pass-Through	Genesse Intermediate School District Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 18000002065 19000001755 E20180243-002 5 H76HA00182-23-00 E20180570-001	93.600 93.600 93.767 93.767 93.917 93.918 93.958	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease Block Grants for Community Mental Health Services	44,397 28,199 \$ 469,832 \$ 6,410 692 \$ 7,102 \$ 7,102 \$ (37,208) \$ 559,542 \$ 122,665	S - S - S - S -
th and Human Services, Department of thand Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct	Genesee Intermediate School District Wayne State University Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 180000002065 19000001755 E20180243-002 5 H76HA00182-23-00	93.600 93.600 93.767 93.767 93.917 93.918	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease	$\begin{array}{r} & 44.397 \\ 28.199 \\ \hline $ 28.09 \\ \hline $ 469,832 \\ \hline $ 6,410 \\ \hline $ 692 \\ \hline $ 7,102 \\ \hline $ 7,102 \\ \hline $ 7,102 \\ \hline $ 3,7208 \\ \hline $ 3,559,542 \\ \hline $ 559,542 \\ \hline $ 113,964 \\ \hline $ 113,964 \\ \hline \end{tabular}$	\$ - <u>\$</u> - <u>\$</u> - <u>\$</u> - <u>\$</u> -
alth and Human Services, Department of alth and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct Pass-Through	Genesse Intermediate School District Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 18000002065 19000001755 E20180243-002 5 H76HA00182-23-00 E20180570-001	93.600 93.600 93.767 93.767 93.917 93.918 93.958	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease Block Grants for Community Mental Health Services Block Grants for Community Mental Health Services	44,397 28,199 \$ 469,832 \$ 6,410 692 \$ 7,102 \$ 7,102 \$ (37,208) \$ 559,542 \$ 122,665	\$ - \$ - \$ - \$ - \$ -
alth and Human Services, Department of alth and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct Pass-Through	Genesse Intermediate School District Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 18000002065 19000001755 E20180243-002 5 H76HA00182-23-00 E20180570-001	93.600 93.600 93.767 93.767 93.917 93.918 93.958	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease Block Grants for Community Mental Health Services	$\begin{array}{r} & 44.397 \\ 28.199 \\ \hline $ 28.09 \\ \hline $ 469,832 \\ \hline $ 6,410 \\ \hline $ 692 \\ \hline $ 7,102 \\ \hline $ 7,102 \\ \hline $ 7,102 \\ \hline $ 3,7208 \\ \hline $ 3,559,542 \\ \hline $ 559,542 \\ \hline $ 113,964 \\ \hline $ 113,964 \\ \hline \end{tabular}$	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -
alth and Human Services, Department of alth and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct Pass-Through Pass-Through Pass-Through	Genesse Intermediate School District Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 180000002065 19000001755 E20180243-002 5 H76HA00182-23-00 E20180570-001 E20192538-002	93.600 93.600 93.767 93.767 93.917 93.918 93.958 93.958	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease Block Grants for Community Mental Health Services Block Grants for Community Mental Health Services Block Grants for Prevention and Treatment of Substance	44,397 28,199 <u>\$</u> 469,832 <u>\$</u> 6,410 692 <u>\$</u> 7,102 <u>\$</u> 7,102 <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,208 <u>\$}7,208</u> <u>\$}7,208</u> <u>\$}7,208</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,20</u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u>	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -
ealth and Human Services, Department of ealth and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct Pass-Through Pass-Through Pass-Through	Genesse Intermediate School District Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 180000002065 19000001755 E20180243-002 5 H76HA00182-23-00 E20180570-001 E20192538-002	93.600 93.600 93.767 93.767 93.917 93.918 93.958 93.958	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease Block Grants for Community Mental Health Services Block Grants for Community Mental Health Services Block Grants for Prevention and Treatment of Substance Abuse Block Grants for Prevention and Treatment of Substance Abuse	44,397 28,199 <u>\$</u> 469,832 <u>\$</u> 6,410 692 <u>\$</u> 7,102 <u>\$</u> 7,102 <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,102</u> <u>\$}7,208 <u>\$}7,208</u> <u>\$}7,208</u> <u>\$}7,208</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206</u> <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,206 <u>\$}7,20</u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u>	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -
ealth and Human Services, Department of ealth and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Direct Pass-Through Pass-Through Pass-Through Direct	Genesee Intermediate School District Wayne State University Wayne State University Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	05HP000104-01-00 90YR0092 WSU17120 1800000001755 E20180243-002 5 H76HA00182-23-00 E20180570-001 E20192538-002 5 R21 CA215968-02	93.600 93.600 93.767 93.767 93.917 93.918 93.958 93.958	Head Start Head Start Children's Health Insurance Program Children's Health Insurance Program HIV Care Formula Grants Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease Block Grants for Community Mental Health Services Block Grants for Community Mental Health Services Block Grants for Prevention and Treatment of Substance Abuse Block Grants for Prevention and Treatment of Substance	44,397 28,199 \$ 469,832 \$ 6,410 \$ 6,410 \$ 6,7102 \$ 7,102 \$ 7,102 \$ 13,964 \$ 236,629 \$ 163,385	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
_					Block Grants for Prevention and Treatment of Substance		
Health and Human Services, Department of	Pass-Through	Community Mental Health Partnership of Southeast Michigan	Contract# C19056	93.959	Abuse	40,345	; -
					-	\$ 237,196	5 \$ 92
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180450-00	93.994	Maternal and Child Health Services Block Grant to the States	\$ 5,041	\$ -
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180500-00	93.994	Maternal and Child Health Services Block Grant to the States	5,659) -
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20192511-00	93.994	Maternal and Child Health Services Block Grant to the States	12,154	۰ - I
					-	\$ 22,854	- S
			Total Health and Human Services, De	epartment of		\$ 1,518,668	\$ \$ 92
Corporation for National and Community Service	Pass-Through	Public Allies	14ESHMI0010004	94.006	AmeriCorps	\$ (30,435	5) \$ -
Corporation for National and Community Service	Pass-Through	Public Allies	18EDHWI0010008	94.006	AmeriCorps	464,089) -
Corporation for National and Community Service	Pass-Through	Public Allies	OP022-94.006-17-PADT	94.006	AmeriCorps	60,118	-
Corporation for National and Community Service	Pass-Through	Public Allies	OP022-94.006-18-PADT-SC	94.006	AmeriCorps	22,278	-
Corporation for National and Community Service	Pass-Through	Public Allies	OP022-94.006-19-PADT - SC	94.006	AmeriCorps	82,526	; -
			Total Corporation for National and Co	ommunity Service		\$ 598,576	5 \$ -
			Total other programs		-	\$ 2,375,819	\$ 121,711
			Total federal expenditures		-	\$ 1,392,858,954	\$ 99,476,918

