

EMORY UNIVERSITY

Independent Auditors' Report as Required by Uniform Guidance and State of Georgia and Related Information

Year ended August 31, 2019

EMORY UNIVERSITY

Independent Auditors' Report as Required by Uniform Guidance and State of Georgia and Related Information

Year ended August 31, 2019

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KPMG LLP Suite 2000 303 Peachtree Street, N.E. Atlanta, GA 30308-3210

Independent Auditors' Report

The Board of Trustees Emory University:

We have audited the accompanying consolidated financial statements of Emory University and its subsidiaries (the University), which comprise the consolidated statements of financial position as of August 31, 2019 and 2018, the related consolidated statements of activities and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; 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 these 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 the auditors' 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, the auditor considers internal control relevant to the entity'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 entity'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.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Emory University and its subsidiaries as of August 31, 2019 and 2018, and the changes in their net assets and their cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



Emphasis of Matters

As discussed in note 2(t) to the consolidated financial statements, in fiscal year 2019, Emory University and its subsidiaries adopted Accounting Standards Update (ASU) No. 2016–14, *Not-for-Profit Entities* (*Topic 958*): Presentation of Financial Statements of Not-for-Profit Entities; ASU No. 2014–09, Revenue from Contracts with Customers (*Topic 606*), as amended; and ASU No. 2018–08, Clarifying the Scope and Accounting Guidance for Contributions Received and Contributions Made. Our opinion is not modified with respect to these matters.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 19, 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. 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 the University's 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.



Atlanta, Georgia December 19, 2019

EMORY UNIVERSITY CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AUGUST 31, 2019 AND 2018 (Dollars in thousands)

	August 31, 2019		August 31, 2018	
ASSETS:				
Cash and cash equivalents	\$	229,414	\$	149,449
Patient accounts receivable, net		515,801		398,706
Student accounts receivable, net		21,875		109,780
Loans receivable, net		21,960		23,138
Contributions receivable, net		193,792		396,127
Other receivables, net		180,406		248,685
Prepaid expenses, deferred charges, and other assets		319,591		429,839
Investments		8,282,405		8,157,678
Interests in perpetual funds held by others		1,757,576		1,311,406
Property and equipment, net		3,502,052		3,219,005
Total assets	\$	15,024,872	\$	14,443,813
LIABILITIES AND NET ASSETS:				
	\$	747,530	\$	657 294
Accounts payable and accrued liabilities Deferred revenue	Ф		Ф	657,384
		340,445		521,289
Interest payable		14,892		29,391
Liability for derivative instruments		238,112		128,861
Bonds and notes payable		1,980,060		1,959,897
Accrued liabilities for benefit obligations and professional liabilities		652,125		476,686
Funds held in trust for others		826,663		791,841
Annuities payable		15,287		15,704
Government advances for federal loan programs		16,638		18,659
Asset retirement obligation		79,096		65,996
Total liabilities		4,910,848		4,665,708
Net assets without donor restrictions, controlled by Emory		4,191,903		4,226,918
Net assets without donor restrictions, controlled by Emory Net assets without donor restrictions related to noncontrolling interests		107,380		113,345
Total net assets without donor restrictions		4,299,283		4,340,263
Net assets with donor restrictions		5,814,741		5,437,842
Total net assets		10,114,024		9,778,105
TOTAL LIABILITIES AND NET ASSETS	\$	15,024,872	\$	14,443,813

See accompanying independent auditors' report.

EMORY UNIVERSITY CONSOLIDATED STATEMENTS OF ACTIVITIES

YEAR ENDED AUGUST 31, 2019 (WITH SUMMARIZED COMPARATIVE FOR 2018) (Dollars in thousands)

	Net Assets without Donor Restrictions	Net Assets with Donor Restrictions	Total August 31, 2019	Total August 31, 2018
OPERATING REVENUE AND OTHER SUPPORT				
Tuition and fees, net of scholarship allowance	\$ 452,423	-	\$ 452,423	\$ 434,166
Sales and services of auxiliary enterprises, net of scholarship allowance	74,666	-	74,666	74,481
Endowment spending distribution	197,908	-	197,908	182,562
Distribution from perpetual funds	37,077	-	37,077	35,377
Other investment income designated for current operations	77,927	-	77,927	81,257
Gifts and contributions for current use	47,123	26,344	73,467	56,060
Grants and contracts	495,839	-	495,839	470,924
Indirect cost recoveries	147,534	-	147,534	144,026
Net patient service revenue	4,206,383	-	4,206,383	3,404,004
Medical services	246,435	_	246,435	336,141
Independent operations	23,798	_	23,798	24,348
Other revenue	275,106	_	275,106	176,853
Net assets released from restrictions	45,387	(17,584)	27,803	23,707
Total operating revenue	6,327,606	8,760	6,336,366	5,443,906
OPERATING EXPENSES				
Salaries	3,188,145	_	3,188,145	2,703,393
Fringe benefits	688,173	_	688,173	608,246
Student financial aid	20,477	_	20,477	19,133
Nonsalary operating expenses:	,,,,		,,	,
Professional fees and purchased services	572,991	_	572,991	519,232
Supplies and pharmaceuticals	1,039,738	_	1,039,738	827,657
Rent, utilities, and maintenance	367,291	_	367,291	325,204
Other operating expenses	64,741	_	64,741	27,925
Total nonsalary operating expenses	2,044,761	-	2,044,761	1,700,018
Interest on indebtedness	82,814	_	82,814	80,468
Depreciation and amortization	294,291	_	294,291	265,156
Total operating expenses	6,318,661	-	6,318,661	5,376,414
NET OPERATING ACTIVITIES	8,945	8,760	17,705	67,492
	,	,	,	,
NONOPERATING ACTIVITIES, NET	174,375	73,574	247,949	248,682
Investment return in excess of spending distribution for current operations Change in undistributed income from perpetual funds held by others	1/4,3/3	195,591	195,591	26,880
* * *	17,737	118,391	136,128	420,939
Gifts and contributions for capital and long-term investment Other gains (losses)	14,774	110,391	14,774	(1,593)
Loss on defeasance of debt	(11,442)	-	(11,442)	(1,393)
Change in fair value of derivative instruments	(109,251)	-	(109,251)	59,751
e e e e e e e e e e e e e e e e e e e	, , ,	-	,	28,461
Pension and postretirement plans	(105,641)	5,008	(105,641)	· · · · · · · · · · · · · · · · · · ·
Other nonoperating items, net Net assets released from restrictions	(27,099)	(24,425)	(22,091) (27,803)	
	(3,378)	(, ,		(23,707)
Total nonoperating activities, net	(49,925)	368,139	318,214	767,114
CHANGE IN NET ASSETS	(40,980)	376,899	335,919	834,606
Less change in net assets related to noncontrolling interests	(5,965)	-	(5,965)	16,712
CHANGE IN NET ASSETS CONTROLLED BY EMORY	\$ (35,015)	376,899	\$ 341,884	\$ 817,894

See accompanying independent auditors' report.

EMORY UNIVERSITY CONSOLIDATED STATEMENT OF ACTIVITIES

YEAR ENDED AUGUST 31, 2018 (Dollars in thousands)

	Net Assets without Donor Restrictions	Net Assets with Donor Restrictions	Total August 31, 2018
OPERATING REVENUE AND OTHER SUPPORT			
Tuition and fees, net of scholarship allowance	\$ 434,166	_	\$ 434,166
Sales and services of auxiliary enterprises, net of scholarship allowance	74,481	_	74,481
Endowment spending distribution	182,562	_	182,562
Distribution from perpetual funds	35,377	-	35,377
Other investment income designated for current operations	81,257	-	81,257
Gifts and contributions for current use	43,656	12,404	56,060
Grants and contracts	470,924	· -	470,924
Indirect cost recoveries	144,026	-	144,026
Net patient service revenue	3,404,004	_	3,404,004
Medical services	336,141	-	336,141
Independent operations	24,348	-	24,348
Other revenue	176,853	-	176,853
Net assets released from restrictions	36,856	(13,149)	23,707
Total operating revenue	5,444,651	(745)	5,443,906
OPERATING EXPENSES			
Salaries	2,703,393	-	2,703,393
Fringe benefits	608,246	_	608,246
Student financial aid	19,133	_	19,133
Nonsalary operating expenses:	17,133		17,133
Professional fees and purchased services	519,232	_	519,232
Supplies and pharmaceuticals	827,657	_	827,657
Rent, utilities, and maintenance	325,204	_	325,204
Other operating expenses	27,925	_	27,925
Total nonsalary operating expenses	1,700,018		1,700,018
Interest on indebtedness	80,468	_	80,468
Depreciation and amortization	265,156	_	265,156
Total operating expenses	5,376,414		5,376,414
Total operating expenses	3,370,414	- _	3,370,414
NET OPERATING ACTIVITIES	68,237	(745)	67,492
NONOPERATING ACTIVITIES, NET			
Investment return in excess of spending distribution for current operations	127,810	120,872	248,682
Change in undistributed income from perpetual funds held by others	=	26,880	26,880
Gifts and contributions for capital and long-term investment	2,035	418,904	420,939
Other losses	(1,593)	,	(1,593)
Change in fair value of derivative instruments	59,751	_	59,751
Pension and postretirement plans	28,461	_	28,461
Other nonoperating items, net	(3,100)	10,801	7,701
Net assets released from restrictions	(1,998)		(23,707)
Total nonoperating activities, net	211,366	555,748	767,114
CHANGE IN NET ASSETS	279,603	555,003	834,606
Less change in net assets related to noncontrolling interests	16,712	-	16,712
			<u> </u>
CHANGE IN NET ASSETS CONTROLLED BY EMORY	\$ 262,891	555,003	\$ 817,894

See accompanying independent auditors' report.

EMORY UNIVERSITY CONSOLIDATED STATEMENTS OF CASH FLOWS

YEARS ENDED AUGUST 31, 2019 AND 2018 (Dollars in thousands)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Change in net assets	\$ 335,919	\$ 834,606
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Restricted contributions for endowments and capital projects	(136,128)	(420,939)
Net realized and unrealized gains on investments	(494,199)	(473,446)
Contribution from acquisition	(17,304)	-
Loss on disposal of property and equipment	2,684	1,633
Interests in perpetual funds held by others	(195,591)	(26,880)
Loss on defeasance of debt	11,442	-
Depreciation	293,611	260,674
Accretion/amortization of bond discounts/premiums and issuance costs	(3,028)	(3,057)
Actuarial adjustments for retiree pension and benefit plans	105,641	(28,461)
Change in fair value of derivative instruments	109,251	(59,751)
Change in operating assets, net of effects from acquisition:		
Accounts and other receivables, net	51,347	(265,080)
Contributions receivable for operations	(10,004)	21,167
Prepaid expenses, deferred charges, and other assets	155,725	49,474
Change in operating liabilities, net of effects from acquisition:		
Accounts payable, accrued liabilities, and interest payable	(25,456)	(72,850)
Asset retirement obligation	13,100	3,012
Accrued liabilities for benefit obligations and professional liabilities	22,977	137,558
Deferred revenue	(180,843)	89,554
Net cash provided by operating activities	39,144	47,214
CASH FLOWS FROM INVESTING ACTIVITIES:		
Cash received from acquisition	95,407	-
Disbursements for loans to students	(2,868)	(2,713)
Repayment of loans from students	4,046	4,496
Proceeds from sales and maturities of investments	6,109,430	7,653,840
Purchases of investments	(5,724,954)	(7,294,192)
Purchases of property, plant, and equipment	(434,868)	(378,464)
Increase in funds held in trust for others	34,822	44,732
Net cash provided by investing activities	\$ 81,015	\$ 27,699

(Continued)

EMORY UNIVERSITY CONSOLIDATED STATEMENTS OF CASH FLOWS

YEARS ENDED AUGUST 31, 2019 AND 2018 (Dollars in thousands)

	2019	2018
CASH FLOWS FROM FINANCING ACTIVITIES:		
Cash received for endowments and capital projects	\$ 147,888	\$ 44,432
Proceeds from bonds payable, including premiums	594,373	-
Principal repayments of bonds payable	(752,037)	(29,500)
(Posting) recovery of collateral for debt-related derivative instruments	(27,980)	7,770
Change in annuities payable	(417)	783
Decrease in government advances for federal loan programs	(2,021)	(62)
Net cash (used in) provided by financing activities	(40,194)	23,423
Net increase in cash and cash equivalents	79,965	98,336
Cash and cash equivalents at beginning of year	149,449	51,113
Cash and cash equivalents at end of year	\$ 229,414	\$ 149,449
Supplemental disclosures:		
Cash paid for interest	\$ 100,965	\$ 84,274
Accrued liabilities for property, plant, and equipment purchases	19,228	10,836

See accompanying notes to consolidated financial statements.

AUGUST 31, 2019 AND 2018

(1) Organization

Emory University (the University or Emory) is a private, coeducational, not-for-profit institution, located in Atlanta, Georgia. Founded in 1836, Emory owns and operates educational, research, and healthcare facilities to support its mission. Emory provides educational services to approximately 8,100 undergraduate students and 7,300 graduate and professional students within its nine schools and colleges. Included within the University is the Emory Healthcare System (Emory Healthcare), Emory Medical Care Foundation, and Emory Innovations, LLC.

Emory Healthcare consists of Emory Healthcare, Inc. (EHC) and its controlled operating companies, including Emory University Hospital Midtown (EUHM), Emory University Hospital (EUH), Emory Saint Joseph's Hospital (ESJH), EHCA Johns Creek Hospital, LLC (EJCH), Emory Rehabilitation Hospital (ERH), DeKalb Medical Center, Inc. (DMC), Decatur Health Resources, Inc. (DHR), DeKalb Medical Center Foundation (DMCF), DeKalb Regional Health System Ventures, Inc. (Ventures), The Emory Clinic, Inc. (TEC), Emory Specialty Associates, LLC (ESA), Emory Specialty Associates – Joint Operating Company (ESA-JOC), Wesley Woods Center of Emory University, Inc. (WWC), and Clifton Casualty Insurance Company, Ltd. (CCIC). EUH, EUHM, EJCH, ESJH, ERH, DMC, and DHR are sometimes referred to herein, collectively, as "the Hospitals."

On September 1, 2018, Emory Healthcare became the sole and controlling member of DeKalb Regional Health System (DRHS) and its affiliates upon acquisition of DRHS' assets and liabilities. DMC, DHR, DMCF, and Ventures are the affiliates that account for DRHS' operations, assets, and liabilities. DMC operates a 451-bed general acute care hospital with a freestanding surgery center in Decatur, Georgia and a 100-bed general acute care hospital in Hillandale, Georgia. DRHS has been integrated operationally, financially, and clinically into Emory Healthcare since September 1, 2018, and the results of DRHS' operations have been included in the consolidated financial statements since that date.

The consolidated financial statements include the University and all other entities in which Emory has significant financial interest and control. All significant interentity accounts and transactions have been eliminated in consolidation.

(2) Summary of Significant Accounting Policies

The following significant accounting policies are used in the preparation of the accompanying consolidated financial statements:

The consolidated financial statements have been prepared on the accrual basis in conformity with U.S. generally accepted accounting principles (GAAP).

Net assets and revenue, gains, and losses are classified based on the existence or absence of externally imposed restrictions. Accordingly, net assets of the University are classified and reported as follows:

Net assets without donor restrictions – Net assets that are not subject to donor-imposed stipulations. All revenue, gains, and losses that are not restricted by donors are included in this classification. All expenses are reported as decreases in net assets without donor restrictions.

Net assets with donor restrictions – Net assets that are subject to donor-imposed stipulations that will or may be met either by actions of the University and/or the passage of time. These net assets include donor-restricted endowments, unconditional pledges, split-interest agreements, and interests in perpetual trusts held by others. Generally, the donors of these assets permit the University to use all or part of the income earned and net appreciation on related investments for general or specific purposes.

Revenue is reported as increases in net assets without donor restrictions unless their use is limited by donor-imposed restrictions. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor stipulation or by law. Expirations of restrictions on net assets (i.e., the donor-stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as net assets released from restrictions and shown as reclassifications among the applicable classes of net assets.

The University considers the following items to be nonoperating activities: gifts and contributions for capital and long-term investment and the related net assets released from restrictions, investment return in excess of spending distribution for current operations, change in fair value of derivative

AUGUST 31, 2019 AND 2018

instruments, pension- and postretirement-related changes other than net periodic pension cost, and other activities, net.

(a) Cash Equivalents

Cash equivalents consist primarily of bank balances and short-term money market mutual funds and treasury bills with original maturities generally 90 days or less that are not invested as part of the long-term investment assets. These amounts are carried at cost, which approximates fair value. Cash and cash equivalents that are part of the long-term pool is shown within investments as those funds generally are not used for daily operating purposes.

(b) Contributions Receivable, Net

Contributions of assets other than cash are recorded at their estimated fair value at the date of the gift. Contributions to be received after one year, net of an allowance for uncollectible amounts, are discounted to their present value at credit-adjusted rates. Amortization of discounts is recorded as additional contribution revenue. An allowance for uncollectible contributions receivable is provided based on management's judgment, considering such factors as prior collection history, type of contribution, relationship with donor, and other relevant factors.

(c) Loans Receivable, Net

Emory-funded loans to students are carried at estimated net realizable value. Loans receivable from students under certain government loan programs, carried at cost, can only be assigned to the federal government or its designees. In addition to federal direct loans (which are not reported in the consolidated financial statements), loans to qualified students are funded principally with government advances to Emory under the Perkins, Nursing, and Health Professions Student Loan Programs.

(d) Other Receivables, Net

Other receivables are recorded at net realizable value and include receivables under grants and contracts, medical services provided to other organizations, and losses recoverable from reinsurers.

(e) Investments

Investments are reported at fair value. Investments in securities and listed funds are valued using quoted prices in active markets if available; otherwise, if the market is inactive, fair value is determined by the University in accordance with its valuation policy. Valuations provided by the general partners and

investment managers are evaluated by the Emory Investment Management Office and are believed to present reasonable estimates of fair value at August 31, 2019 and 2018.

Investments in alternative investment fund structures are valued using the net asset value (NAV) per share of the investment (or its equivalent), as a practical expedient, if (a) the underlying investment manager's calculation of NAV is fair value based and (b) the University does not currently have plans to sell the investment for an amount different from NAV.

Investments are exposed to several risks, which may include (but are not limited to) interest rate, liquidity, currency, market, and credit risks. The University attempts to manage these risks through diversification, ongoing due diligence of fund managers, and monitoring of economic conditions, though it is at least reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect the amounts reported in the University's consolidated financial statements.

Investment transactions are accounted for on the trade-date basis. Dividend income is recognized on the ex-dividend date, and interest income is recognized on the accrual basis. Investment return, including realized and unrealized gains and losses, is recognized when earned and reported in the consolidated statement of activities net of external and direct internal investment expenses. Investment return, if restricted, is reported in the consolidated statement of activities as increases or decreases in net assets with donor restrictions until amounts have been appropriated and the donor-imposed or statutory time restrictions have been satisfied.

(f) Fair Value Measurements

Fair value measurements reflected in the consolidated financial statements represent the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction among market participants at the measurement date. GAAP provides a hierarchy that prioritizes the inputs to fair value measurements based on the extent to which inputs to valuation techniques are observable in the marketplace. The hierarchy assigns a higher priority to observable inputs that reflect verifiable information obtained from independent sources and a lower priority to unobservable inputs that would reflect the University's assumptions about how market participants would value an asset or liability based on the best information available. Fair value measurements must maximize the use of observable inputs and minimize the use of unobservable inputs.

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Assets and liabilities measured and reported at fair value are classified and disclosed within one of the following categories:

Level 1 – Valuations for assets and liabilities traded in active exchange markets as of the reporting date; valuations are obtained from readily available pricing sources for market transactions involving identical assets or liabilities.

Level 2 – Valuations are determined through direct or indirect observations other than quoted market prices. The type of investments in Level 2 also includes certain positions in which the University is a unit of account holder within a fund or account that holds underlying assets that are traded in active exchange markets with readily available pricing.