1. Summary of Significant Accounting Policies

The accompanying Schedule of Expenditures of Federal Awards (the "SEFA") includes all federal grant transactions of the University of Michigan (the "University") recorded on the accrual basis of accounting. The information in the SEFA is presented in accordance with Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards* (the "Uniform Guidance"). As the SEFA presents only the federal award activity of the University, it is not intended to and does not present the net position, changes in net position and cash flows of the University.

Negative amounts presented in the SEFA represent adjustments, in the normal course of business, to expenditures reported in prior years. Complete CFDA numbers and pass-through numbers are provided on the SEFA when available.

2. Indirect Costs

The University applies its predetermined approved facilities and administrative rate when charging indirect costs to federal awards rather than the 10 percent de minimus cost rate as described in Section 200.414 of the Uniform Guidance. The indirect cost rates approved by the University's cognizant agency (the Department of Health and Human Services) for organized research, instruction and other sponsored activities through June 30, 2020 are as follows:

	July 1, 2018 –
	June 30, 2020
On-campus organized research	56%
On-campus instruction	54%
On-campus sponsored activities	29%
Off-campus all programs	26%

3. Federal Direct Loan Program

Under the William D. Ford Federal Direct Loan Program, students and parents borrow funds directly from the federal government. The University is responsible for verifying student eligibility, electronically transmitting the loan records to the federal processor and distributing the loan funds directly to the student account or parent borrower. During the year ended June 30, 2019, the University's students and parents received the following amount of new loans under this program:

	CFDA	
	<u>Number</u>	Loans Issued
Direct Student Loans:		
Undergraduate subsidized	84.268	\$ 52,666,164
Undergraduate unsubsidized	84.268	157,564,785
Graduate	84.268	4,926,197
Direct Parent Loans for Undergraduate Students	84.268	64,481,328
		\$ 279,638,474

4. University-Administered Federal Loan Programs

The federal loan programs listed below are administered directly by the University and outstanding balances related to these programs are included in the University's financial statements. The amount of loans outstanding at the beginning of the year, loans made during the year and the administrative cost allowance are included in the SEFA. The balance of loans outstanding at June 30, 2019 consists of:

	CFDA <u>Number</u>	Outstanding Balance at June 30, 2019
Department of Education, Federal Perkins Program	84.038	\$ 53,340,433
Department of Health and Human Services: Nursing Faculty Loan Program	93.264	4,015,134
Health Professions Loan Program – Medicine/Primary Care Health Professions Loan Program – Pharmacy Health Professions Loan Program – Dentistry	93.342 93.342 93.342	1,181,370 930,626 8,090,654 10,202,650
Nursing Student Loan – Baccalaureate Nursing Student Loan – Graduate	93.364 93.364	1,440,714 432,854 1,873,568
Disadvantaged Student Loan Program – Medicine/Primary Care Disadvantaged Student Loan Program – Pharmacy Disadvantaged Student Loan Program – Dentistry	93.925 93.925 93.925	4,404,174 142,576 174,041 4,720,791
Total University administered federal loans outstanding		\$ 74,152,576



Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Regents of the University of Michigan

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the consolidated financial statements of the University of Michigan (the "University"), which comprise the consolidated statement of net position as of June 30, 2019, and the related consolidated statements of revenues, expenses and changes in net position and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated October 17, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the University's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

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Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Precewaterhouse Coopers LLP

October 17, 2019



Report of Independent Auditors on Compliance with Requirements That Could Have a Direct and Material Effect on Each Major Program and on Internal Control Over Compliance in Accordance with the Uniform Guidance

To the Regents of the University of Michigan:

Report on Compliance for Each Major Federal Program

We have audited the University of Michigan's (the "University") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2019. The University's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations and the terms and conditions of its federal awards applicable to its federal programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for each of the University's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (the "Uniform Guidance"). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the University's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the University's compliance.

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Opinion on Each Major Federal Program

In our opinion, the University of Michigan complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2019.

Other Matter

As indicated in Part I to the accompanying Schedule of Findings and Questioned Costs, we have audited the Student Financial Assistance cluster as a major program. Also, as indicated in the first paragraph of this report, we performed our audit of compliance using the compliance requirements contained in the OMB Compliance Supplement, including those contained in Part V 5.3, Compliance Requirement N, Special Tests and Provisions, Section 10 "Gramm-Leach-Bliley Act-Student Information Security." This section includes three suggested audit procedures with respect to verification that the institution (1) designated an individual to coordinate the information security program, (2) performed a risk assessment that addresses the three required areas in 16 CFR 314.4(b), and (3) documented a safeguard for each risk identified. Our procedures in relation to these three items were limited to inquiry of and obtaining written representation from management and obtaining and reading management's documentation related to these three items. Our procedures did not include an analysis of the adequacy or completeness of the risk assessment performed or the safeguards for each risk identified by management.

Report on Internal Control Over Compliance

Management of the University is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the University's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency of a combination of



deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Pricewaterhouse Coopers LLP

February 6, 2020

Section I – Summary of Auditors' Results

Financial Statements Type of auditor's report issued:	Unmodified Opinion			
Internal control over financial reporting:Material weakness(es) identified?	Yes	🖂 No		
• Significant deficiency(ies) identified not considered to be material weaknesses?	Yes	None reported		
• Noncompliance material to financial statements noted?	Yes	🖂 No		
Federal AwardsInternal control over major programs:Material weakness(es) identified?	Yes	🖂 No		
• Significant deficiency(ies) identified not considered to be material weakness(es)?	Yes	None reported		
Type of auditor's report issued on compliance for major programs:	Unmodified Opinion			
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	Yes	🖂 No		
Identification of major programs: <u>CFDA Number(s)</u> Various	<u>Name of Federal Program or Cluster</u> Student Financial Assistance Cluster			
Dollar threshold used to distinguish between Type A and Type B programs:	<u>\$4,178,577</u>			
Auditee qualified as low-risk auditee?	Xes Yes	🗌 No		

Section II – Financial Statement Findings

None.