Level 3 – Valuations for assets and liabilities that are unobservable and derived from other valuation methodologies, including discounted cash flow models and similar techniques, and not based on market exchange, dealer, or broker-traded transactions; Level 3 valuations incorporate certain assumptions and projections in determining the fair value assigned to such assets or liabilities.

In the event changes in the inputs used in the fair value measurement of an asset or liability result in a transfer of the fair value measurement to a different categorization, such transfers between fair value categories are recognized at the end of the reporting period.

(g) Split-Interest Agreements

The University's split interest agreements with donors consist primarily of gift annuity agreements and irrevocable charitable remainder trusts for which the University serves as trustee. Assets held in the trusts are included in investments. Contribution revenue is recognized when trusts (or annuity agreements) are established, after recording liabilities for the present value of the estimated future payments to be made to beneficiaries. The liabilities are adjusted annually for changes in the value of assets, accretion of the discount, and other changes in the estimates of future benefits.

(h) Interests in Perpetual Funds Held by Others

The University is also the beneficiary of certain perpetual funds held and administered by others. The value of the funds' assets (or Emory's share when there are other beneficiaries) is considered a reasonable estimate of the present value of the estimated future cash flows from these funds and is recognized in beneficial interest in perpetual funds and as contribution revenue at the date such funds are established. The largest fund of this type primarily holds shares of common stock of The Coca-Cola

Company. The carrying value of Emory's interest in such perpetual funds is adjusted annually for changes in fair value.

(i) Property and Equipment, Net

Land, buildings, and equipment are recorded at cost at the date of acquisition or fair value at the date of gift to the University. Depreciation expense is based on the straight-line method over the estimated useful lives of the assets. Useful lives are as follows: buildings – 10 to 60 years, land improvements and infrastructure – 5 to 40 years, movable equipment – 3 to 20 years, fixed equipment – 3 to 30 years, software and enterprise systems – 3 to 10 years, leasehold improvements – term of the lease, and library books – 10 years. Certain assets totaling \$112.2 million and \$107.1 million, such as art, museum assets, and rare books, are included in property and equipment, net on August 31, 2019 and 2018, respectively, but are not depreciated.

(j) Net Tuition and Fees

Tuition and fees revenue is derived from degree programs and continuing education programs. Most undergraduate students receive institutional financial aid based upon academic promise and demonstrated financial need. Graduate students often receive tuition support in connection with research assistant, teaching assistant, and fellowship appointments. Student financial aid provided by the University for tuition and fees is reflected as a reduction of tuition and fees revenue from published rates.

(k) Student Health Insurance Plan

The University is self-insured for student health insurance costs, with losses insured in excess of a maximum amount on both a per claim and annual aggregate claim amount. The self-insurance liability is based on claims filed and an estimate of claims incurred but not yet reported. The consolidated statement of financial position includes a self-insurance liability for student health insurance of \$0.6 million as of August 31, 2019. Self-insurance claims are reported as net of insurance premiums collected from students.

(l) Gifts and Contributions Revenue

Contributions, including unconditional promises to give, are recognized as revenue in the period received. Unconditional promises to give, with payments due in future periods, are recorded as increases in net assets with donor restrictions at the estimated present value of future cash flows, net of an allowance for uncollectible pledges.

AUGUST 31, 2019 AND 2018

Donor-restricted contributions are reported as revenue with donor restrictions, which increases this net asset class. Expirations of restrictions on net assets, such as the donor stipulation being met or the passage of time, are reported as net assets released from restrictions and reflect reclassifications from net assets with donor restrictions to net assets without donor restrictions. If the donor stipulation is met in the year of the gift, the contribution is reflected in net assets without donor restrictions. Restrictions on gifts to acquire long-lived assets are considered met in the period when the asset is placed in service. Conditional promises to give are not recognized until they become unconditional; that is, when the barriers on which they depend are met.

(m) Grants and Contracts Revenue and Indirect Cost Recoveries

Funding from the federal government, corporations, or private foundations (sponsors) is recorded as grants and contracts revenue when it is for a specified activity with a defined budget, period of performance, and scope of work undertaken by the University. The agreement with the sponsor may take the form of a contract, grant, or cooperative agreement and is generally in direct support of the University's mission. Sponsored program revenue and program income are earned when the University has substantially met its obligations and when the contractual performance measures have been completed. Revenue is recognized when services are rendered, milestones are met, or qualifying expenses are incurred as specified in the terms and conditions of the agreements, not necessarily when payments are received. Unearned revenue results when cash is received from sponsors in advance of revenue being earned. Unearned revenue is recorded as a liability (deferred revenue) until it is earned. Amounts recorded in grants and contracts receivable are for services rendered or expenditures incurred in advance of the receipt of funds.

Indirect cost recoveries are based on negotiated rates with grantor agencies and represent recoveries of facilities and administrative costs incurred under grants and contracts agreements.

(n) Net Patient Service Revenue

Net patient service revenue is reported at the estimated net realizable amounts due from patients, third-party payors, and others for services rendered, including estimated retroactive adjustments due to future audits, reviews, and investigations. Retroactive adjustments are considered in the recognition of revenue on an estimated basis in the period the related services are rendered, and such amounts are adjusted in future periods as adjustments become known or as years are no longer subject to such audits, reviews, and investigations. Emory Healthcare's estimates in this area may differ from actual experience, and those differences may be material.

The Hospitals reserve for third-party payor cost report audits and anticipated settlements through initial audit and final settlement of the cost reports. The Hospitals maintain estimates of third-party settlements for the Hospitals' routine exposures in this area in recognition of the complexity of relevant reimbursement regulations and the volatility of related settlement processes.

(o) Sales and Services of Auxiliary Enterprises and Independent Operations

An auxiliary enterprise is a nonacademic entity that exists predominantly to furnish goods and services to students, faculty, and staff. Auxiliary enterprises include residential halls, a bookstore, and parking operations. Fee charges are directly related to the costs of services provided.

Independent operations are activities that are solely owned and/or controlled by the University but are unrelated or independent of its mission. Independent operations include an externally managed conference center, hotel, and a fitness center. Fee charges are based on market rates for the services provided.

(p) Income Taxes

The University is recognized as a tax-exempt organization, as defined in Section 501(c)(3) of the U.S. Internal Revenue Code (the Code), and is generally exempt from the federal income taxes on related income pursuant to Section 501(a) of the Code. Accordingly, no provision for income taxes is made in the consolidated financial statements. Unrelated business income of the University is reported on Form 990-T.

In December 2017, the Tax Cuts and Job Acts (the Act) was approved by the United States Congress. Emory has adopted the relevant positions of the Act, and there was no material impact on the consolidated financial statements.

(q) Derivative Instruments

Certain investment strategies used by the University and its investment managers incorporate various derivative financial instruments in order to reduce volatility, manage market risk, and enhance investment returns. Such instruments are reflected at fair value and included in investments. Changes in the fair value of

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investment-related derivative instruments are included in investment return in excess of spending distribution for current operations on the consolidated statements of activities. The University utilizes interest swap agreements to hedge interest rate market exposure of variable rate debt. The difference between amounts paid and received under such agreements is reported in interest expense. Changes in the fair value of these swap agreements are recognized as nonoperating activities in the consolidated statements of activities.

(r) Pension and Postretirement Benefit Plans

The University recognizes the funded status of its defined-benefit pension and postretirement benefit plans as an asset or liability and recognizes changes in funded status during the year in which the changes occur as changes in net assets without donor restrictions.

(s) Reclassifications

Certain amounts included in the accompanying 2018 consolidated statement of financial position have been reclassified to conform with the 2019 presentation, primarily related to the adoption of Accounting Standards Update (ASU) No. 2016-14, Presentation of Financial Statements of Not-for-Profit Entities (Topic 958), and ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), as amended. In addition, the University reclassified certain 2018 balances from other receivables, net to prepaid expenses, deferred charges and other assets, and from accrued liabilities for benefit obligations and professional liabilities to accounts payable and accrued liabilities to conform with their 2019 presentation. The University does not believe the impact of these reclassifications is material to the 2018 consolidated statement of financial position as it was originally presented.

(t) New Accounting Pronouncements

On September 1, 2018, Emory adopted ASU No. 2014-09 and all subsequent amendments to the ASU using the modified retrospective approach applied to all contracts not completed as of September 1, 2018. Results for reporting periods beginning after September 1, 2018 are presented under ASU No. 2014-09. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The adoption of ASU No. 2014-09 did not have a material impact to Emory's results.

On September 1, 2018, Emory implemented ASU No. 2018-08, Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made. ASU No. 2018-08 clarifies the accounting guidance for making or receiving contributions. The ASU provides a framework for evaluating whether transactions should be accounted for as contributions (nonreciprocal transactions) within the scope of this update, or as exchange (reciprocal) transactions subject to other guidance. The new guidance results in additional grants and contracts being accounted for as either contributions or conditional contributions rather than exchange transactions compared to previous practice.

During fiscal year 2019, the University retrospectively adopted, as of September 1, 2017, the provisions of ASU No. 2016-14. ASU No. 2016-14 reduces the number of net asset categories from three to two: net assets without donor restrictions, previously reported as unrestricted net assets, and net assets with donor restrictions, previously reported as temporarily restricted net assets and permanently restricted net assets. The ASU also requires that underwater endowment funds previously reported as reductions to unrestricted net assets be reported instead as reductions to net assets with donor restrictions. Accordingly, the University has reclassified \$3.6 million and \$7.8 million of underwater funds as of the beginning of fiscal years 2019 and 2018, respectively, as reductions to net assets with donor restrictions.

In March 2017, the Financial Accounting Standards Board (FASB) issued ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which requires the University to present the service cost component of net benefit cost within operating expenses and all other components of net benefit cost in nonoperating activities. The ASU is effective for the University in FY 2020.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. ASU No. 2016-02 requires the recognition of right-of-use assets and lease liabilities by lessees for those leases classified as operating leases under the Accounting Standards Codification (ASC) Topic 840, *Leases*. The accounting applied by a lessor under ASU No. 2016-02 is largely unchanged from that applied under ASC Topic 840. ASU No. 2016-02 is effective for the University in FY 2020.

In August 2016, the FASB issued ASU No. 2016-15, Classification of Certain Cash Receipts and Cash Payments. The ASU amends the financial reporting requirements in Topic 230, Statement of Cash Flows. Changes include revisions to the presentation of cash flows related to the settlement of debt instruments with coupon rates that are insignificant in relation to the effective interest rate of the borrowing and distributions received from equity method investees. This ASU is effective for

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fiscal years beginning after December 15, 2018. The University is evaluating the impact of the new standard on its consolidated financial statements beginning in FY 2020.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement: Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement (Topic 820). ASU No. 2018-13 eliminates, modifies, and adds certain disclosures on fair value measurements. ASU No. 2018-13 is effective for fiscal periods beginning after December 15, 2019. Emory is evaluating the effect of adoption on its consolidated financial statements beginning in FY 2021.

In March 2019, the FASB issued ASU No. 2019-03, *Updating the Definitions of Collections, Not-for-Profit Entities* (*Topic* 958). This ASU is effective for fiscal years beginning after December 15, 2019. This ASU modifies the term "Collections," which, in turn, may change collection recognition policies and adds certain disclosure requirements. The University is evaluating the impact of the new standard on its consolidated financial statements beginning in FY 2021.

(u) Use of Estimates

The preparation of the consolidated financial statements in conformity with GAAP requires that management make estimates and assumptions affecting the reported amounts of assets, liabilities, revenue, and expenses, as well as disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Significant items in the University's consolidated financial statements subject to such estimates and assumptions include valuations for certain investments without readily determinable fair values, the determination of the allowances for price concessions, purchase price allocation related to business combination, reserves for employee and student healthcare and workers' compensation claims, accrued professional and general liability costs, estimated third-party settlements, and actuarially determined benefit liabilities.

(v) Conflict of Interest Policies

University trustees, directors, principal officers, and key employees may periodically be directly or indirectly associated with companies doing business with the University. The University requires annual disclosure of significant financial interests in, or employment or board service with, entities doing business with the University. The annual disclosures cover these key officials and their immediate family members.

When such relationships exist, measures are taken to appropriately manage the actual or perceived conflict. The written conflict of interest policy for the University requires, among other things, that no member of a governing board may participate in any decision in which he or she (or an immediate family member) has a material financial interest.

(3) Contributions Receivable

Contributions receivable as of August 31 consist of the following (in thousands):

	2019	2018
UNCONDITIONAL PROMISES EXPECTED TO BE COLLECTED IN:		
Less than one year	\$ 164,414	\$ 167,912
One year to five years	35,094	275,094
Over five years	3,973	2,983
Gross contributions receivable	203,481	445,989
Less:		
Allowance for uncollectible amounts	(5,497)	(10,581)
Discount to present value	(4,192)	(39,281)
Contributions receivable, net	\$ 193,792	\$ 396,127

At August 31, 2019 and 2018, the five largest outstanding donor pledge balances represented 73% and 90%, respectively, of Emory's gross contributions receivable. Contributions receivable are discounted at rates ranging from 3.02% to 4.25%.

As of August 31, 2019, the University had received bequest intentions and conditional promises of approximately \$125.0 million. These intentions to give are not recognized as assets or revenue and, if received, will generally be restricted for purposes stipulated by the donor.

(4) Patient Accounts Receivable and Credit Concentrations

Emory Healthcare grants credit to patients, substantially all of whom reside in the service areas. Emory Healthcare generally does not require collateral or other security in extending credit to patients; however, it routinely obtains assignment of (or is otherwise entitled to receive) patients' benefits payable under their health insurance programs, plans, or policies (e.g., Medicare, Medicaid, managed care, capitated, and other preferred provider arrangements and commercial insurance policies).

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The composition of net receivables from patients and third-party payors for the years ended August 31 is as follows:

	2019	2018
Managed care and other third-party payors	56%	56%
Medicare	31	32
Medicaid	7	7
Patients	6	5
	100%	100%

(5) Revenue from Contracts with Customers

(a) Contracts with Customers

ASU No. 2014-09 requires that the University recognize revenue, when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the University expects to receive in exchange for those goods or services. ASU No. 2014-09 defines a five-step process to achieve this core principle.

Emory assessed various contractual agreements and performance obligations for its major revenue streams, including the impacts to internal processes and disclosures, and determined that the adoption of the new standard would not result in a material change to the timing of when revenue is recognized.

Emory applied the practical expedients to account for revenue with similar characteristics as a collective group rather than individually and to not disclose the remaining (unsatisfied or partially unsatisfied) performance obligations for contracts with customers as of the end of the reporting period that have an original expected duration of one year or less, or for contracts where the performance obligation is recognized in the amount invoiced (right to invoice).

(b) Disaggregation of Student Revenue

The following table provides the components of tuition and fees and student-related auxiliary enterprises revenue by programs for the year ended August 31, 2019 (in thousands):

Tuition and	Auxiliary	Total
\$ 421,061	46,015	467,076
314,700	1,365	316,065
735,761	47,380	783,141
(152,366)	(4,538)	(156,904)
(152,695)	(254)	(152,949)
430,700	42,588	473,288
21,723	669	22,392
452,423	43,257	495,680
	Fees 421,061 314,700 735,761 (152,366) (152,695) 430,700 21,723	Fees Enterprises 6 421,061 46,015 314,700 1,365 735,761 47,380 (152,366) (4,538) (152,695) (254) 430,700 42,588 21,723 669

(c) Contract Balances

Prior to adoption of ASU No. 2014-09, Emory recorded a student receivable and deferred revenue for fall term when the billing statement was created. Under ASU No. 2014-09, accounts receivable is recorded only when the University's right to consideration is unconditional (i.e., the contract is uncancelable – generally after the expiration of a student withdrawal period).

Deferred revenue, which is a contract liability under ASU No. 2014-09, relates to payments received in advance of performance under contracts with customers. Emory invoices customers (i.e., students) for education and residential services and customers transfer consideration before the University has transferred promised goods or services to its customers. At each reporting date, Emory records all prepayment amounts associated with educational services that have not yet been delivered as deferred revenue.

Under ASU No. 2014-09, the University records accounts receivable and related contract liabilities for noncancelable contracts with customers when there is a right to consideration.

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(d) Significant Judgements

Emory applied the portfolio approach to educational and residential services (room and board) and to patient services due to the large volume of similar contracts and similar customer classes. Using the portfolio approach streamlines Emory's processes for collectibility assessment and refund estimation. The University expects that the effect of applying this guidance to the portfolio would not differ materially from applying the guidance to the individual contracts within the portfolio. Emory considers education and residential service as separate and distinct performance obligations. Since students receive instruction and housing concurrently during the academic term, they simultaneously receive and use all the benefits that Emory provides in the performance of the contracts. Therefore, the performance obligations associated with academic programs are satisfied over time and revenue recognized as the related services are performed.

Tuition and fees revenue are recognized in the fiscal year in which the academic programs and residential services are provided. Revenue is reflected in the consolidated statements of activities for the portion that is completed by the end of the fiscal year. The remaining performance obligation that will be completed in the following fiscal year remains a liability on the consolidated statements of financial position.

Emory provides institutionally funded grants and scholarships to students, who either demonstrate financial need or qualify academically, as a form of price reduction up to and equal to amounts owed by students to the University. Institutional resources provided in excess of amounts owed by the students to Emory are recorded as scholarship expenses. Students receive Title IV financial aid, state funds, and employer reimbursements. Emory accounts for the payment as a third-party payment on behalf of an identified customer to an existing exchange transaction, and therefore, the grant or loan amount does not reduce the transaction price.

Auxiliary enterprises revenue includes revenue from residential services, parking operations, bookstore, conference services offered by the University, ticket sales for events, and other miscellaneous activities, which furnish goods or services to students, faculty, staff, and, in some cases, to the general public. Within auxiliary enterprises, Emory considers parking service agreements to be distinct performance obligations that are billed to students in advance and payments due prior to the start of each academic term. Prepayments are reflected on the consolidated statements of financial position as deferred revenue and

recognized as revenue ratably over the period during which the parking services are rendered. Sales of goods within auxiliary enterprises generally occur as a point of sale transaction, and the revenue is recognized as the sale occurs. Any discounts are factored into the selling price at the point of sale.

Emory considers revenue from clinical trial agreements to be exchange transactions where revenue is recognized as services are performed, billed, and the University has contractual right to consideration. Revenue related to clinical trial agreements included in grants and contracts revenue in the consolidated statements of activities for the years ended August 31, 2019 and 2018 totaled \$49.8 million and \$54.5 million, respectively.

The University recognizes revenue from nonrefundable, upfront fees allocated to a license at a point in time when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For agreements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the University recognizes revenue when the related sales occur.

The University has contractual agreements with Grady Memorial Hospital where practicing interns and medical residents of the Emory School of Medicine receive clinical training and faculty provide teaching, medical care, and hospitalization services. The School of Medicine is paid for expenses incurred for interns and medical residents based on the costs for labor and paid for the faculty teaching, administrative, and clinical services based on the number of interns and residents trained and time spent performing clinical and administrative services. Medical services revenue is recognized as services performed and the customer receives and uses the benefits of the services.

The University also has affiliation and administrative services agreements with Children's Healthcare of Atlanta and the Emory + Children's Pediatric Institute, where it provides various administrative services. Revenue is recorded as other revenue in the consolidated statements of activities as the University satisfies the performance obligation over time. The customer simultaneously receives and consumes the benefits as the University performs.

(e) Financial Statement Impact of Adoption

Emory adopted ASU No. 2014-09 utilizing the modified retrospective method. The cumulative impact of applying the new guidance to all contracts with customers that were not completed

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as of September 1, 2018 was recorded as a \$5.7 million decrease to net assets as of the adoption date.

Emory made certain presentation changes to its consolidated statements of financial position on September 1, 2018 to comply with ASU No. 2014-09.