University of Michigan Schedule of Findings and Questioned Costs For the Year Ended June 30, 2019

Section III – Federal Award Findings and Questioned Costs

None.

Finding 2018-001 – Enrollment Reporting

Cluster: Student Financial Assistance

Grantor(s): Department of Education

Award(s): Federal Direct Student Loans, 84.268, Parent PLUS Loans, 84.268 and Federal Pell Grant, 84.063, academic year 2017-18

Summary: When testing enrollment status changes, (graduated, full time, half time, or withdrawn) four of 40 students tested at the Dearborn campus were not properly reported to the National Student Loan Data System ("NSLDS") within the appropriate window of time during the 2017-18 academic year.

When the University submits enrollment records to the National Student Clearinghouse ("NSC"), the NSC's system records a "G" status for recent graduates and reports this change to the NSLDS and student loan servicing organizations. However, if the graduation information uploaded for a student does not match the NSC's existing records, the "G" status will not be applied, and the status change will not be communicated to the NSLDS or loan servicers. Due to program level reporting required for enrollment and degrees, NSC's current DegreeVerify process cannot assign a "G" enrollment status to the student program record in certain situations, resulting in the need for manual updates to the NSC file prior to submission to the NSLDS. The "G" status was not applied to the four exceptions identified during testing, however, they were subsequently updated and reported 81 days late.

Status: As of October 2018, UM-Dearborn generates a graduates only enrollment file from its student information system for direct upload to the NSC. This process avoids any issues associated with the NSC's existing DegreeVerify process and ensures the enrollment status is properly applied to the enrollment record, with the correct graduation date and degree program, within 60 days of the official graduation date.

Finding No. 2018-002 – Vendor Discounts (Significant Deficiency)

Cluster(s), Grantor(s), Award Name(s), Award Year(s), CDFA Number(s), Award Number(s): Applies to awards in various clusters, except Student Financial Assistance. All such awards are identified with the finding in the Data Collection Form.

Summary: The University has a Strategic Supplier Program (the "Program"), of which the costs to the University to operate the Program have historically been offset by a Program fee paid by participating vendors, collected in the form of a discount applied to the charges on each invoice. The Program fee was not considered a discount for purposes of representations made in the University's Form DS-2 Disclosure Statement and was not been passed on to federal agencies and pass through entities in determining reimbursement for direct costs associated with sponsored activities. From a sample of 60 direct costs tested in 2018, one selection related to equipment originally acquired in 2016 through the Program that was reclassified from University-owned equipment to federally-owned equipment within the same grant award in 2018, as the result of a data integrity review performed by the University. While this reclassification had no impact on direct costs charged to the award in 2018, it was noted that the 2016 purchase of equipment included a two percent discount of \$60 that was retained by the University and not passed on to the related federal award in 2016.

In connection with its internal review, the University evaluated Program purchases made during 2018, noting that discounts of \$316,281 were retained by the University and not passed on to federal agencies and pass through entities, which resulted in the University being reimbursed for amounts in excess of the related paid invoices.

In February 2019, the University notified its cognizant agency, the Department of Health and Human Services ("DHHS"), of this discrepancy with its DS-2 and advised that processes will be changed to ensure that, as of April 1, 2019, Program discounts will be applied to direct costs as listed on the vendor invoice for purposes of reimbursement for its federally sponsored activities. The University also notified DHHS, that the amount of Program fees retained for purchases made on federally funded projects which were not passed on to federal agencies and pass through entities totaled \$316,281 for fiscal 2018 and \$1,783,228 during the six-year period from fiscal 2013 through 2018.

Status: As of April 2019, Program fees are applied to direct costs as listed on the vendor invoice for purposes of reimbursement for federally sponsored activities. As directed by DHHS, the University also remitted payment to the Department of Treasury in May 2019 as full and final settlement of this matter.