The cumulative effect of changes made to Emory's consolidated statements of financial position for the adoption of ASU No. 2014-09 is as follows (in thousands):

	Balance at August 31, 2018	Modified Retrospective Adoption of Topic 606	Balance at September 1, 2018
ASSETS:			
Student accounts receivable, net	\$ 109,780	(46,491)	63,289
Prepaid expenses, deferred charges, and other assets	429,839	(135,717)	294,122
LIABILITIES AND NET ASSETS:			
Accounts payable and accrued liabilities	657,384	(11,808)	645,576
Deferred revenue	521,289	(164,693)	356,596
Net assets without donor restrictions	4,340,263	(5,707)	4,334,556

(6) Grants and Contracts

The University receives grants and contracts revenue from federal, state, corporate, and private sources. If the resource provider is not receiving commensurate benefit (only indirect benefit because the research findings serve the general public) in exchange for the grant and the results are maintained and can be used by the University, this is considered a contribution.

Most Emory nonexchange, sponsored research agreements are conditional contributions as the agreements include both a right of return or release of assets and a barrier that Emory must overcome to be entitled to the consideration. These agreements become unconditional as barriers are satisfied. The University recognizes revenue associated with these sponsored agreements as qualifying allowable expenses are incurred or a measurable performance-related barrier is achieved in accordance with the terms and conditions of the agreements. Conditional contributions are recognized as deferred revenue if assets are transferred in advance or not recognized at all until the conditions have been substantially met or explicitly waived by the sponsoring entity, at which point the contributions are recognized as unconditional. Conditional agreements with sponsor-imposed restrictions that expire simultaneously with the satisfaction of the specified conditions are reported as net assets without donor restrictions.

The following table presents Emory's sources of grants and contracts revenue (including indirect cost recoveries) for the year ended August 31, 2019 (in thousands):

	Grants	Contracts with Customers
Federal government	\$ 479,084	2,292
Other government	13,051	229
Corporate	12,170	44,528
Private institutions	89,272	2,747
Total	\$ 593,577	49,796

As of August 31, 2019 and 2018, Emory had unexpended grant awards of \$627.6 million and \$635.9 million, respectively, for which revenue will be recognized when conditions have been met or performance obligations have been satisfied.

(7) Net Patient Services Revenue

Emory Healthcare has agreements with government and other third-party payors that provide for reimbursement to Emory Healthcare at amounts different from established rates.

Revenue is recognized as performance obligations are satisfied. Performance obligations are determined based on the nature of the services provided. Revenue for performance obligations satisfied over time is recognized based on actual charges incurred in relation to total expected (or actual) charges. Emory Healthcare believes that this method provides a reasonable depiction of the transfer of services over the term of the performance obligation based on the inputs needed to satisfy the obligation. Generally, performance obligations satisfied over time relate to patients in the Emory Healthcare's hospitals receiving inpatient, outpatient, or emergency services. Emory Healthcare measures the performance obligation from admission, or the commencement of an outpatient service, to the point when it is no longer required to provide services to that patient, which is generally at the time of discharge or completion of the outpatient services. Revenue for performance obligations satisfied at a point in time is generally recognized when goods are provided to Emory Healthcare's patients and customers in a retail setting (e.g., pharmaceuticals), and Emory Healthcare does not believe it is required to provide additional goods or services related to that sale.

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Emory Healthcare determines the transaction price based on standard charges for goods and services provided, reduced by contractual adjustments provided to third-party payors, discounts provided to uninsured patients in accordance with Emory Healthcare policy, and implicit price concessions provided to patients. Emory Healthcare determines its estimates of contractual adjustments and discounts based on contractual agreements, its discount policies, and historical experience. Emory Healthcare cannot pursue collections for the contractual or discount amounts; therefore, such amounts are not reported as revenue.

Emory Healthcare provides care to patients regardless of their ability to pay. Emory Healthcare has determined it has provided implicit price concessions to uninsured patients and patients with other uninsured balances (e.g., co-pays and deductibles). The implicit price concessions included in estimating the transaction price represent the difference between amounts billed to patients and the amounts Emory Healthcare expects to collect based on its collection history with those patients considering business and economic conditions, trends in healthcare coverage, and other collection indicators. Periodically, management assesses the adequacy of the allowance for implicit price concessions based upon historical write-off experience by payor category and adjusts the reserve as appropriate.

The allowance for implicit price concessions was 48% and 41% of patient accounts receivable after contractual allowances as of August 31, 2019 and 2018, respectively.

Patient service revenue, net of contractual adjustments, implicit price concessions, and other discounts recognized from major payor sources are as follows (in thousands):

	2019	2018
Medicare	\$ 1,322,185	\$ 1,052,334
Medicaid	233,463	185,283
Other third-party payor	2,613,609	2,127,399
Patients	37,126	38,988
Net patient service revenue	\$ 4,206,383	\$ 3,404,004

The composition of net patient service revenue based on the Emory Healthcare lines of business for the years ended August 31, 2019 and 2018 is as follow (in thousands):

	2019	2018
Services lines:		
Hospital – inpatient	\$ 1,781,251	\$ 1,438,163
Hospital – outpatient	1,421,988	1,083,657
Physician services	1,003,144	882,184
Net patient service revenue	\$ 4,206,383	\$ 3,404,004

(8) Charity Care and Community Benefits

Emory Healthcare provides care to patients who meet certain criteria under their charity care policies without charge or at amounts less than their established rates and such amounts are not included in net patient service revenue.

Records are maintained to identify and monitor the level of charity care provided. These records include the amount of charges foregone and actual costs for services furnished under its charity and indigent care policies. The cost of charity care provided totaled approximately \$151.5 million and \$99.7 million for the years ended August 31, 2019 and 2018, respectively. Emory Healthcare estimated these costs by applying a ratio of cost to gross charges to the gross uncompensated charges associated with providing care to the charity patients.

(9) Liquidity and Availability

Emory regularly monitors liquidity required to meet its operating needs and other contractual commitments, while also maximizing the investment of its available funds.

For purposes of analyzing resources available to meet general expenditures over a 12-month period, the University considers all expenditures related to its ongoing mission-related activities as well as the conduct of services undertaken to support those activities to be general expenditures.

In addition to financial assets available to meet general expenditures over the next 12 months, the University operates with a balanced budget and anticipates collecting sufficient revenue to cover general expenditures not covered by donor-restricted resources.

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As of August 31, 2019, the following financial assets could readily be made available within one year of the statement of financial position date to meet cash needs for general expenditures (in thousands):

		2019
TOTAL ASSETS	\$	15,024,872
Less:		
Land, building, and equipment, net		(3,502,052)
Interest in perpetual trusts held by others		(1,757,576)
Donor-restricted and board-designated endowment funds		(5,399,522)
Other investments		(2,174,895)
Prepaid expenses, deferred charges, and other assets		(319,591)
Contributions receivable, net		(193,792)
Loans receivable, net		(21,960)
Add:		
Endowment payout in following year		203,334
Contributions receivable due within one year for operations	3	164,414
Financial assets available to meet cash needs for general expenditures within one year	\$	2,023,232

The University has \$2,023.2 million of financial assets that are available within one year of the statement of financial position date to meet cash needs for general expenditures, consisting of cash of \$229.4 million, accounts receivable of \$718.1 million, contributions receivable, less than one year of \$164.4 million,

payout on with and without donor-restricted endowment funds of \$203.3 million, and other operating investments of \$708 million.

As described further in note 15, to supplement working capital and other commitments, the University also has lines of credit and a taxable and tax-exempt Commercial Paper program.

(10) Investments

During the year ended August 31, 2019, Emory revised its investment classifications presented below to align more closely with its recently updated investment policy statement and reporting to the Investment Committee. Global equity securities and commingled funds - equity, as well as alternative investments pursuing in such strategies, have been recategorized as public equity. Investments in fixed-income securities and commingled funds - fixed income, along with alternative investment funds pursuing similar, credit, or opportunistic strategies, have been recategorized as absolute return/fixed income. Private markets, as well as investments in private securities, have been recategorized as private equity/venture capital, and natural resources and real estate partnerships have been recategorized as real assets. Prior-year comparative amounts have been reclassified to conform to the current year's presentation.

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The following table summarizes investments as of August 31 (in thousands):

	2019	2018
Short-term investments and cash equivalents (a)	\$ 181,658	\$ 248,580
Public equity (b)	3,079,796	2,820,071
Absolute return/fixed income (c) (g)	2,491,602	3,069,624
Private equity/venture capital (d)	1,786,917	1,275,342
Real assets (e)	731,062	740,618
Derivative instruments ^(f)	8,846	(1,579)
Total investments at fair value	8,279,881	8,152,656
Joint ventures (equity method)	2,524	5,022
Total investments	\$ 8,282,405	\$ 8,157,678

⁽a) Includes short-term U.S. and non-U.S. Treasury securities with maturities of less than one year, as well as funds that invest in these types of investments

- (c) Includes directly held actively traded global fixed-income securities (such as government bonds and corporate bonds) or commingled funds holding such securities of \$1.38 billion and \$1.90 billion and investments in multistrategy or credit funds as well as opportunistic absolute return funds intended to enhance diversification and reduce correlation to public equity of \$1.11 billion and \$1.17 billion as of August 31, 2019 and 2018, respectively; certain fund investments included in this category may hold marketable securities and be subject to redemption terms governed by the respective fund agreement or may contain illiquid investments and, therefore, offer no liquidity over the fund life. Such funds holding illiquid investments are expected to yield liquidating distributions over the next 8 years.
- (d) Includes illiquid investments in private and public companies, both domestically and internationally; the majority of these investments are held through funds and also include buyout, venture capital, high yield, and subordinated debt strategies. The nature of the investments in this category is such that distributions are received through liquidation of the underlying assets of the funds, which are expected to occur over the next 12 years.
- (e) Includes investments in oil and gas, commodities, timber, and real estate, the majority of which are held through commingled funds; the nature of the investments in this category is such that distributions are received through liquidation of the underlying assets of the funds, which are expected to occur over the next 10 years.
- (f) Includes investments in derivative instruments, including both exchange traded and OTC futures, forwards, swaps, and options valued at fair value of each underlying instrument
- (g) Amounts presented net of \$244.0 million and \$379.0 million of net pending trade payables related to unsettled forward purchases and sales of such securities as of August 31, 2019 and 2018, respectively

As of August 31, 2019, the related unfunded commitments of the University's alternative investments valued using the practical expedient and limitations and restrictions on the University's ability to redeem or sell are summarized as follows (in thousands):

	C	Unfunded commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
Absolute return	\$	592,498	30-180 days or not eligible	5 - 306 days, or not eligible
Private equity/venture capital		621,868	not eligible	not eligible
Public equity		_	30 days to over 2 years	10-180 days
Real assets		373,116	not eligible	not eligible
	\$	1,587,482		

Unfunded commitments are expected to be called by funds within five years of fund inception.

(11) Endowment Net Assets

The University's endowed assets (the Endowment) consists of 2,086 individual funds established for a variety of purposes, including with donor restriction endowment funds and without donor restrictions funds designated by the Board of Trustees to function as endowments. The Endowment provides stable financial support to a wide variety of programs and activities in perpetuity, playing a critical role in enabling the University to achieve its mission. Net assets associated with these endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

(a) Interpretation of Relevant Law

The Board of Trustees of the University has approved the University's adoption of the State of Georgia Uniform Prudent Management of Institutional Funds Act (UPMIFA), which provides standards for managing investments of institutional funds and spending from endowments. The University classifies as donor-restricted historical value net assets (a) the original

⁽b) Includes domestic and international stocks, as well as interests in funds that invest in both long only and long/short equity-based strategies; certain investments in funds may be subject to restrictions that limit the University's ability to withdraw capital until (i) certain "lock-up period" has expired or (ii) until certain underlying investments designated as "illiquid" or "side pockets" are sold. In addition, fund investments in this category may be subject to restrictions limiting the amount the University is able to withdraw as of a given redemption date.

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value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund.

The remaining portion of the donor-restricted endowment fund that is classified as restricted appreciation until those amounts are appropriated for expenditures by the University in a manner consistent with the standard of prudence prescribed by UPMIFA. In accordance with UPMIFA, the University considers several factors in making a determination to appropriate or accumulate donor-restricted endowment funds, including the duration and preservation of the fund, the purposes of the fund, general economic conditions, the possible effect of inflation and deflation, the expected total return from income and the appreciation of investments, other resources of the University, and the investment policies of the University.

The endowment funds subject to UPMIFA are true endowments and do not include perpetual funds held by others, long-term investments, annuity funds, funds held in trust for others, and miscellaneous investments. As of August 31, 2019, approximately 65.2% of the investments described in note 10 are classified as endowed net assets.

Endowment funds are categorized in the following net asset classes as of August 31 (in thousands):

		2019		2018			
	Without Donor	With Donor		Without Donor	With Donor		
	Restrictions	Restrictions	Total	Restrictions	Restrictions	Total	
Donor-restricted endowment funds							
Appreciation	\$ -	2,845,925	2,845,925	\$ -	2,761,985	2,761,985	
Historical value	_	950,730	950,730	_	923,950	923,950	
Total donor restricted	-	3,796,655	3,796,655	-	3,685,935	3,685,935	
Funds functioning as endowments or board-designated	1,602,867	_	1,602,867	1,556,384	_	1,556,384	
Total endowment net assets	\$ 1,602,867	3,796,655	5,399,522	\$ 1,556,384	3,685,935	5,242,319	

The following table represents endowment net asset composition by purpose for the years ended August 31 (in thousands):

		2019		2018			
	Without Donor	With Donor		1	Without Donor	With Donor	
	Restrictions	Restrictions	Total		Restrictions	Restrictions	Total
Student financial aid	\$ 150,500	755,011	905,511	\$	144,919	744,996	889,915
Academic and program support	816,761	2,669,675	3,486,436		789,951	2,604,630	3,394,581
Research	51,807	161,219	213,026		50,417	114,638	165,055
Capital projects, real estate, and infrastructure	583,799	210,750	794,549		571,097	221,671	792,768
Total endowment net assets	\$ 1,602,867	3,796,655	5,399,522	\$	1,556,384	3,685,935	5,242,319

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Changes in endowment funds by net asset classification for the years ended August 31 are summarized as follows (in thousands):

	Without Donor	With Donor	
	Restrictions	Restrictions	Total
Balance as of August 31, 2017	\$ 1,498,575	3,516,337	5,014,912
Investment return:			
Investment income	3,997	19,076	23,073
Net realized and unrealized gains on investments	85,997	299,269	385,266
Total investment return	89,994	318,345	408,339
Cash contributions	168	41,209	41,377
Additions of funds for endowments	-	(3,348)	(3,348)
Transfers of institutional funds for endowments without donor restrictions	28,655	-	28,655
Withdrawal of board-designated funds for strategic initiatives	(7,678)	-	(7,678)
Appropriations for expenditure	(36,779)	(180,995)	(217,774)
Appropriations for capital purposes	(6,110)	(16,054)	(22,164)
Other	(10,441)	10,441	_
Balance as of August 31, 2018	\$ 1,556,384	3,685,935	5,242,319
Investment return:			
Investment income	9,805	23,261	33,066
Net realized and unrealized gains on investments	94,099	240,376	334,475
Total investment return	103,904	263,637	367,541
Cash contributions	9,369	26,375	35,744
Additions of funds for endowments	-	406	406
Transfers of institutional funds for endowments without donor restrictions	11,426	-	11,426
Withdrawal of board-designated funds for strategic initiatives	(7,686)	-	(7,686)
Appropriations for expenditure	(64,093)	(162,946)	(227,039)
Appropriations for capital purposes	(6,437)	(16,752)	(23,189)
Balance as of August 31, 2019	\$ 1,602,867	3,796,655	5,399,522

(b) Funds with Deficiencies

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level of the donor's original contribution. No significant deficiencies of this nature are reported in net assets with donor restrictions.

(c) Return Objectives and Risk Parameters

The University has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowment and seek to maintain the purchasing power of the endowment assets. Under this policy, as approved by the Board of Trustees, the endowment assets are invested within risk tolerances of the University to provide an expected total return in excess of spending and inflation over the long term.

(d) Strategies Employed for Achieving Objectives

To satisfy its long-term return objectives, the University relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The University employs a diversified asset allocation strategy across public equity, absolute return/fixed income, private equity/venture capital, real assets, and derivative instruments to achieve its long-term return objectives within a prudent risk framework. The Endowment's long-term target asset allocation is approved by the Investment Committee of the Board of Trustees. The portfolio is periodically rebalanced to the target weightings for each asset class.

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(e) Relationship between Investment Objectives and Spending Policy

The University's Board of Trustees has established a spending policy that determines how endowment distributions are made. The University employs a total return endowment spending policy that establishes the amount of endowment investment return available to support current operating and capital needs. The distribution of endowment investment return in 2019 and 2018 was based on 4.75% of the average fair value of the

endowment over the previous 12 months ended on August 31. The University considers the expected return on its endowment, including the effect of inflation in setting the annual appropriation amount. Accordingly, the University expects the current spending policy to allow its endowment to maintain its purchasing power if projected growth rates are achieved. Additional real growth will be provided through new gifts and any excess investment return. The payout rate is approved annually by the Board of Trustees as part of the budget process.

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(12) Fair Values of Assets and Liabilities

The following table summarizes the valuation of the University's assets and liabilities according to the fair value hierarchy levels as of August 31, 2019 (in thousands):

			-	Fair Value Hierarchy			
	Т	otal Fair Value	Investments Measured at NAV (2)	Level 1	Level 2	Level 3	
Short-term investments and cash equivalents	\$	181,658	_	181,548	110	_	
Public equity		3,079,796	2,732,350	275,789	71,654	3	
Absolute return/fixed income		2,491,602	1,112,463	193,331	1,185,808	_	
Private equity/venture capital		1,786,917	1,771,318	_	54	15,545	
Real assets		731,062	727,567	205	1,674	1,616	
Derivative instruments		8,846	_	191	8,655	-	
Total investments		8,279,881	6,343,698	651,064	1,267,955	17,164	
Interests in perpetual funds held by others (1)		1,757,576	_	_	_	1,757,576	
Total assets at fair value		10,037,457	6,343,698	651,064	1,267,955	1,774,740	
FINANCIAL LIABILITIES:							
Derivative instruments – interest rate swaps		(238,112)	_	_	(238,112)	_	
Funds held in trust for others		(826,663)	_	_	(826,663)	_	
Total liabilities at fair value	\$	(1,064,775)	-	-	(1,064,775)	-	

⁽¹⁾ Primarily invested in The Coca-Cola Company

⁽²⁾ Certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated statements of financial position.

AUGUST 31, 2019 AND 2018

The following table summarizes the valuation of the University's assets and liabilities according to the fair value hierarchy levels as of August 31, 2018 (in thousands):

			-	Fai		
	Т	otal Fair Value	Investments Measured at NAV (2)	Level 1	Level 2	Level 3
Short-term investments and cash equivalents	\$	248,580	-	247,493	1,087	-
Public equity		2,820,071	1,964,007	581,092	274,266	706
Absolute return/fixed income		3,069,624	1,166,916	230,413	1,671,569	726
Private equity/venture capital		1,275,342	1,254,710	-	-	20,632
Real assets		740,618	733,057	228	1,674	5,659
Derivative instruments		(1,579)	_	(2,981)	1,402	-
Total investments		8,152,656	5,118,690	1,056,245	1,949,998	27,723
Interests in perpetual funds held by others (1)		1,311,406	_	_	_	1,311,406
Total assets at fair value		9,464,062	5,118,690	1,056,245	1,949,998	1,339,129
FINANCIAL LIABILITIES:						
Derivative instruments – interest rate swaps		(128,861)	_	_	(128,861)	_
Funds held in trust for others		(791,841)	_	_	(791,841)	_
Total liabilities at fair value	\$	(920,702)	-	-	(920,702)	_

The following tables summarize the University's Level 3 reconciliation for the years ended August 31, 2019 and 2018 (in thousands):

	· -	Balance as of agust 31, 2018	Net Gains (Losses)	Purchases	Sales	Transfer out of Level 3	I	Balance as of August 31, 2019
Public equity	\$	706	(205)	-	(7)	(491)	\$	3
Absolute return/fixed income		726	(726)	_	_	-		_
Private equity/venture capital		20,632	8,508	452	(14,047)	-		15,545
Real assets		5,659	(4,023)	_	(20)	-		1,616
Total investments		27,723	3,554	452	(14,074)	(491)		17,164
Interest in perpetual funds held by others		1,311,406	195,591	255,380	(4,801)	_		1,757,576
Total assets	\$	1,339,129	199,145	255,832	(18,875)	(491)	\$	1,774,740

							Balance as of
	I	Balance as of	Net Gains			Transfer into	August 31,
	Αι	igust 31, 2017	(Losses)	Purchases	Sales	Level 3	2018
Public equity	\$	29	(6)	42	(56)	697	\$ 706
Absolute return/fixed income		1,122	(8)	_	(388)	_	726
Private equity/venture capital		17,004	(842)	85	(233)	4,618	20,632
Real assets		680	475	_	_	4,504	5,659
Total investments		18,835	(381)	127	(677)	9,819	27,723
Interest in perpetual funds held by others		1,244,906	66,500	_	_	_	1,311,406
Total assets	\$	1,263,741	66,119	127	(677)	9,819	\$ 1,339,129

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(13) Derivative Instruments and Hedging Activities

(a) Investments

Investment strategies employed by Emory and investment managers retained by Emory may incorporate futures, options, swaps, and other derivative instruments to adjust elements of investment exposures to various securities, markets, and currencies without taking a position in the underlying assets. These instruments expose Emory to risk of an unexpected movement in the fair value of the underlying security, a counterparty failing to meet its obligations, and, in certain circumstances, not being able to unwind a position at current fair value due to market illiquidity. Emory has established procedures to monitor and manage these risks.

Emory's investment-related derivative exposures, categorized by primary underlying risk, as of and for the years ended August 31 are as follows (in thousands):

2019	Notional Amount (1)	Asset Fair Value	Liability Fair Value	Total Earnings (2)
Interest-rate contracts	\$ 759,465	305	(7,427)	(8,563)
Foreign exchange contracts	1,352,696	662	(956)	4,007
Equity contracts (3)	220,797	31,347	(14,954)	14,133
Credit contracts	28,962	364	(495)	10
Total	\$ 2,361,920	32,678	(23,832)	9,587

2018	Notional Amount (1)	Asset Fair Value	Liabilty Fair Value	Total Earnings (2)
Interest-rate contracts	\$ 1,083,904	3,772	(2,383)	(9,487)
Foreign exchange contracts	1,112,864	781	(1,959)	(637)
Equity contracts	679,692	17	(2,267)	79,293
Credit contracts	53,900	904	(443)	687
Total	\$ 2,930,360	5,474	(7,052)	69,856

- (1) The notional amount is representative of the absolute value of the open contracts as of August 31, 2019 and 2018, except as otherwise discussed below.
- (2) Gains (losses) on derivative instruments incurred during the fiscal year are included in the consolidated statements of activities in investment return in excess of spending distribution for current operations in nonoperating activities.
- (3) The notional value for options is presented on a net delta-adjusted basis.

Emory's investment-related derivative assets and liabilities at August 31, by counterparty, are as follows (in thousands):

			Cash Collateral
2019	Assets	Liabilities	Held (Pledged)
Counterparty A	\$ 31,969	(23,164)	(7,197)
All other	709	(668)	1,180
Total	\$ 32,678	(23,832)	(6,017)

			Cash Collateral
2018	Assets	Liabilities	Pledged
Counterparty A	\$ 4,165	(4,409)	(47,042)
All others	1,309	(2,643)	(580)
Total	\$ 5,474	(7,052)	(47,622)

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(b) Debt

As a component of the debt portfolio, the University entered into interest rate swap agreements that effectively convert a portion of variable rate debt to fixed rates and are used to manage interest rate risk. The University's exchange arrangements are exposed to credit loss in the event of nonperformance by the counterparty and to interest rate risk driven by factors influencing the spread between the taxable and tax-exempt market interest rates on its basis exchange. Certain of the University's derivative instruments contain provisions requiring long-term, unsecured debt to be maintained at specified credit ratings from Moody's Investors Service and Standard and Poor's Ratings Service. If the ratings of the University's debt were to fall below certain benchmarks, the counterparty could request immediate payment on derivative instruments in net liability positions. At August 31, 2019, the University's long-term debt ratings exceeded these benchmarks.

At August 31, 2019, Emory had eight interest rate swap agreements expiring on various dates ranging from September 1, 2035 through December 1, 2042. These agreements require

Emory to pay fixed interest rates to the counterparties varying from 3.238% to 3.607% in exchange for variable rate payments from the counterparties based on a percentage of the three-month LIBOR.

Net settlement transactions related to the agreements described above resulted in interest expense totaling \$10.6 million and \$13.7 million during 2019 and 2018, respectively. The fair value of each exchange agreement is estimated based on pricing models that utilize significant observable inputs, such as relevant current interest rates, that reflect assumptions on the amount the University would receive or pay to terminate the agreement at the reporting date. As such, the University's exchange agreements are categorized as Level 2 in the fair value hierarchy.

The aggregate fair value of all derivative instruments with credit risk-related contingent features that are in a liability position was \$238.1 million and \$128.9 million, collateralized by \$28.0 million and \$0 million of cash on August 31, 2019 and 2018, respectively. Collateral postings are reported in prepaid expenses, deferred charges, and other assets in the consolidated statements of financial position.

The following table summarizes the debt-related derivative instruments as of August 31 (in thousands):

Interest Rate Swaps		20)19	2018	
Inception	Maturity	Liability Fair Value	Unrealized (Loss) Gain	Liability Fair Value	Unrealized Gain
August 4, 2005	September 1, 2035	\$ (38,427)	(18,110)	\$ (20,317)	10,234
August 25, 2005	September 1, 2035	(12,964)	(6,106)	(6,858)	3,319
April 19, 2007 (1)	November 15, 2028	_	991	(991)	578
December 1, 2007	September 1, 2035	(27,501)	(12,049)	(15,452)	7,010
May 1, 2008	September 1, 2038	(33,510)	(14,327)	(19,183)	6,793
December 1, 2008	December 1, 2042	(44,731)	(22,137)	(22,594)	10,437
December 1, 2009	September 1, 2035	(28,488)	(12,193)	(16,295)	6,546
June 23, 2015	September 1, 2035	(39,241)	(18,924)	(20,317)	11,175
June 23, 2015	September 1, 2035	(13,250)	(6,396)	(6,854)	3,659
Total		\$ (238,112)	(109,251)	\$ (128,861)	59,751

(1) Interest rate swap terminated on April 11, 2019

Emory is exposed to financial loss in the event of nonperformance by a counterparty to any of the financial instruments described above. General market conditions could impact the credit standing of the counterparties and, therefore, potentially impact the value of the instruments. Emory management, with consultation from third-party financial advisers, controls this counterparty credit risk by considering the

credit rating, business risk, and reputation of any counterparty before entering into a transaction, monitoring for any change in the credit standing of its counterparty during the life of the transaction, and requiring collateral be posted when predetermined thresholds are crossed. The swaps are exchanged with primarily five counterparties.

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(14) Property and Equipment, Net

Property and equipment, net at August 31 are summarized as follows (in thousands):

	2019	2018
Land and land improvements	\$ 241,771	\$ 201,887
Buildings and improvements	3,888,388	3,668,327
Equipment	2,677,517	2,435,931
Library and museum assets	460,960	438,429
Construction in progress	171,332	142,101
	7,439,968	6,886,675
Less accumulated depreciation	(3,937,916)	(3,667,670)
	\$ 3,502,052	\$ 3,219,005

Property and equipment are reviewed for recoverability whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss shall be recognized only if the carrying amount of a long-lived asset is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. There were no asset impairments for fiscal years 2019 or 2018.

The University has identified asset retirement obligations predominantly from commitments to remove asbestos and lead paint in the University's facilities at the time of major renovation or demolition. The liability was estimated using an inflation rate of 5.00% and discount rate of 4.74%. The liability for asset retirement obligations at August 31, 2019 and 2018 is \$79.1 million and \$66.0 million, respectively.

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(15) Bonds and Notes Payable

Bonds and notes payable, including unamortized premiums, discounts, and issuance costs, consisted of the following at August 31 (dollars in thousands):

				Outstandi	ng Pri	ıcipal
	Average Interest Rate	Final Maturity		2019		2018
Tax-exempt, fixed-rate revenue bonds:						
2019 Series A	5.00%	September 1, 2039	\$	218,115	\$	=-
2019 Series B	4.96	September 1, 2048		39,725		-
2016 Series A	4.96	October 1, 2046		130,030		130,030
2016 Series B	4.23	October 1, 2043		204,385		212,620
2013 Series A	5.00	October 1, 2043		182,205		186,800
2011 Series A	5.00	September 1, 2041		121,500		121,500
2009 Series B (1)	4.81	September 1, 2035		_		195,470
2009 Series C (1)	4.97	September 1, 2039		_		93,555
Total tax-exempt, fixed-rate revenue bonds				895,960		939,975
Tax-exempt, variable-rate revenue bonds:						
2013 Series B (2)	2.06	October 1, 2039		135,100		135,100
2013 Series C (2)	1.84	October 1, 2039		57,865		57,865
2007 Series A	_	November 15, 2028		_		9,740
2005 Series B	1.53	September 1, 2035		250,000		250,000
2005 Series C	1.55	September 1, 2036		124,150		124,150
Total tax-exempt, variable-rate revenue bonds				567,115		576,855
Taxable, fixed-rate revenue bonds:						
2009 Series A (3)	5.63	September 1, 2019		_		250,000
1994 Series C	8.00	October 1, 2024		4,100		4,610
Series 1991	8.85	April 1, 2022		133		186
Total taxable, fixed-rate revenue bonds				4,233		254,796
Taxable, variable-rate revenue bonds:						
1999 Series B	2.30	November 1, 2029		8,105		8,610
1995 Series B	2.33	November 1, 2025		1,750		1,940
1994 Series B	2.57	October 1, 2024		6,375		7,200
Total taxable, variable-rate revenue bonds				16,230		17,750
Commercial paper:						
2010 Program 1 – Tax-exempt	1.66	August 1, 2050		164,422		_
2008 Program 1 – Taxable	2.13	April 1, 2047		203,247		104,344
Total commercial paper				367,669		104,344
Other long-term debt	Various					10
Unamortized bond premiums				136,687		76,575
Unamortized bond discounts				-		(2,003)
Bond issuance costs				(7,834)		(8,405)
Total bonds and notes payable			\$	1,980,060	\$	1,959,897
Total bonus and notes payable			φ	1,700,000	Ψ	1,737,077

^{(1) 2009}B and 2009C Series bonds were refunded with proceeds from the University's issuance of 2019A Series bonds.

^{(2) 2013}B and 2013C Series bonds are floating rate notes and interest rates are based on a spread to The Securities Industry and Financial Markets Association Index (SIFMA).

^{(3) 2009}A Series bonds were redeemed with proceeds from the University's issuance of 2019B Series bonds and taxable Commercial Paper program, along with funds on hand.

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The University incurred interest expense of \$83.5 million and \$77.1 million in 2019 and 2018, respectively, net of capitalized interest of \$0 million and \$4.1 million in 2019 and 2018, respectively. During 2019 and 2018, the average interest rate on the University's tax-exempt and taxable variable rate demand bonds was 1.54% and 2.31%, respectively. Related indices for this period were 1.57% for tax-exempt debt (SIFMA) and 2.38% for taxable debt (LIBOR).

At August 31, 2019, the aggregate annual maturities of bonds and notes payable for the next five years and thereafter are as follows (in thousands):

		2019
PAYABLE IN FISCAL YEAR:	AR:	
2020	\$	6,928
2021		18,504
2022		13,386
2023		13,335
2024		13,560
Thereafter		1,785,494
		1,851,207
Unamortized net premium		136,687
Unamortized net bond issuance costs		(7,834)
	\$	1,980,060

During 2019, the University refunded its 2009B and 2009C Series bonds with proceeds from the University's issuance of 2019A Series bonds. The University also redeemed the 2009A Series bonds with proceeds from the 2019B Series bonds and taxable Commercial Paper program, along with funds on hand. The University incurred a \$69.3 thousand make-whole call premium on the early redemption of the 2009A Series bonds and an accounting gain of \$4.3 million on the refunding of the extinguishment of the 2009B and 2009C Series bonds, which is included in the nonoperating activities in the accompanying 2019 consolidated statement of activities.

In 2010, the University established a \$400.0 million taxexempt Commercial Paper program. In September of 2018, Emory issued \$164.4 million of its tax-exempt Commercial Paper program to defease DRHS' outstanding debt (note 23), DeKalb County Hospital Authority Revenue Anticipation Certificates (DeKalb Medical Center Inc. Project), Series 2010 issued in the original aggregate principal amount of \$183.1 million. The primary purpose of the program is to meet interim financing needs related to capital projects. As of August 31, 2019, the University had an outstanding balance of \$164.4 million.

In 2008, the University established a \$100.0 million taxable Commercial Paper program. The taxable Commercial Paper program was increased to \$150.0 million in 2014 and to \$350.0 million in 2019. On August 27, 2019, Emory issued an additional \$103.4 million of taxable Commercial Paper to redeem a portion of the 2009 Series bonds. As of August 31, 2019 and 2018, the University has an outstanding balance of \$203.2 million and \$104.3 million, respectively, under this program.

The University has a standby credit facility to enable the University to purchase tendered variable rate debt in the event of a failed remarketing. Currently, it has one diversified facility totaling \$150.0 million that is committed for this sole purpose and cannot be used for operating needs of the University. There were no draws against this line of credit in 2019 or 2018.

Emory Healthcare entered into an affiliation agreement with one of its payors effective June 11, 2018. This affiliation agreement includes, among other provisions, a \$100.0 million line of credit to Emory University, which can be utilized for any purpose that advances the charitable mission of Emory Healthcare. There is no outstanding balance on this line of credit as of August 31, 2019. Emory University has an additional \$75.0 million line of credit with a commercial bank for which there is also no outstanding balance as of August 31, 2019.

The University has two letters of credit with a commercial bank totaling \$1.3 million. There were no outstanding balances as of August 31, 2019 or 2018.

The terms of the University's long-term debt provide for certain financial and nonfinancial covenants, including provisions as to the use of the proceeds, limits as to arbitrage and bond issuance costs, and various other administrative requirements. The line of credit agreements have varying expiration dates through fiscal 2021.

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(16) Net Assets

The following is a summary of net assets as of August 31 (in thousands):

		2019		2018				
	Without Donor Restrictions	With Donor Restrictictions	Total	Without Donor Restrictions	With Donor Restrictictions	Total		
University funds	\$ 1,112,978	-	1,112,978	\$ 1,226,510	-	1,226,510		
EHC funds	369,882	-	369,882	492,984	-	492,984		
Endowment funds	1,602,867	3,796,655	5,399,522	1,556,384	3,685,934	5,242,318		
Investment in plant	1,213,556	-	1,213,556	1,064,385	-	1,064,385		
Interest in perpetual funds held by others	-	1,757,576	1,757,576	-	1,311,406	1,311,406		
Contributions receivable, net	-	193,792	193,792	-	396,128	396,128		
Annuity and other split-interest agreements	-	14,065	14,065	-	13,891	13,891		
Capital projects and other donor purposes	-	52,653	52,653	-	30,483	30,483		
	\$ 4,299,283	5,814,741	10,114,024	\$ 4,340,263	5,437,842	9,778,105		

(17) Retirement and Deferred Compensation Plans

The University has a defined-contribution plan under the Code, Section 403(b), covering eligible employees. The University contributes an amount equal to 6% of each eligible employee's compensation to the plan as well as a supplemental contribution of 3% based on a 1.5 to 1 match of employee contributions of up to 2% of compensation. Emory Healthcare sponsors a retirement plan, covering most full-time employees, under which annuities are purchased with contributions made by Emory Healthcare and its employees. The benefits are vested only to the extent of the annuities purchased. TEC sponsors The Emory Clinic, Inc. Retirement Savings Plan (the Retirement Plan), covering all its employees, except those considered leased employees or those covered under collective bargaining agreements, as defined. The Retirement Plan provides for employees to make salary reduction contributions and for TEC to make discretionary contributions for employees who have attained the age of 21 and are employees at the date the contribution is made. The Retirement Plan provides for contributions at an annual determined percentage of compensation and employees cliff vest in employer contributions after three years of service. Retirement expense totaled \$154.8 million and \$142.7 million during 2019 and 2018, respectively, and is included in fringe benefits expense in the accompanying consolidated statements of activities.

The University sponsors the Code Section 457(b) Deferred Compensation Plan primarily for the purpose of providing deferred compensation for a select group of management or highly compensated employees who are eligible for participation and elect to make salary deferrals under the Deferred Compensation Plan. These assets are fully vested and available to the participating employees at the time of termination of

employment from the University. As of August 31, 2019 and 2018, respectively, the University held other assets of \$142.0 million and \$134.7 million under the Retirement Plan. These assets are included in other assets, which are designated by the University to pay future salary deferral plan payments. The assets are held in separate investment funds for which the majority are classified as Level 1 in the fair value hierarchy. Associated liabilities for the obligations of \$142.0 million and \$134.7 million as of August 31, 2019 and 2018, respectively, are included in accrued liabilities for benefit obligations and professional liabilities and considered Level 2 in the fair value hierarchy.

(18) Pension Plans - Emory Healthcare

Emory Healthcare sponsors a defined-benefit pension plan (the Plan). The Plan was curtailed effective December 31, 2011. The terms of the curtailment generally provide that no further benefit accrual under the Plan is provided for service after the effective date nor will new entrants into the Plan be permitted after the effective date.

The Plan's investment objectives are to protect long-term asset value by applying prudent, low-risk, high-quality investment disciplines and to enhance the values by maximizing investment returns through active security management within the framework of the Plan's investment policy. Asset allocation strategies and investment management structure are designed to meet the Plan's investment objectives. The Plan's expected long-term rate of return on assets is determined by reviewing the historical return of each asset category comprising the Plan's target asset allocation.

The Joint Operating Company (JOC) assumed certain defined-benefit pension liabilities covering certain employees of the entities contributed to the JOC by Saint Joseph's Health

AUGUST 31, 2019 AND 2018

System SJHS (the SJHS Pension Plan). The plan was curtailed, effective December 31, 2011, and the JOC has agreed to provide for funding of the plan, generally over 10 years, beginning in fiscal year 2015, subject to certain terms and conditions.

In connection with the acquisition of DRHS (note 23),

Emory Healthcare assumed sponsorship of DRHS' trusteed noncontributory, defined-benefit pension plan on September 1, 2018. Prior to the acquisition, the DRHS Pension Plan had been permanently frozen effective December 31, 2008 as a result of DRHS' Board of Directors approving such action.

The changes in the projected benefit obligations as of August 31 are as follows (in thousands):

			2019		2018	
	Em	ory Healthcare	SJHS	DRHS	Emory Healthcare	SJHS
Projected benefit obligation, beginning of year	\$	320,034	149,118	161,598	\$ 326,875	154,690
Interest cost		12,582	6,250	5,695	11,614	6,180
Actuarial (gain) loss		63,650	27,051	23,282	(10,651)	(6,178)
Plan settlements		(45,951)	_	(117,884)	-	_
Benefits paid		(9,127)	(5,906)	(8,283)	(7,804)	(5,574)
Projected benefit obligation, end of year	\$	341,188	176,513	64,408	\$ 320,034	149,118

Given the curtailment of the plans, the accumulated benefit obligations at August 31, 2019 and 2018 are the same as the projected benefit obligations.

The changes in the fair value of plan assets, funded status of the plans, and the status of amounts recognized in the accompanying consolidated statements of financial position as of August 31 are as follows (in thousands):

			2019		2018	
	Em	ory Healthcare	SJHS	DRHS	Emory Healthcare	SJHS
Fair value of plan assets, beginning of year	\$	251,372	121,388	165,400	\$ 235,118	110,316
Actual return on plan assets		16,226	5,153	17,810	12,969	9,406
Employer contributions		10,516	6,366	-	11,089	7,240
Plan settlements		(40,941)	_	(112,767)	-	_
Benefits paid		(9,127)	(5,906)	(8,283)	(7,804)	(5,574)
Fair value of plan assets, end of year	\$	228,046	127,001	62,160	\$ 251,372	121,388
Funded status – accrued pension cost recognized in the consolidated statements of financial position	\$	(113,142)	(49,512)	(2,248)	\$ (68,662)	(27,730)

The components of net periodic pension cost for the years ended August 31 are as follows (in thousands):

			2019			2018	
	Er	nory Healthcare	SJHS	DRHS	Em	ory Healthcare	SJHS
Interest cost	\$	12,582	6,250	5,695	\$	11,614	6,180
Expected return on assets		(17,077)	(8,200)	(7,035)		(18,827)	(7,777)
Amortization of prior service cost		_	(438)	_		3,552	(438)
Settlement loss recognized		15,549	_	5,731		_	_
Amortization of net loss		_	_	4		_	_
Recognized actuarial loss		1,947	1,679	_		2,295	1,866
Net periodic pension cost	\$	13,001	(709)	4,395	\$	(1,366)	(169)

Net periodic pension costs are recognized as employees render the services necessary to earn the pension and postretirement benefits.

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Weighted average assumptions used to determine benefit obligations in the accompanying consolidated statements of financial position for 2019 and 2018 are as follows:

		2019		2018	
	Emory Healthcare	SJHS	DRHS	Emory Healthcare	SJHS
Discount rate	3.14%	3.08%	3.14%	4.31%	4.28%
Expected long-term rate of return on plan assets	6.80	6.75	4.81	8.00	6.75

Weighted average assumptions used to determine net periodic pension cost for 2019 and 2018 are as follows:

		2019	2018		
	Emory Healthcare	SJHS	DRHS	Emory Healthcare	SJHS
Discount rate	4.31%	4.00%	4.24%	4.07%	4.07%
Expected long-term rate of return on plan assets	6.80	6.75	4.81	8.00	7.00

Emory Healthcare Plan Assets

A settlement charge of approximately \$11.3 million was recognized during June 2019 due to the purchase of an annuity contract for certain retirees under Emory Healthcare Pension Plan. Liabilities and assets were remeasured prior to the settlement. The buyout reduced the projected benefit obligation (PBO) by \$34.6 million and assets by \$31.8 million.

A settlement charge of approximately \$4.3 million was recognized during August 2019 due to a lump-sum window offered to certain vested terminated participants under Emory Healthcare Pension Plan. Liabilities and assets were remeasured prior to the settlement. The payout reduced PBO by \$11.3 million and assets by \$9.1 million.

The following tables summarize the Plan's assets, which are recorded at fair value as of August 31 as follows (in thousands):

			2019			
	Fair Value Hierarchy					Total Asset
	To	tal Fair Value	Level 1	Level 2	Target Allocation	Allocation
INVESTMENTS:						
Short-term investments and cash equivalents	\$	302	(353)	655	—%	%
Commingled funds – equity		154,068	-	154,068	70	68
Commingled funds – fixed income		73,676	_	73,676	30	32
Total investments	\$	228,046	(353)	228,399	100%	100%

			2018	•		
				Total Asset		
	T	otal Fair Value	Level 1	Level 2	Target Allocation	Allocation
INVESTMENTS:						
Short-term investments and cash equivalents	\$	2,103	(595)	2,698	—%	1%
Commingled funds – equity		174,329	-	174,329	70	69
Commingled funds – fixed income		74,940	-	74,940	30	30
Total investments	\$	251,372	(595)	251,967	100%	100%

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SJHS Pension Plan Assets

Under the terms of the agreement forming the JOC, the assets of the SJHS Pension Plan formally remain assets of SJHS, and the plan assets remain invested in the CHE Trinity Health Pension Investment Program. Accordingly, neither the JOC nor Emory Healthcare has discretion over the management of the plan assets. However, the plan assets related to the entities contributed to the JOC (and certain other employees leased to the JOC) are contractually required to be clearly separated from the plan assets of the other entities participating in the CHE Trinity Health Employee Pension Program.

The following tables summarize the SJHS Pension Plan's assets, which are recorded at fair value as of August 31 (in thousands):

		201	9		
		Fair Value I		Total Asset	
	Total Fair Value	Level 1	Level 2	Target Allocation	Allocation
INVESTMENTS:					
Short-term investments and cash equivalents	\$ 4,460	1,654	2,806	2%	4%
Commingled funds – equity	58,278	25,940	32,338	52	46
Commingled funds – fixed income	46,315	-	46,315	35	36
Managed funds	17,948	-	17,948	11	14
Total investments	\$ 127,001	27,594	99,407	100%	100%

		201	8			
	Fair Value Hierarchy					
	Total Fair Value	Level 1	Level 2	Target Allocation	Allocation	
INVESTMENTS:						
Short-term investments and cash equivalents	\$ 4,814	2,067	2,747	2%	4%	
Commingled funds – equity	66,187	27,008	39,179	52	55	
Commingled funds – fixed income	31,751	_	31,751	35	26	
Managed funds	18,636	_	18,636	11	15	
Total investments	\$ 121,388	29,075	92,313	100%	100%	

DRHS Plan Assets

As a result of the acquisition of DRHS, the funded status of the DRHS Pension Plan was remeasured as of September 1, 2018, and unamortized prior service costs and experience gains and losses were eliminated.

A settlement charge of approximately \$3.3 million was recognized during June 2019 due to the purchase of an annuity contract for retirees under the DRHS Pension Plan. Liabilities and

assets were remeasured prior to the settlement. The buyout reduced PBO by \$95.0 million and assets by \$95.4 million.

A settlement charge of approximately \$2.4 million was recognized during August 2019 due to a lump-sum window offered to certain vested terminated participants under the DRHS Pension Plan. Liabilities and assets were remeasured prior to the settlement. The payout reduced PBO by \$22.9 million and assets by \$17.3 million.

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The following table summarizes the DRHS Pension Plan's assets, which are recorded at fair value as of August 31 (in thousands):

		2019	9		
			Total Asset		
	Total Fair Value	Level 1	Level 2	Target Allocation	Allocation
INVESTMENTS:					
Short-term investments and cash equivalents	\$ 4,570	4,570	-	10%	7%
Commingled funds – equity	-	-	-	_	_
Commingled funds - fixed income	57,590	1,949	55,641	90	93
Managed funds	-	-	-	_	_
Total investments	\$ 62,160	6,519	55,641	100%	100%

Cash Flows

Emory Healthcare expects to contribute \$8.0 million to the Emory Healthcare Pension Plan, \$6.4 million to the SJHS Pension Plan, and does not expect to contribute to the DRHS Pension Plan during fiscal year 2020.

Expected Future Benefit Payments

Emory Healthcare annual future benefit payments, excluding lump-sum settlements, are expected to range from \$8.5 million to \$13.1 million for the next five years. SJHS Pension Plan annual future benefit payments, excluding lump-sum settlements, are expected to range from \$6.5 million to \$8.0 million for the next five years. DRHS Pension Plan annual future benefit payments, excluding lump-sum settlements, are expected to range from \$0.5 million to \$1.9 million for the next five years.

Other Items

Emory Healthcare uses the straight-line method to amortize prior service cost for both plans.

(19) Postretirement Healthcare and Life Insurance Benefits

The University sponsors a postretirement life insurance and healthcare benefits plan. Participants hired after 2002 pay the full retiree-specific premium equivalent and are therefore assumed to pay the full cost of their coverage. The University and Emory Healthcare each fund a separate trust (VEBA Trust) for retiree health and life benefits. The assets of the VEBA Trust are invested primarily in equity and fixed-income securities. The University funds these benefits only to the extent of current retiree claims. The University measures its participation in the VEBA Trust at August 31 each fiscal year.

The changes in the accumulated postretirement benefit obligation (APBO) as of August 31 are as follows (in thousands):

		2019		2018
	Emory University	Emory Healthcare	Total	Total
APBO, beginning of year	\$ 102,672	57,976	160,648	\$ 161,232
Service cost	1,522	590	2,112	2,393
Interest cost	4,134	2,322	6,456	5,673
Actuarial losses (gains)	23,822	13,217	37,039	(3,322)
Benefits paid	(3,469)	(2,051)	(5,520)	(5,328)
APBO, end of year	\$ 128,681	72,054	200,735	\$ 160,648

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The changes in the fair value of plan assets, funded status of the plan, and the status of the accrued postretirement benefit obligation recognized in the accompanying consolidated statements of financial position as of August 31 are as follows (in thousands):

		2019		2018
	Emory University	Emory Healthcare	Total	Total
Fair value of plan assets, beginning of year	\$ 73,443	19,597	93,040	\$ 88,661
Actual return on plan assets	(363)	(96)	(459)	6,635
Benefits paid by Emory	-	(2,051)	(2,051)	(2,256)
Fair value of plan assets, end of year	\$ 73,080	17,450	90,530	\$ 93,040
Funded status – accrued postretirement benefit cost recognized in the consolidated statements of financial position	\$ (55,601)	(54,604)	(110,205)	\$ (67,608)

Actuarial assumptions used to determine the values of the APBO and the benefit costs for years ended August 31, 2019 and 2018 included a discount rate of 3.10% and 4.31%, respectively. Since the plan was amended on April 11, 2002 to limit the University's liability for future medical care cost increases to 4.00%, the per

capita cost increase of healthcare benefits is capped at 4.00%. The estimated long-term rate of return on plan assets was 8.00% for the University and Emory Healthcare for both years ended August 31, 2019 and 2018.

The components of net periodic postretirement benefit cost for years ended August 31 were as follows (in thousands):

		2019		2018
	Emory University	Emory Healthcare	Total	Total
Service cost of benefits earned	\$ 1,522	590	2,112	\$ 2,393
Interest cost on APBO	4,134	2,322	6,456	5,673
Expected return on plan assets	(5,737)	(1,486)	(7,223)	(6,893)
Recognized net actuarial loss	1,926	2,019	3,945	4,566
Net periodic postretirement benefit cost	\$ 1,845	3,445	5,290	\$ 5,739

The amounts accumulated in net assets without donor restrictions follow (in thousands):

		2019				
	Emory University	Emory Healthcare	Total		Total	
Net unrecognized actuarial loss	\$ 67,576	33,631	101,207	\$	60,359	
Prior service cost	(116)	18	(98)		(26)	
Total	\$ 67,460	33,649	101,109	\$	60,333	

In fiscal year 2020, net unrecognized actuarial losses of \$3.6 million for Emory University and \$3.7 million for Emory Healthcare are expected to be amortized from net assets without donor restrictions into net periodic postretirement benefit cost.

Plan Assets

The Investment Committee of Emory University's Board of Trustees approves the investment guidelines and asset allocation targets for the pension benefits and postretirement benefits plans.

The primary objective of the investments is to ensure the solvency of the plans over time to meet plan obligations. The secondary objective is to meet or exceed the plans' actuarial assumed rate of return over time without taking excess risk. The funds are diversified by asset class in accordance with established allocation targets and rebalanced as needed. Specific investments are apportioned to a combination of institutional pooled funds and mutual funds.

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The following table summarizes the VEBA Trust assets for the University and Emory Healthcare as of August 31 (in thousands):

			2019				
			Fair Value Hierarchy			Target	Total Asset
	Tot	al Fair Value	Level 1	Level 2	NAV	Allocation	Allocation
Fixed income	\$	23,614	13,119	10,495	-	25%	26%
Public equity		66,952	17,292	35,777	13,883	75	74
Short-term investment and cash equivalent		(36)	(36)	_	_	-	_
Total investments	\$	90,530	30,375	46,272	13,883	100%	100%

		2018				
		Fair Value Hierarchy			Target	Total Asset
	Total Fair Value	Level 1	Level 2	NAV	Allocation	Allocation
Fixed income	\$ 22,573	11,938	10,635	-	25%	24%
Public equity	70,488	18,539	37,142	14,807	75	76
Short-term investment and cash equivalent	(21)	(21)	_	_	_	_
Total investments	\$ 93,040	30,456	47,777	14,807	100%	100%

Cash Flows

Emory University and Emory Healthcare expect to contribute \$3.9 million and \$0 million, respectively, to the postretirement benefit plan during fiscal year 2020.

Expected Future Benefit Payments

Annual future benefit payments are expected to range from \$3.9 million to \$5.0 million for Emory University and from \$2.5 million to \$3.2 million for Emory Healthcare for the next five years.

(20) Functional Expenses

The consolidated statements of activities present expenses by

natural classification. The University also summarizes expenses by functional classification, in accordance with its mission. The University's primary program services are instruction, research, public service, and the delivery of healthcare and medical services. Expenses for academic support, institutional support, and independent operations/auxiliary enterprises are generally incurred in support of these primary program activities, with academic support being related to student financial aid. Capital and plant expenditures, costs for operation and maintenance of plant, interest on indebtedness, and depreciation and amortization are allocated using a variety of cost allocation techniques, such as square footage and time and effort.

The consolidated statements of activities include the following functional expenses for the years ended August 31 (in thousands, net of the cost allocations and recharges referenced above):

					2019					2018
	I	nstruction	Research	Academic Support and Scholarship and Fellowship	Institutional Support	Public Service	*Healthcare and Medical Services	Independent Operations and Auxillary	Total	Total
Salaries	\$	289,428	231,901	83,253	150,487	56,359	2,280,392	96,325	3,188,145	\$ 2,703,393
Fringe benefits		74,962	57,474	20,662	32,350	14,593	468,562	19,570	688,173	608,246
Student financial aid		-	-	20,477	-	-	-	-	20,477	19,133
Nonsalary operating expenses		49,216	189,874	62,063	19,586	47,855	1,676,152	15	2,044,761	1,700,018
Interest on indebtedness		8,127	12,936	5,166	2,608	2,044	29,738	22,195	82,814	80,468
Depreciation and amortization		28,572	47,885	17,249	24,726	7,864	151,080	16,915	294,291	265,156
Total expenses, 2019	\$	450,305	540,069	208,871	229,757	128,715	4,605,924	155,019	6,318,661	\$ 5,376,414
Total expenses, 2018	\$	453,790	507,108	199,136	224,558	117,447	3,738,948	135,427	5,376,414	

^{*} Healthcare and Medical Services – a portion of patient care services related to Emory Healthcare expenses equal to \$4.3 billion. Healthcare administrative costs are \$396.7 million, included therein.

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Costs related to the University's operation and maintenance of property, including depreciation of property and equipment and interest on related debt, are allocated to program and supporting activities based upon information reported in the space study and debt financing records. Total amounts allocated in 2019 and 2018 were \$175.6 million and \$188.7 million, respectively. Fundraising costs were approximately \$43.0 million and \$38.9 million in 2019 and 2018, respectively.

(21) Medical Professional and General Liability Insurance Coverage

CCIC, Emory Healthcare's wholly owned offshore captive insurer, provides claims-made primary medical professional and general liability coverage for the University, the Hospitals, Emory Clinic, Emory Specialty Associates, and Wesley Woods Center.

As of August 31, 2019 and 2018, the University has recorded an accrual for estimated losses associated with all retained CCIC risks of approximately \$203.8 million (discounted at 2.5%) and \$144.6 million (discounted at 1.6%), respectively.

Emory has purchased layered excess and umbrella insurance and reinsurance coverage beyond the amounts retained by CCIC, through various carriers, for a total of \$129.0 million per claim and in the aggregate.

The estimated liability for professional and general liability claims will be significantly affected if current and future claims differ from historical trends. While the University monitors reported claims closely and considers potential outcomes as estimated by its actuaries when determining its professional and general liability accruals, the complexity of the claims, the extended period of time to settle the claims, and the wide range of potential outcomes complicate the estimation. The University's management believes adequate provision has been made for the related risk.

(22) Related-Party Transactions

The Carter Center, Inc. (CCI) is a nonprofit organization founded by former U.S. President Jimmy Carter and Rosalynn Carter, which sponsors various domestic and international programs. The Board of Trustees of CCI comprises 16 to 28 members, including its founders, and others as elected half by the University, including the University's president, and half by the Carter Center class trustees. The University's Board of Trustees has the authority to approve amendments to CCI's articles of incorporation and bylaws. Funds held in trust for others include \$780.2 million and \$758.2 million, representing CCI's investment in the University's long-term investment portfolio of August 31, 2019 and 2018, respectively.

Emory University and Children's Healthcare of Atlanta, Inc. (Children's), a Georgia nonprofit corporation, established the Emory + Children's Pediatric Institute (the Institute) effective September 1, 2018 under a Master Affiliation Agreement (the affiliation agreement). Under the terms of the affiliation agreement, approximately 350 Emory University School of Medicine Department of Pediatrics faculty physicians and PhD researchers transferred to the Institute and became employees thereof. The affiliation agreement restructured previous arrangements between the parties for pediatric teaching, research, and related clinical services. The ownership of the Institute is 50% Emory University and 50% Children's, with equal representation on the governing board. The funding obligations of each party are specified by the affiliation agreement, and each party funds its mission-related expenses. The University reports research and teaching expenses provided by these 350 faculty members in salaries, fringe benefits, professional fees and purchased services, and other operating expenses in the consolidated statements of activities.

(23) DeKalb Regional Health System (DRHS) Acquisition

On September 1, 2018 (the acquisition date), Emory Healthcare entered into a Definitive Agreement with DRHS and became the sole and controlling member of DRHS and its affiliates upon acquisition of DRHS' assets and liabilities, with the goal of DRHS being integrated operationally, financially, and clinically into Emory Healthcare. This partnership was formed as part of an effort to support an integrated healthcare delivery system with expanded geographic coverage and a full continuum of care, as well as enhancing Emory Healthcare's ability to support its charitable missions and respective community benefit activities.

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The following table summarizes the estimated fair values of the assets acquired and liabilities assumed by Emory Healthcare as a result of the transaction as of September 1, 2018 (in thousands):

Cash and cash equivalents	\$ 95,407
Patient accounts receivable, net	55,168
Other receivables, net	7,090
Prepaid expenses, deferred charges, and other assets	17,497
Investments	15,004
Property and equipment, net	134,044
Total assets acquired	324,210
Accounts payable and accrued liabilities	90,673
Bonds and notes payable	169,413
Accrued liabilities for benefit obligations and professional liabilities	46,820
Total liabilities assumed	306,906
Net assets without donor restrictions acquired	\$ 17,304

The fair value of the assets and liabilities acquired in the transaction resulted in a net contribution received totaling \$17.3 million, which is included in other gains (losses) on the consolidated statement of activities for the year ended August 31, 2019.

The operating results of DMC, DHR, and DMCF have been included in the 2019 accompanying consolidated statement of activities since the acquisition date of September 1, 2018.

The unaudited pro forma combined summary of operations, which gives effect to including the acquired operating results of DMC, DHR, and DMCF as if the acquisition occurred on September 1, 2017, is as follows (in thousands):

	Year ended August 31, 2018			
Revenue, gains, and other support	\$	456,743		
Operating loss		(84,422)		
Change in net assets without donor restrictions		(73,432)		

As part of the terms of the Definitive Agreement, Emory Healthcare committed \$239.0 million on capital projects to benefit DRHS and its affiliates over a 7-year period, beginning September 1, 2018. Such period may be extended under certain circumstances to a period of no more than 10 years.

(24) Commitments and Contingencies

Emory University (excluding Emory Healthcare) is in the process of constructing, renovating, and equipping certain facilities for which the outstanding commitments at August 31, 2019 totaled \$38.1 million. Emory Healthcare's primary commitment is disclosed in note 23.

Expenditures and indirect costs related to federal and state grants and contracts are subject to adjustment based upon review by the granting agencies. The amounts, if any, of expenditures, which may be disallowed by the granting agencies, cannot be determined at this time, although management expects they will not have a material effect on the University's consolidated financial statements.

Lawsuits and claims have been filed against the University in the ordinary course of business. As one of the nation's largest research universities and academic medical centers, the University has active litigation that takes several forms. The University's policy is to accrue for litigation and claims when such amounts are probable and can be reasonably estimated based on consultation with external legal counsel and Emory General Counsel review.

In addition, the University is subject to many federal and state regulations, and as a result, there may be one or more pending government investigations ongoing at any time. While the outcome of many of these actions is not presently determinable, it is the opinion of management that any resulting liability from these actions will not have a material adverse effect on the consolidated financial position or operating results of the University. The University also has a comprehensive program of primary and excess insurance. Management of the University believes any current pending lawsuit subjecting the University to liability would not have a materially adverse effect on the University's consolidated financial position.

Emory Healthcare and SJHS have a JOC under the name of Emory/Saint Joseph's, Inc. to further the respective missions of Emory Healthcare and CHE Trinity Health. Under the JOC Contribution Agreement, Emory Healthcare maintains a 51% controlling ownership interest in the JOC. SJHS has a noncontrolling membership interest in the JOC of 49%. Effective August 31, 2014, CHE Trinity Health has a put right, as defined in the JOC Contribution Agreement, that may be exercised at any time with written notice to Emory Healthcare. Upon the occurrence of such event, Emory Healthcare may be required to purchase from SJHS its noncontrolling interest in the JOC.

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(25) Subsequent Events

Emory has evaluated subsequent events after the consolidated statements of financial position date of August 31, 2019 through December 19, 2019, the date the consolidated financial statements were available to be issued, and noted that there are no other items to disclose except as follows:

The University has simultaneously executed a ground lease and a building lease with a developer to construct a Musculoskeletal Outpatient Center (MSK Center) at its Executive Park property. The MSK Center will be an expanded point of entry for imaging and surgical cases for Emory Healthcare, one of the fastest growing lines of business in the region.



KPMG LLP Suite 2000 303 Peachtree Street, N.E. Atlanta, GA 30308-3210

Independent Auditors' Report 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

The Board of Trustees Emory University:

We have audited, in accordance with the 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 Emory University and its subsidiaries (the University), which comprise the consolidated statement of financial position as of August 31, 2019, the related consolidated statements of activities and cash flows for the year then ended, and the related notes to the consolidated financial statements, and have issued our report thereon dated December 19, 2019. Our report contains an emphasis of matters paragraph referring to the University's adoptions, in 2019, of Accounting Standards Update (ASU) No. 2016-14, *Not-for-Profit Entities (Topic 958): Presentation of Financial Statements of Not-for-Profit Entities*; ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, as amended; and ASU No. 2018-08, *Clarifying the Scope and Accounting Guidance for Contributions Received and Contributions Made*.

Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated 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 consolidated 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 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.

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 consolidated 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 University'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 University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Atlanta, Georgia December 19, 2019

SUPPLEMENTARY SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Research and Development Cluster: U.S. Department of Agriculture:				_
Agriculture Research – Basic and Applied Research: Pass-through Venturewell	59-0210-6-004	10.001	\$	4,605
Total CFDA No. 10.001				4,605
Sustainable Agriculture Research and Education: Pass-through University of Georgia	20163864025382	10.215		26,783
Total CFDA No. 10.215				26,783
U.S. Department of Agriculture: Agriculture and Food Research Initiative (AFRI) Pass-through University of Georgia	2018-67011-28030 2018-69001-27553/AMND1 2019-67013-29371 2015-67017-23080 20186701327401	10.310 10.310 10.310 10.310 10.310		42,786 49,213 14,748 50,000 65,532
Total CFDA No. 10.310				222,279
U.S. Department of Agriculture Total				253,667
U.S. Department of Commerce: Sea Grant Support				
Pass-through Georgia Southern University	NA180AR4170084	11.417		15,115
Total CFDA No. 11.417				15,115
Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements	NA15NMF4270347	11.427	11,749	12,395
Total CFDA No. 11.427			11,749	12,395
Marine Fisheries Initiative	NA17NMF4330319	11.433	23,375	62,331
Total CFDA No. 11.433			23,375	62,331
U.S. Department of Commerce Total			35,124	89,841
U.S. Department of Defense: Basic and Applied Scientific Research Pass-through Brown University	N00014-16-1-2276 N00014-1 6-1-2355	12.300 12.300	23,707	201,213 172,010
Total CFDA No. 12.300			23,707	373,223
Basic Scientific Research – Combating Weapons of Mass Destruction Basic Scientific Research – Combating Weapons of Mass Destruction	HDTRA1-15-C-0075 HDTRA-1-16-1-0029	12.351 12.351	1,676,728	2,897,967 163,331
Basic Scientific Research – Combating Weapons of Mass Destruction	HDTRA11810029	12.351	110,171	295,443
Total CFDA No. 12.351			1,786,899	3,356,741
Military Medical Research and Development Military Medical Research and Development Military Medical Research and Development	W81XWH-14-1-0616 W81XWH-15-1-0132 W81XWH-15-1-0154	12.420 12.420 12.420	 127,631	13,957 41 201,987
Military Medical Research and Development Military Medical Research and Development Military Medical Research and Development	W81XWH-15-1-0545 W81XWH-15-1-0676 W81XWH-16-1-0535	12.420 12.420 12.420	_ _ _	159,476 (549) 232,343
Military Medical Research and Development	W81XWH-16-1-0584	12.420	65,947	183,959
Military Medical Research and Development Military Medical Research and Development	W81XWH-16-1-0744 W81XWH-17-1-0104	12.420 12.420	47,839 —	57,102 177,662
Military Medical Research and Development Military Medical Research and Development	W81XWH-17-1-0186 W81XWH1710187	12.420 12.420	=	291,928 200,058
Military Medical Research and Development	W81XWH-17-1-0271	12.420	_	265,463
Military Medical Research and Development Military Medical Research and Development	W81XWH-17-1-0438 W81XWH-17-1-0439	12.420 12.420	_	301,455 252,020
Military Medical Research and Development	W81XWH-17-1-0459	12.420	_	380,150
Military Medical Research and Development Military Medical Research and Development	W81XWH1810373 W81XWH1810526	12.420 12.420	 4,272	342,038 302,767
Military Medical Research and Development Military Medical Research and Development	W81XWH-18-1-0619 W81XWH1810700	12.420 12.420	_	73,327
Military Medical Research and Development	W81XWH1910068	12.420	=	327,527 115,841
Military Medical Research and Development Military Medical Research and Development	W81XWH-19-1-0069 W81XWH-17-1-0634	12.420 12.420	100,143	945 222,690
Military Medical Research and Development	W81XWH-17-C-0229	12.420	-	294,176
Pass-through Dana Farber Cancer Institute Pass-through Georgia Institute of Technology	W81XWH1310274 W81XWH-18-1-0669	12.420 12.420	_	4,990 67,954
Pass-through University of California San Francisco	W81XWH-14-2-0176	12.420	=	16,630
Pass-through University of Miami Pass-through University of Rochester	W81XWH-16-1-0756 WB1XWH-17-1-0168	12.420 12.420	=	51,227 97,656
Pass-through University of Texas San Antonio	W81XWH13220063	12.420		112,541
Total CFDA No. 12.420			345,832	4,747,361
Basic Scientific Research Basic Scientific Research	W911NF-17-1-0382 W911NF-17-1-0427	12.431 12.431		117,206
Basic Scientific Research	W911NF-17-1-0427 W911NF1810187	12.431	63,862	245,039 8,607
Basic Scientific Research Pass-through University of California Los Angeles	W911NF1820089 W911NF-14-1-0378	12.431	_	132,467
Pass-through Virginia Tech	W911NF-14-1-0378 W911NF1520107	12.431 12.431		168,913 155,702
Total CFDA No. 12.431	EAGEE0 43 4 0000	12.620	63,862	827,934
Basic, Applied, and Advanced Research in Science and Engineering Total CFDA No. 12.630	FA9550-13-1-0002	12.630		(64)

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Uniformed Services University Medical Research Projects		-, ,	· <u></u>	•
Pass-through Duke University	HT9404-13-0032	12.750	\$ 6,946	1,329,299
Pass-through Henry M Jackson Foundation Pass-through Henry M Jackson Foundation	HU0001-14-2-0052 HU0001-15-20001	12.750 12.750	1,440	108,684 822,622
Pass-through Geneva Foundation	HU0001-14-1-TS06	12.750	_	14,776
Pass-through Henry M Jackson Foundation	HT9404-13-1-0030	12.750	 .	52,903
Total CFDA No. 12.750			8,386	2,328,284
Air Force Defense Research Sciences Program	FA9550-17-1-0006	12.800	_	47,945
Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	FA9550-18-1-0189 FA9550-18-1-0414	12.800 12.800	_	59,389 63,328
Air Force Defense Research Sciences Program	FA9550-18-1-0420	12.800	440,127	756,483
Air Force Defense Research Sciences Program	FA9550-18-1-0005	12.800	_	293,154
Pass-through Georgia State University Pass-through University of Illinois	FA95501510373 FA9550-136-1-0006	12.800 12.800	=	5,549 (153)
Pass-through Yale University	FA9550-17-0198	12.800		147,289
Total CFDA No. 12.800			440,127	1,372,984
Language Grant Program	H98230-19-1-0116	12.900	_	44,866
Total CFDA No. 12.900				44,866
Mathematical Sciences Grants Program	H98230-19-1-0013	12.901		63,864
	1190230-19-1-0013	12.901		
Total CFDA No. 12.901				63,864
Research and Technology Development Research and Technology Development	HR0011-16-2-0011 N66001-16-2-4054	12.910 12.910	 164,253	11,522 808,946
Research and Technology Development	W31P4Q-14-1-0010	12.910	104,255	14,373
Pass-through Georgia Institute of Technology	HR001117C0124	12.910	_	3,231
Pass-through Georgia Institute of Technology	HROOII-18-2-0019	12.910	_	159,180
Pass-through University of Pennsylvania Pass-through University of Western Ontario	N66001-14-2-4-31 D18AC0035	12.910 12.910	_	15,004 123,532
Total CFDA No. 12.910			164,253	1,135,788
	HB0044040500	42 PD	104,200	197,409
Contract Contract	HR0011940590 W911NF-16-C-0008	12.RD 12.RD	194,675	875,267
Contract	W81XWH-16-0108	12.RD	15,079	34,840
Contract	W81XWH-16-1-0644	12.RD	_	1,435
Contract Contract	W81XWH-16-1-0721 W81XWH1810505	12.RD 12.RD	_	130,452 346,115
Contract	W81XWH1910353	12.RD	_	8,297
Pass-through Geneva Foundation	W81XWH-17-C-0029	12.RD	_	418,057
Pass-through Georgia Institute of Technology Pass-through Mclean Hospital	W81XWH-16-1-0518 W81XWH18P0128	12.RD 12.RD	_	9,149 149,442
Pass-through North Carolina State University	W911NF	12.RD	_	209,663
Pass-through University of Maryland Baltimore	W81XWH-17-1-0702	12.RD	_	3,276
Pass-through University of Michigan Pass-through University of Michigan	N00024-13-D-6400 SUBK00009161/3005438	12.RD 12.RD	=	47,668 130,732
Total CFDA No. 12.RD	GOBINO0003101/30003430	12.10	209,754	
				2,561,802
U.S. Department of Defense Total			3,042,820	16,812,783
U.S. Department of Justice:				
Rural Domestic Violence, Dating Violence, Sexual Assault, and Stalking Assistance Program Pass-through Childrens Healthcare of Atlanta	2017-WRAX0005/650188	16.589		40,302
Total CFDA No. 16.589				40,302
U.S. Department of Justice Total				40,302
U.S. Department of State:			<u> </u>	
Academic Exchange Programs – Humphrey Fellowship Program				
Pass-through Institute of International Education	3223-Emory_7.1.1.16	19.010	_	5,060
Pass-through Institute of International Education	CAGD-18-CA-1027	19.010	_	48,109
Pass-through Institute of International Education	S-ECAGD-17-CA-1020	19.010		2,297
Total CFDA No. 19.010				55,466
U.S. Department of State Total				55,466
U.S. Department of Transportation:				
National Highway Traffic Safety Administration (NHTSA) Discretionary Safety Grants	DTNH2217D00068	20.614	_	74,094
National Highway Traffic Safety Administration (NHTSA) Discretionary Safety Grants Pass-through University of Michigan	DTNH2217F00160 SUBK00009875	20.614 20.614	23,596	590,923 12,899
Total CFDA No. 20.614			23,596	677,916
U.S. Department of Transportation Total			23,596	677,916
National Aeronautics and Space Administration:				
Science	80NSSC18M0053	43.001	_	81,307
Science	80NSSC19K0191	43.001	_	69,414
Science	NNX16AQ28G 000004	43.001	87,260	280,632
Science Pass-through California Institute of Technology	NNX17AE72G 1588347	43.001 43.001	_	227,255 87,875
Pass-through California Institute of Technology Pass-through Center for the Advancement of Science In Space	1588347 NNH11CD70A	43.001	=	87,875 136,705
Pass-through Massachusetts Institute of Technology	NNX16AN15G	43.001	_	40,912
Pass-through University of Georgia	NNXAF09G	43.001	_	70,547
Pass-through University of Iowa Total CFDA No. 43.001	NNX17AC94A	43.001		4,704
			87,260	999,351

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Aeronautics	400000	40.000		40.404
Pass-through California Institute of Technology Total CFDA No. 43.002	1363692	43.002	\$	10,461 10,461
Exploration	80NSSC188K1116	43.003		731,692
Exploration	NNX15AD63G S008	43.003	_	(1,243)
Pass-through Georgia Institute of Technology	NNX16AT06G	43.003		26,132
Total CFDA No. 43.003				756,581
National Aeronautics and Space Administration Total			87,260	1,766,393
National Endowment for the Humanities: Promotion of the Humanities – Division of Preservation and Access	PW-264219-19	45.149		24,113
Total CFDA No. 45.149				24,113
Promotion of the Humanities Research Promotion of the Humanities Research	RQ-260871-18 RZ – 230579-15	45.161 45.161		64,880 75,476
Total CFDA No. 45.161				140,356
Promotion of the Humanities Professional Research	FV-256791-17	45.163		1,163
Total CFDA No. 45.163				1,163
Promotion of the Humanities-Office of Digital Humanities Pass-through Georgia Institute of Technology	HAA-261266-18	45.169		8,386
Total CFDA No. 45.169				8,386
National Leadership Grants	LG-94-17-0269-17	45.312		53,271
Total CFDA No. 45.312				53,271
National Endowment for the Humanities Total				227,289
National Science Foundation:				
Engineering Grants	1512826	47.041	_	130,126
Engineering Grants Engineering Grants	1609831 1706891	47.041 47.041	_	27,633 155,946
Engineering Grants	1741691	47.041	48,757	436,517
Engineering Grants	1762211 1804198	47.041 47.041	_	120,207
Engineering Grants Engineering Grants	1807568	47.041	_	48,316 102,743
Engineering Grants	1818476	47.041	_	202,466
Engineering Grants Engineering Grants	1822606 184186	47.041 47.041	_	55,206 54,661
Engineering Grants	CBET 1150235	47.041	_	25,467
Pass-through Georgia Institute of Technology	1749677 EEC-1648035	47.041 47.041	_	3,777
Pass-through Georgia Institute of Technology	EEC-1648035	47.041	48,757	35,587
Total CFDA No. 47.041	4200500	47.040	40,737	1,398,652
Mathematical and Physical Sciences Mathematical and Physical Sciences	1362502 1455086	47.049 47.049	_	50 112,242
Mathematical and Physical Sciences	1463552	47.049	_	60,336
Mathematical and Physical Sciences Mathematical and Physical Sciences	1463882 1465189	47.049 47.049	_	23,866 26,657
Mathematical and Physical Sciences	1504449	47.049	_	145,989
Mathematical and Physical Sciences	1506405	47.049	_	7,771
Mathematical and Physical Sciences Mathematical and Physical Sciences	1506446 1507932	47.049 47.049	_	15 4,457
Mathematical and Physical Sciences	1522599	47.049	_	40,705
Mathematical and Physical Sciences Mathematical and Physical Sciences	1555048 1557960	47.049 47.049	_	72,589 41,934
Mathematical and Physical Sciences	1565912	47.049	_	595
Mathematical and Physical Sciences	1601306	47.049	_	141,551
Mathematical and Physical Sciences Mathematical and Physical Sciences	1609763 1611102	47.049 47.049	_	132,963 9,857
Mathematical and Physical Sciences	1620406	47.049	_	49,617
Mathematical and Physical Sciences Mathematical and Physical Sciences	1626172 1654485	47.049 47.049	43,591	309 122,838
Mathematical and Physical Sciences	1700982	47.049	2,876,446	3,788,202
Mathematical and Physical Sciences	1709132	47.049	_	135,351
Mathematical and Physical Sciences Mathematical and Physical Sciences	1709182 1719578	47.049 47.049	_	122,876 48,412
Mathematical and Physical Sciences	1751636	47.049	_	75,753
Mathematical and Physical Sciences Mathematical and Physical Sciences	1755698 1764385	47.049 47.049	_	174,446 75,282
Mathematical and Physical Sciences	1801951	47.049	=	93,178
Mathematical and Physical Sciences	1807865	47.049	_	215,759
Mathematical and Physical Sciences Mathematical and Physical Sciences	1808288 1808509	47.049 47.049		162,790 390,582
Mathematical and Physical Sciences	1808771	47.049	_	152,626
Mathematical and Physical Sciences Mathematical and Physical Sciences	1809566 1818781	47.049 47.049	_	28,025 58,011
Mathematical and Physical Sciences	1819042	47.049	_	48,482
	1822262	47.049	_	73,215
Mathematical and Physical Sciences		47.049	_	68,161
Mathematical and Physical Sciences Mathematical and Physical Sciences Mathematical and Physical Sciences	1849959 1900532			
Mathematical and Physical Sciences Mathematical and Physical Sciences Mathematical and Physical Sciences	1900532 1904885	47.049 47.049	_ _	19,797 13,799
Mathematical and Physical Sciences Mathematical and Physical Sciences	1900532	47.049	_	19,797

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Mathematical and Physical Sciences	DMS 1208874	47.049	\$	694
Mathematical and Physical Sciences	DMS 1250467	47.049	_	(10,537)
Pass-through Georgia Institute of Technology	1806833	47.049		100,000
Total CFDA No. 47.049			2,920,037	6,896,694
Geosciences	AGS 1350021	47.050		69
Pass-through University of California Berkeley	1646708	47.050		144,367
Total CFDA No. 47.050				144,436
	4550570	47.070		
Computer and Information Science and Engineering Computer and Information Science and Engineering	1553579 1618932	47.070 47.070	_	172,781 183,451
Computer and Information Science and Engineering	1636933	47.070	90,026	320,951
Computer and Information Science and Engineering	1722906	47.070		31,741
Computer and Information Science and Engineering	1755958	47.070	_	47,500
Computer and Information Science and Engineering	1822378	47.070	_	71,282
Computer and Information Science and Engineering Computer and Information Science and Engineering	1835364 1838200	47.070 47.070	_	297,866 113,400
Computer and Information Science and Engineering Computer and Information Science and Engineering	1907711	47.070	_	32,366
Pass-through University of Arizona	IIS-1838745	47.070	_	11,155
Pass-through Virginia Tech	1547580	47.070		6,722
Total CFDA No. 47.070			90,026	1,289,215
Biological Sciences	1457291	47.074	14,935	89,704
Biological Sciences	1557724	47.074	58,515	219,802
Biological Sciences	1624104	47.074	_	37,398
Biological Sciences	1655163	47.074		20,003
Biological Sciences Biological Sciences	1656247	47.074 47.074	26,603	160,240
Biological Sciences Biological Sciences	1726544 1750553	47.074	_	139,027 164,087
Biological Sciences	1754431	47.074	_	89,306
Biological Sciences	1754595	47.074	_	244,874
Biological Sciences	1755002	47.074	_	19,037
Biological Sciences	1755418	47.074	_	65,033
Biological Sciences Biological Sciences	1827160 1834487	47.074 47.074	_	13,892 100,899
Biological Sciences	1844803	47.074	_	71,241
Biological Sciences	DBI 1346549	47.074	_	110,261
Biological Sciences	IOS 1354998	47.074	7,160	99,845
Biological Sciences	MCB 1350829	47.074	_	156,210
Biological Sciences	MCB 1359575	47.074	_	52,759
Biological Sciences Pass-through University Of California Riverside	TOS 1354829 1238243	47.074 47.074	_	20 (7,618
Pass-through University of Pennsylvania	1121019	47.074	_	(7,010
Pass-through University of Washington Seattle	1748843	47.074	_	96,091
Total CFDA No. 47.074			107,213	1,942,053
Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	1430403 1528091	47.075 47.075	30,069	36,569 (45
Social, Behavioral, and Economic Sciences	1533260	47.075	90,891	135,976
Social, Behavioral, and Economic Sciences	1560458	47.075	_	19,795
Social, Behavioral, and Economic Sciences	1560674	47.075	_	20
Social, Behavioral, and Economic Sciences	1632477	47.075	_	147,523
Social, Behavioral, and Economic Sciences	1748128	47.075	_	55,803
Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	1748293 1756853	47.075 47.075	_	146,209 122,167
Social, Behavioral, and Economic Sciences	1822677	47.075	=	245,824
Social, Behavioral, and Economic Sciences	1824062	47.075	_	7,128
Social, Behavioral, and Economic Sciences	1825469	47.075	_	30,658
Social, Behavioral, and Economic Sciences	1830816	47.075	_	7,409
Social, Behavioral, and Economic Sciences	1853185	47.075	_	37,252
Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	1904396 SMA 1634001	47.075 47.075	_	3,65° 393
Pass-through Auburn University	1628014	47.075	_	16,428
Pass-through Rutgers University	1252125	47.075	_	(19
Pass-through University of Michigan	1528445	47.075	_	74,963
Pass-through University of Michigan	1756746	47.075		153,87
Total CFDA No. 47.075			120,960	1,241,575
Education and Human Resources	1444932	47.076	_	1,536,27
Education and Human Resources	1821533	47.076	_	89,358
Pass-through Georgia Institute of Technology	1545287	47.076	_	19,604
Pass-through Georgia State University	1631563	47.076		108,809
Total CFDA No. 47.076				1,754,049
International Science and Engineering (OISE)	1827201	47.079	=	156,92
Pass-through CRDF Global	OISE17630631	47.079		55,427
Total CFDA No. 47.079				212,348
Contract Pass-through Council of Graduate Schools	CC-92480	47.RD		4E 740
-	CC-92480	47.KD		45,740
Total CFDA No. 47.RD				45,740
National Science Foundation Total			3,286,993	14,924,762
S. Department of Veterans Affairs:				
Veterans State Hospital Care	508-17-3-7103-0234	64.016		5,640
Total CFDA No. 64.016				5,64
Contract	VA268-16-C-0032	64.RD		550
		64.RD	_	4,180
Pass-through Fdtn For Atlanta Veterans Educ and Res	4U5UU-U3D-1713U8h7			
•	40500-036-17130867	04.10		
Pass-through Fdtn For Atlanta Veterans Educ and Res Total CFDA No. 64.RD U.S. Department of Veterans Affairs Total	40500-036-17130867	04.112		4,730

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
U.S. Environmental Protection Agency: Science to Achieve Results (STAR) Research Program Science to Achieve Results (STAR) Research Program Pass-through Carleton University Pass-through Dartmouth College	83586901 83615301 Mod. 2 4962-RF417-2/18-4 83544201	66.509 66.509 66.509 66.509	\$ 163,866 — — —	248,618 662,082 11,346 37,830
Total CFDA No. 66.509			163,866	959,876
U.S. Environmental Protection Agency Total			163,866	959,876
U.S. Department of Energy: Office of Science Financial Assistance Program	DE-FG02-01ER15153-0016 DE-FG02-07ER15906/9 DE-SC0008798 DE-SC0008798-0007 DE-SC0016904 MOD 0002 DE-SC0019362 DE-SC0019374 DE-SC2218976	81.049 81.049 81.049 81.049 81.049 81.049 81.049	182,389	98,956 269,458 122,774 48,326 107,745 4,779 410,110 49,564
Total CFDA No. 81.049			182,389	1,111,712
U.S. Department of Energy Total			182,389	1,111,712
U.S. Department of Education:				
Overseas Programs – Doctoral Dissertation Research Abroad	PO22A180025	84.022		22,861
Total CFDA No. 84.022				22,861
Education Research, Development, and Dissemination	R305A160240-18	84.305	59,160	358,934
Total CFDA No. 84.305			59,160	358,934
Research in Special Education				
Pass-through Florida State University	R324A180193	84.324		36,726
Total CFDA No. 84.324				36,726
U.S. Department of Education Total			59,160	418,521
U.S. Department of Health and Human Services:				
Global AIDS	NU14GH001237	93.067	2,420,597	3,475,043
Global AIDS	NU2GGH001815	93.067		181,179
Total CFDA No. 93.067			2,420,597	3,656,222
Chronic Diseases: Research, Control, and Prevention: Pass-through American College of Rheumatology	6 NU58DP006138-02-02	93.068		53,074
Total CFDA No. 93.068				53,074
Birth Defects and Developmental Disabilities – Prevention and Surveillance Pass-through University of Iowa	U01DD001223	93.073		8,676
Total CFDA No. 93.073				8,676
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01CA179422-05 REVISED	93.077		131,519
Total CFDA No. 93.077				131,519
Prevention of Disease, Disability, and Death by Infectious Diseases Pass-through Johns Hopkins University Pass-through University of Illinois At Chicago	U01CK000554 U01CK000557	93.084 93.084		1,997 15,682
Total CFDA No. 93.084			_	17,679
Food and Drug Administration Research Pass-through Duke University	R01FD005746 R01FD003539	93.103 93.103	95,759	189,768 107,897
Total CFDA No. 93.103			95,759	297,665
Maternal and Child Health Federal Consolidated Programs Maternal and Child Health Federal Consolidated Programs	5 T76MC28446-04 6 T03MC076511203	93.110 93.110	37,800	320,624 24,499
Total CFDA No. 93.110			37,800	345,123
Environmental Health Environmental Health	1F31ES030980-01 3R01ES023839-04S1	93.113 93.113		2,068 8,160
Environmental Health Environmental Health	3R21ES025632-02S1 4P30RD019776-04	93.113 93.113	<u> </u>	46,672 (312)
Environmental Health	5K99ES027869-02	93.113	_	84,379
Environmental Health Environmental Health	5P30ES019776-03REVIS 5R01ES024790-04	93.113 93.113	_	66 307,534
Environmental Health	5R01ES025145-05	93.113	221,230	548,422
Environmental Health	5R01ES025775-03 REVISED	93.113	39,106	711,721 386,984
Environmental Health Environmental Health	5R01ES027892-03 5R21ES028226-02	93.113 93.113	77,871	266,087
Environmental Health	F30ES029018	93.113	_	42,212
Environmental Health Environmental Health	K01ES025445 P30ES019776	93.113 93.113	201,944	128,759 1,565,236
Environmental Health	P50ES026071	93.113		546,624
Environmental Health Environmental Health	R00ES026648 R01ES022223	93.113 93.113	233,311	112,813 396,032
Environmental Health	R01ES023485	93.113	_	125,700
Environmental Health Environmental Health	R01ES026082 R01ES027859	93.113 93.113	405,115	773,312 345,000
Environmental Health Environmental Health	R01ES027859 R01ES028346	93.113	61,254	192,144
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Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Environmental Health	R01ES029212	93.113	\$ —	148,832
Environmental Health	R21ES028903	93.113	25,019	187,727
Environmental Health	R24ES028507	93.113	148,003	273,234
Environmental Health	R24ES028528	93.113	1,272	162,195
nvironmental Health	R24ES029490	93.113	_	220,637
nvironmental Health	T32ES012870	93.113	_	433,312
Pass-through Duke University	R21ES027990	93.113	_	25,705
Pass-through Georgia State University	R21ES029252	93.113	_	10,706
Pass-through Oregon State University	R01ES023441	93.113	_	39,262
Pass-through University of California Davis Pass-through University of Southern California	R01ES028089 R21ES029681	93.113 93.113	_	28,040 4,382
Pass-through Wake Forest University	R01ES025066	93.113	_	2,336
Total CFDA No. 93.113	11012002000	00.110	1,414,125	8,125,981
Preventive Medicine and Public Health Residency Training Program, Integrative				
Medicine Program, and National Center for Integrative Primary Healthcare	5 D33HP316630200	93.117		326,687
Total CFDA No. 93.117				326,687
Oral Diseases and Disorders Research	5R00DE025060-06	93.121	17,111	232,583
Oral Diseases and Disorders Research	R01DE025837	93.121	84,858	301,530
ral Diseases and Disorders Research	R01DE026333	93.121	78,048	950,039
ral Diseases and Disorders Research	R01DE026941	93.121	_	345,934
ral Diseases and Disorders Research	R01DE028342	93.121	_	1,217
Oral Diseases and Disorders Research	R03DE027103	93.121	_	123,859
Iral Diseases and Disorders Research	R56DE026762	93.121	_	359,361
Pass-through Massachusetts General Hospital	R01DE027983	93.121	_	38,561
Pass-through University of Iowa	1 R01 DE027362-01A1	93.121	_	30,554
Pass-through University of North Carolina Chapel Hill	R01DE028146	93.121	_	39,159
Pass-through University of Pittsburgh Pass-through University of Pittsburgh	5U01DE024425-05 R01DE016148	93.121 93.121	_	3,823
Total CFDA No. 93.121	K01DE016146	93.121	180,017	29,862 2,456,482
Nurse Anesthetist Traineeships	1 A22HP31815-01-00	93.124	100,017	11,487
Total CFDA No. 93.124				11,487
enters for Research and Demonstration for Health Promotion and Disease Prevention				
Pass-through Morehouse School of Medicine	U48DP005042	93.135	_	132,094
Pass-through New York University	U48DP005008	93.135	_	14,458
Pass-through University of Washington	48DP001911	93.135		25
Total CFDA No. 93.135				146,577
njury Prevention and Control Research and State and Community Based Programs njury Prevention and Control Research and State and Community Based Programs	R49CE003072 U01CE002939	93.136 93.136	_	18,279
Total CFDA No. 93.136	001CE002939	93.136		296,261 314,540
IIEHS Hazardous Waste Worker Health and Safety Training	5UH4ES027093-03	93.142	104,784	422,670
Total CFDA No. 93.142	30114E3027093-03	93.142	104,784	422,670
			104,704	422,010
IIEHS Superfund Hazardous Substances_Basic Research and Education Pass-through Michigan State University	P42ES004911	93.143		135,029
Total CFDA No. 93.143				135,029
Human Genome Research				
Pass-through University of Chicago	RM1HG008935	93.172	_	119,161
Pass-through University of Iowa	R01HG008348	93.172	_	86,255
Pass-through University of Maryland, Baltimore	R21HG010412	93.172		9,614
Total CFDA No. 93.172				215,030
Research Related to Deafness and Communication Disorders	5F31DC015395-03	93.173		13,604
Research Related to Deafness and Communication Disorders	5R01DC014496-04	93.173	_	476,634
Research Related to Deafness and Communication Disorders	7R03DC015305-04	93.173	36,579	50,744
Research Related to Deafness and Communication Disorders	R01DC008343	93.173	29,788	439,023
Research Related to Dearness and Communication Disorders	R21DC017272	93.173	20,100	6,291
Pass-through University of Memphis	R01DC015108	93.173	12,561	123,583
Total CFDA No. 93.173			78,928	1,109,879
Jursing Workforce Diversity	5D19HP269730303	93.178		11,069
Total CFDA No. 93.178	22 2007 00000	23.110		11,069
mmunization Research, Demonstration, Public Information and Education Training and Clinical				,
Skills Improvement Projects	U01IP001117	93.185		765
Total CFDA No. 93.185				765
Telehealth Programs: Pass-through University of Arizona	G22RH30360	93.211		53,633
Total CFDA No. 93.211				53,633
Research and Training in Complementary and Alternative Medicine	5UG3AT008857-02 REVISED	93.213	73,629	115,198
Research and Training in Complementary and Alternative Medicine	K23AT009713	93.213	13,029	132,366
	K23A1009713 K24AT009893	93.213	_	164,603
			_	104,003
Research and Training in Complementary and Alternative Medicine			_	115
Research and Training in Complementary and Alternative Medicine Pass-through Georgia State University	R34AT009538	93.213	_	115
Research and Training in Complementary and Alternative Medicine				115 29,636

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Research on Healthcare Costs, Quality and Outcomes	1K08HS025240-01A1	93.226	s —	152,045
Research on Healthcare Costs, Quality and Outcomes	1R01HS026081	93.226	47,913	294,672
Research on Healthcare Costs, Quality and Outcomes	1R03HS026578-01	93.226	_	96,108
Research on Healthcare Costs, Quality and Outcomes	5R01HS024530-03	93.226	_	126,788
Research on Healthcare Costs, Quality and Outcomes	5R01HS024712-02 REVISED	93.226	_	(8,702)
Research on Healthcare Costs, Quality and Outcomes	5R18HS024499-03	93.226	332,687	488,069
Research on Healthcare Costs, Quality and Outcomes	R01HS026232	93.226	_	25,631
Research on Healthcare Costs, Quality and Outcomes	R13HS026453	93.226	4,843	18,107
Research on Healthcare Costs, Quality and Outcomes	R18HS026877	93.226		3,750
Pass-through Cincinnati Childrens Hospital	R01HS024390	93.226	61,482	91,489
Pass-through Clemson University	R01HS025981	93.226	_	52,679
Pass-through Northwestern University	R01HS024712	93.226	_	41,736
Pass-through Society of Thoracic Surgeons	R01HS022279	93.226	_	(5,076)
Pass-through University of Kentucky	RO1HS025148	93.226		25,584
Pass-through Vanderbilt University Medical Center	R01HS022640	93.226		14,151
Total CFDA No. 93.226			446,925	1,417,031
National Center on Sleep Disorders Research	K01HL138211	93.233		156,729
Total CFDA No. 93.233				156,729
Mental Health Research Grants	F30MH117878	93.242	_	17,340
Mental Health Research Grants	1F31MH114509-01A1	93.242	_	43,007
Mental Health Research Grants	1K23MH114037-01A1 REVISED	93.242	_	198,358
Mental Health Research Grants	1R01MH117103-01	93.242	_	421,546
Mental Health Research Grants	1R01MH118534-01 REVISED	93.242	_	107,548
Mental Health Research Grants	1R21MH118092-01REVISED	93.242	23,536	170,553
Mental Health Research Grants	1R56MH116994-01	93.242	_	476,355
Mental Health Research Grants	2 R01 MH082833 -05	93.242	155,264	375,290
Mental Health Research Grants	3R01MH111682-03S1	93.242	145,577	254,511
Mental Health Research Grants	4R01MH101477-05	93.242	_	92,808
Mental Health Research Grants	4U01MH101720-04REVISED	93.242	_	(114)
Mental Health Research Grants	5F30MH108276-03	93.242	_	46,786
Mental Health Research Grants	5F31MH111224-03	93.242	_	44,822
Mental Health Research Grants	5K01MH107320-04	93.242	_	142,504
Mental Health Research Grants	5K01MH108741-03	93.242	22,539	199,091
Mental Health Research Grants	5K23MH101380-04	93.242	_	52,013
Mental Health Research Grants	5P50MH100023-05	93.242	_	(78)
Mental Health Research Grants	5P50MH100023-07	93.242	252,797	2,259,713
Mental Health Research Grants	5R00MH102355-05 REVISED	93.242		2,227
Mental Health Research Grants	5R01MH069852-14	93.242	_	281,139
Mental Health Research Grants	5R01MH072908-14	93.242	2,309	186,076
Mental Health Research Grants	5R01MH073719-09 REVISED	93.242	143,958	726,294
Mental Health Research Grants	5R01MH099211-05 REVISED	93.242	6,060	15,626
Mental Health Research Grants	5R01MH100122-05 REVISED	93.242	-	26,796
Mental Health Research Grants	5R01MH100318-05	93.242	_	513,803
Mental Health Research Grants	5R01MH100390-05	93.242	116,438	149,927
Mental Health Research Grants	5R01MH100467-05 REVISED	93.242	37,527	325,818
Mental Health Research Grants	5R01MH104534-05	93.242	28,936	252,644
Mental Health Research Grants	5R01MH104632-05	93.242	20,550	309,673
Mental Health Research Grants	5R01MH105561-04	93.242	_	228,525
Mental Health Research Grants	5R01MH107033-04	93.242	_	463,236
Mental Health Research Grants	5R01MH107305-05	93.242		489,565
Mental Health Research Grants	5R01MH110364-03 REVISED	93.242	133,762	198,344
Mental Health Research Grants	5R01MH110701-03	93.242	21,007	895,728
Mental Health Research Grants	5R01MH111416-03	93.242	88,234	453,397
Mental Health Research Grants			00,234	
	5R01MH112788-02	93.242	_	453,262
Mental Health Research Grants Mental Health Research Grants	5R01MH115831-02	93.242 93.242	_	354,496
	5R21MH105811-02 REVISED		_	16,915
Mental Health Research Grants	5R21MH108025-02	93.242	04.470	33,634
Mental Health Research Grants	5R21MH108873-02 REVISED	93.242	34,178	57,394
Mental Health Research Grants	5R21MH108928-03 REVISED	93.242	45.004	148,808
Mental Health Research Grants	5R21MH112449-02 REVISED	93.242	15,991	147,889
Mental Health Research Grants	5R25MH101079-05	93.242	04 470	105,850
Mental Health Research Grants	5R34MH106368-03 REVISED	93.242	21,472	118,144
Mental Health Research Grants	5R56MH111459-02	93.242	14,749	356,669
Mental Health Research Grants	5U01MH081988-10 REVISED	93.242	_	394,406
Mental Health Research Grants	F30MH117873	93.242	_	49,605
Mental Health Research Grants	F31MH114624	93.242	_	43,144
		93.242	_	40,121
Mental Health Research Grants	F31MH116622		_	4,136
Mental Health Research Grants	F31MH119745	93.242		
		93.242 93.242	_	55,659
Mental Health Research Grants	F31MH119745		 572,691	55,659 2,233,533
Mental Health Research Grants Mental Health Research Grants	F31MH119745 F32 MH115692	93.242	572,691 —	
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108605 R01MH108826	93.242 93.242 93.242 93.242	572,691 — 192,292	2,233,533 741,174 484,690
Mental Health Research Grants Mental Health Research Grants Mental Health Research Grants Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108605	93.242 93.242 93.242	_	2,233,533 741,174
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108605 R01MH108826	93.242 93.242 93.242 93.242	_	2,233,533 741,174 484,690
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108605 R01MH108826 R01MH109026	93.242 93.242 93.242 93.242 93.242	_	2,233,533 741,174 484,690 323,788
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108605 R01MH108826 R01MH109026 R01MH109637	93.242 93.242 93.242 93.242 93.242 93.242	_	2,233,533 741,174 484,690 323,788 735,600
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108605 R01MH108826 R01MH109026 R01MH109637 R01MH112076 R01MH114692	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 — — —	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108055 R01MH108026 R01MH109026 R01MH109037 R01MH112076 R01MH114692 R01MH1145174	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 — — —	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108005 R01MH108026 R01MH109026 R01MH109037 R01MH112076 R01MH114692 R01MH114692 R01MH116995	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 — — — 358,515 —	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715
Mental Health Research Grants	F31MH119745 F32MH115692 P50MH100029 R01MH108026 R01MH108026 R01MH109037 R01MH109637 R01MH112076 R01MH114692 R01MH115174 R01MH116955 R01MH117009	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108005 R01MH108026 R01MH109026 R01MH109037 R01MH112076 R01MH114092 R01MH114174 R01MH115174 R01MH117009 R01MH117009	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108605 R01MH108605 R01MH198026 R01MH198027 R01MH119607 R01MH112076 R01MH114692 R01MH115174 R01MH116695 R01MH117009 R01MH117122 R01MH118285	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108025 R01MH108026 R01MH109026 R01MH109037 R01MH112076 R01MH114692 R01MH11474 R01MH11675 R01MH117122 R01MH11709 R01MH117122 R01MH117122	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535 14,668
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108005 R01MH108026 R01MH109026 R01MH109027 R01MH112076 R01MH114692 R01MH115174 R01MH11695 R01MH117122 R01MH117122 R01MH117122 R01MH117122 R01MH117122 R01MH117121 R01MH118771 R01MH120133	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535 14,668 51,969
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108005 R01MH108026 R01MH109026 R01MH109037 R01MH1190637 R01MH114692 R01MH114692 R01MH115174 R01MH115174 R01MH117009 R01MH117102 R01MH117103 R01MH118285 R01MH118271 R01MH118271 R01MH118271	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535 14,668 51,969 138,082
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108005 R01MH108026 R01MH109026 R01MH109037 R01MH112076 R01MH112076 R01MH115174 R01MH11695 R01MH117009 R01MH117122 R01MH117122 R01MH117122 R01MH117122 R01MH117125 R01MH118771 R01MH118771 R01MH118771	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535 14,668 51,969 138,082 113,826
Mental Health Research Grants	F31MH119745 F32MH115692 P50MH100029 R01MH108026 R01MH108026 R01MH109026 R01MH109037 R01MH114692 R01MH114692 R01MH114695 R01MH115174 R01MH116995 R01MH117009 R01MH117109 R01MH117103 R01MH118295 R01MH118271 R01MH18271 R01MH18271 R01MH18271 R01MH18271 R01MH1323 R21MH114151 R21MH117338 R21MH117512	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535 14,668 51,969 138,082 113,826 101,628
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108026 R01MH108026 R01MH109037 R01MH112076 R01MH112076 R01MH115174 R01MH115174 R01MH117009 R01MH117009 R01MH117122 R01MH117013 R01MH118285 R01MH118285 R01MH118711 R01MH120133 R21MH114151 R21MH117388 R21MH117512 U01MH116441	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535 14,668 51,969 138,082 113,826 101,628 1,214,148
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108005 R01MH108026 R01MH109026 R01MH109026 R01MH112076 R01MH114692 R01MH115174 R01MH11695 R01MH115172 R01MH117122 R01MH17009 R01MH1717122 R01MH170133 R21MH114151 R21MH117512 U01MH11638 R21MH17512 U01MH17512	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,553 14,668 51,969 138,082 113,826 101,628 1,214,148 61,920
Mental Health Research Grants	F31MH119745 F32 MH115692 P50MH100029 R01MH108026 R01MH108026 R01MH109037 R01MH112076 R01MH112076 R01MH115174 R01MH115174 R01MH117009 R01MH117009 R01MH117122 R01MH117013 R01MH118285 R01MH118285 R01MH118711 R01MH120133 R21MH114151 R21MH117388 R21MH117512 U01MH116441	93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242 93.242	192,292 —————————————————————————————————	2,233,533 741,174 484,690 323,788 735,600 600,907 892,800 630,557 884,715 70,553 136,148 70,535 14,668 51,969 138,082 113,826 101,628 1,214,148

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Pass-through Child Mind Institute	R24MH114806	93.242	s –	61,789
Pass-through Columbia University	R01MH101307	93.242	_	37,367
Pass-through Columbia University	R01MH104606	93.242	_	56,170
Pass-through Creighton University Pass-through Duke University	1R01MH116003-+01A1 R01MH108348	93.242 93.242	<u> </u>	84,512 93,514
Pass-through Duke University	R01MH111671	93.242	_	66,830
Pass-through Florida State University	R02062	93.242	_	111,298
Pass-through Georgia Institute of Technology	R01MH103517	93.242	_	173,234
Pass-through Georgia State University	R01MH110212	93.242	_ _ _ _ _	281,601
Pass-through Georgia State University	R25MH095735	93.242	_	(414)
Pass-through Georgia State University Pass-through Johns Hopkins University	SP000112851-01 R01MH110358	93.242 93.242	_	(1,004) 254.468
Pass-through Mclean Hospital	R01MH117292	93.242	_	210,993
Pass-through Public Health Foundation Enterprises	R01MH109320	93.242	_	134,851
Pass-through Regents of The University of California	R25MH067127	93.242	_	14,331
Pass-through Rhode Island Hospital	R01MH108641	93.242	_	11,592
Pass-through State University of New York	R01MH104964	93.242	_	195,490
Pass-through University of Alabama Birmingham	R01MH104114	93.242	_	155,883
Pass-through University of California Irvine Pass-through University of California Los Angeles	R01MH105427 R01MH100027	93.242 93.242	_ _ _ _	10,396 175,495
Pass-through University of California Los Angeles Pass-through University of California Los Angeles	R01MH100027 R01MH118514	93.242	_	1,535
Pass-through University of Cape Town	U01MH115484	93.242	_	85,289
Pass-through University of Illinois At Chicago	R01MH116721	93.242	_	60,621
Pass-through University of Illinois At Chicago	RO1MH114847	93.242	_	25,973
Pass-through University of Iowa	R01MH104363	93.242	_	72,714
Pass-through University of North Carolina	U01MH110925	93.242	_	88,246
Pass-through University of North Carolina Chapel Hill	U01MH110925	93.242	_	159,317
Pass-through University of Pittsburgh	U01MH111658 R01MH103848	93.242 93.242	_	97,973
Pass-through University of South Florida	KU1MH103646	95.242		51,044
Total CFDA No. 93.242			3,066,458	25,136,501
Substance Abuse and Mental Health Services Projects of Regional and National Significance	H79SM081774	93.243	57,150	546,915
Pass-through American Psychiatric Association	H79SM080818	93.243	-	67,084
Total CFDA No. 93.243			57,150	613,999
Advanced Nursing Education Grant Program	T14HP33112	93.247		118
Total CFDA No. 93.247			_	118
Public Health Training Centers Grant Program	1UB6HP31680-01-01	93.249	241,605	749,462
Public Health Training Centers Grant Program	UB6HP27875	93.249	120,533	400,198
	050111 27 07 0	00.210		
Total CFDA No. 93.249			362,138	1,149,660
Occupational Safety and Health Program	5R01OH010657-04	93.262	103,052	121,915
Occupational Safety and Health Program	5R01OH010745-03	93.262	128,398	307,115
Pass-through University of Florida	U54OH011230	93.262	_	180,634
Pass-through University of Florida	UFDSP00012028	93.262	28,387	70,003
Pass-through University of North Carolina Chapel Hill	T42OH008673	93.262		9,978
Total CFDA No. 93.262			259,837	689,645
Complex Humanitarian Emergency and War-Related Injury Public Health Activities	5NT01GH001185-05-00	93.269	_	21,113
	311101311001103 03 00	30.203		
Total CFDA No. 93.269				21,113
Alcohol Research Programs	7K01AA021113-06	93.273	_	586
Alcohol Research Programs	1R21AA027345-01	93.273	_	175,292
Alcohol Research Programs	4K05AA021143-05	93.273	_	3,647
Alcohol Research Programs	5F31AA024960-03 REVISED	93.273	=	35,240
Alcohol Research Programs Alcohol Research Programs	5R00AA021803-05 REVISED 5R01AA022601-07	93.273 93.273	_	78,095 331,410
Alcohol Research Programs	5R01AA023826-03 REVISED	93.273	_	298,640
Alcohol Research Programs	5R01AA025882-02 REVISED	93.273	3,213	7,351
Alcohol Research Programs	5U01AA026108-02 REVISED	93.273	159,494	311,118
Alcohol Research Programs	7R01AA021390-05 REVISED	93.273	_	370,527
Alcohol Research Programs	9R01AA027396-05A1	93.273	_	267,480
Alcohol Research Programs	K08AA024512	93.273	=	176,780
Alcohol Research Programs Alcohol Research Programs	R01AA025854 R01AA025857	93.273 93.273	_	300,043 400,685
Alcohol Research Programs	R01AA025637 R01AA026086	93.273	_	233,447
Alcohol Research Programs	R03AA027335	93.273	_	13,220
Alcohol Research Programs	R21AA025723	93.273	_	199,124
		93.273	_	32,525
	F1136-01			40,999
Pass-through New York University Pass-through University of California San Diego	F1136-01 R01AA026579	93.273	_	
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego	R01AA026579 U01AA014835	93.273 93.273	_	28,972
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado	R01AA026579 U01AA014835 R24AA019661	93.273 93.273 93.273	_	28,972 5,421
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver	R01AA026579 U01AA014835 R24AA019661 R21AA026928	93.273 93.273 93.273 93.273	_ _ _	28,972 5,421 10,185
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia	R01AA026579 U01AA014835 R24AA019661 R21AA026628 R01AA026623	93.273 93.273 93.273 93.273 93.273	_ _ _ _	28,972 5,421 10,185 25,617
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver Pass-through University of Georgia Pass-through Wayne State University	R01AA026579 U01AA014835 R24AA019661 R21AA026928 R01AA026623 R01AA022891	93.273 93.273 93.273 93.273 93.273 93.273	_ _ _ _	28,972 5,421 10,185 25,617 (1,012)
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver Pass-through University of Georgia Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University	R01AA026579 U01AA014835 R24AA019661 R21AA026628 R01AA026623	93.273 93.273 93.273 93.273 93.273		28,972 5,421 10,185 25,617 (1,012) 41,573
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver Pass-through University of Georgia Pass-through Wayne State University	R01AA026579 U01AA014835 R24AA019661 R21AA026928 R01AA026623 R01AA022891	93.273 93.273 93.273 93.273 93.273 93.273	_ _ _ _	28,972 5,421 10,185 25,617 (1,012)
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver Pass-through University of Georgia Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273	R01AA026579 U01AA014835 R24AA019661 R21AA026928 R01AA026623 R01AA022891	93.273 93.273 93.273 93.273 93.273 93.273		28,972 5,421 10,185 25,617 (1,012) 41,573
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Goorgia Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026928 R01AA026623 R01AA022891 R01AA025905 5K24Al114444-05 1DP1DA042103 – 01	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279	162,707 92,310	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026623 R01AA026623 R01AA022891 R01AA022895 5K24Al114444-05 10P1DA042103 - 01 1R21DA046738-01 REVISED	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279	162,707 92,310 37,960	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Golorado Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026928 R01AA026623 R01AA026623 R01AA026905 5K24AI114444-05 10P1DA042103 - 01 1R21DA046738-01 REVISED 5R01DA035101-05 REVISED	93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279	162,707 	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026928 R01AA026623 R01AA022891 R01AA025905 5K24AI114444-05 1DP1DA042739-01 REVISED 5R01DA035101-05 REVISED 5R01DA035101-05 REVISED 5R01DA0357568-05 REVISED	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279	162,707 92,310 37,960 46,332 384,647	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026928 R01AA026623 R01AA026623 R01AA025905 5K24Al114444-05 10P1DA042103 – 01 1R21DA046738-01 REVISED 5R01DA037588-05 REVISED 5R01DA038196-05	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279	162,707 ———————————————————————————————————	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026623 R01AA026623 R01AA022691 R01AA025905 5K24Al114444-05 1DP1DA042733-01 REVISED 5R01DA035768-06 REVISED 5R01DA035768-06 REVISED 5R01DA035768-06 REVISED 5R01DA038196-05 5R01DA038453-05	93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279	162,707 92,310 37,960 46,332 384,647	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717 280,299
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA014835 R24AA014835 R21AA026623 R01AA026623 R01AA026623 R01AA025905 5K24Al114444-05 10P1DA042103 – 01 1821DA046738-01 REVISED 5R01DA035101-05 REVISED 5R01DA0351601-05 REVISED 5R01DA038453-05 5R01DA038469-05 5R01DA038469-05 5R01DA038588-04	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279	162,707 92,310 37,960 46,332 384,647 36,023 18,817	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717 280,299 471,168
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026623 R01AA026623 R01AA026623 R01AA026623 R01AA026623 R01AA022891 R01AA025905 5K24Al114444-05 10P1DA042103 - 01 1R21DA046738-01 REVISED 5R01DA037568-05 REVISED 5R01DA037568-05 REVISED 5R01DA038486-05 5R01DA038888-04 5R01DA042742-02	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279	162,707 ———————————————————————————————————	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717 280,299 471,168 228,218
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA014835 R24AA014835 R21AA026623 R01AA026623 R01AA026623 R01AA025905 5K24Al114444-05 10P1DA042103 – 01 1821DA046738-01 REVISED 5R01DA035101-05 REVISED 5R01DA035169-05 REVISED 5R01DA038453-05 5R01DA038469-05 5R01DA038588-04	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279	162,707 92,310 37,960 46,332 384,647 36,023 18,817	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717 280,299 471,168
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA019661 R21AA026623 R01AA026623 R01AA026623 R01AA025891 R01AA025905 5K24Al114444-05 1DP1DA042703 – 01 1R21DA046738-01 REVISED 5R01DA03510-05 REVISED 5R01DA037568-05 REVISED 5R01DA038453-05 5R01DA038463-05 5R01DA038463-05 5R01DA038463-05 5R01DA038463-05 5R01DA038463-05 5R01DA042742-02 5R01DA044797-02	93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279	92,310 37,960 46,332 384,647 36,023 18,817 	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717 280,299 471,168 228,218 237,404
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Colorado Pass-through University of Georgia Pass-through Wayne State University Total CFDA No. 93.273 Drug Abuse and Addiction Research Programs	R01AA026579 U01AA014835 R24AA014835 R24AA014835 R24AA019661 R21AA026623 R01AA026623 R01AA026623 R01AA0262891 R01AA025905 5K24Al114444-05 10P1DA042103 - 01 1R21DA046738-01 REVISED 5R01DA035101-05 REVISED 5R01DA035101-06 REVISED 5R01DA038496-05 5R01DA038496-05 5R01DA038496-05 5R01DA038496-05 5R01DA038496-05 5R01DA04272-02 5R01DA04272-02 5R01DA0442797-02 5R01DA044727-02 F821DA0447716	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279	162,707 	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717 280,299 471,168 228,218 237,404 291,015 95,555 61,192
Pass-through New York University Pass-through University of California San Diego Pass-through University of California San Diego Pass-through University of Colorado Pass-through University of Colorado Denver Pass-through University of Georgia Pass-through University of Georgia Pass-through Wayne State University Pass-through Wayne State University	R01AA026579 U01AA014835 R24AA019661 R21AA026623 R01AA026623 R01AA026623 R01AA026623 R01AA026623 R01AA025905 5K24AH114444-05 1DP1DA042703 – 01 1R21DA046738-01 REVISED 5R01DA03510-05 REVISED 5R01DA03568-05 REVISED 5R01DA038453-05 5R01DA038453-05 5R01DA03888-04 5R01DA038296-02 5R01DA042727-02 5R01DA044297-02 5R01DA044297-02 5R01DA0442797-02 5R01DA044277-02 5R01DA044277-02	93.273 93.273 93.273 93.273 93.273 93.273 93.273 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279 93.279	162,707 92,310 37,960 46,332 384,647 36,023 18,817 — 62,808 41,531	28,972 5,421 10,185 25,617 (1,012) 41,573 3,386,965 132,638 401,144 176,763 260,760 691,020 357,717 280,299 471,168 228,218 237,404 291,015 95,555

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Pass-through Boston Medical Center	R01DA037768	93.279	s –	347,179
Pass-through Case Western Reserve University	R01DA042712	93.279	_	83,361
Pass-through Case Western Reserve University	R01DA043263	93.279	_	201,208
Pass-through Columbia University	01DA032090	93.279	_	21,940
Pass-through Magee-Womens Research Institute and Foundation Pass-through Northwestern University	R25DA043880 P30DA027828	93.279 93.279	_	32,087 3,665
Pass-through Northwestern University	R01DA027626	93.279	_	12,918
Pass-through Ohio State University	R21DA045236	93.279	_	25,388
Pass-through Pennsylvania State University	R01DA047396	93.279	_	11,328
Pass-through University of Georgia	P30DA027827	93.279	_	28,592
Pass-through University of Kentucky	UG30A044798	93.279	_	60,730
Pass-through University of Kentucky Pass-through University of Miami	UG3DA044798 UG1DA013720	93.279 93.279	_	116,936 79,477
Pass-through University of Michigan	R01-DA-041032	93.279	_	16,480
Total CFDA No. 93.279		00.270	1,044,368	5,706,986
Centers for Disease Control and Prevention_Investigations and Technical Assistance	5U01DP005119-05-00	93.283		859,331
Pass-through Fdtn For Atlanta Veterans Educ and Res	40500-036-18182551	93.283	_	451,927
Pass-through Fdtn For Atlanta Veterans Educ and Res	40500-036-19192856	93.283	_	961,510
Pass-through Georgia Dept of Public Health	40500-036-15110270	93.283	_	621,188
Pass-through Georgia State University	200-2017-93187	93.283	38,752	77,130
Total CFDA No. 93.283			38,752	2,971,086
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R01EB004987-09 REVISED	93.286	_	144,264
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R01EB020008-04	93.286	203,441	527,834
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R01EB022872-03	93.286		360,036
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R21EB016662-02	93.286	185	185
Discovery and Applied Research for Technological Innovations to Improve Human Health Discovery and Applied Research for Technological Innovations to Improve Human Health	5R21EB022828-02 7R21EB013387-03REVIS	93.286 93.286	_	366 9,675
Discovery and Applied Research for Technological Innovations to Improve Human Health	R13EB028683	93.286	_	10,000
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB025646	93.286	92,281	170,759
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB026591	93.286		119,149
Discovery and Applied Research for Technological Innovations to Improve Human Health	U01EB028145	93.286	294,491	512,721
Discovery and Applied Research for Technological Innovations to Improve Human Health	U54EB027690	93.286	76,924	346,764
Pass-through Georgia Institute of Technology	R01EB020050	93.286	_	316,608
Pass-through Georgia Institute of Technology	R01EB023808	93.286	_	45,099
Pass-through University of California San Francisco Pass-through University of South Florida	R01EB018842 R01EB020601	93.286 93.286	_	1,810 385,777
Total CFDA No. 93.286			667,322	2,951,047
Minority Health and Health Disparities Research	5R01MD009746-04 REVISED	93.307	_	680,905
Minority Health and Health Disparities Research	5R01MD010290-05	93.307	42,773	630,984
Minority Health and Health Disparities Research	5U01MD010611-04	93.307	132,828	558,497
Minority Health and Health Disparities Research	R01MD009064	93.307	_	284,728
Minority Health and Health Disparities Research	R01MD010241	93.307	19,349	383,390
Minority Health and Health Disparities Research	R01MD010455	93.307		415,361
Minority Health and Health Disparities Research	R01MD011682	93.307	189,454	462,508
Minority Health and Health Disparities Research Minority Health and Health Disparities Research	R01MD013320 R21MD011590	93.307 93.307	_	18,050 106,431
Minority Health and Health Disparities Research	5R01MD008966-05 REVISED	93.307	_	218,435
Pass-through Drexel University	R01MD013558	93.307	_	37,635
Pass-through Morehouse School of Medicine	U54MD007602	93.307	_	10,896
Pass-through Nova Southeastern University	R01MD010368	93.307	_	251,106
Pass-through Stanford University	R01MD007796	93.307	_	29,845
Pass-through University of Minnesota	R01MD013801	93.307	_	15,332
Pass-through University of Pennsylvania	U01MD011274	93.307	_	796,847
Pass-through University of Southern California	R01MD011698	93.307	_	131,629
Pass-through Wake Forest University Pass-through Yale University	R01MD009055 U54MD010711	93.307 93.307	_	10,452 2,462
Total CFDA No. 93.307			384,404	5,045,493
Trans-NIH Research Support	1U01CA235493-01	93.310	53,966	271,479
Trans-NIH Research Support	U01CA242109	93.310	_	27,169
Trans-NIH Research Support	5DP5OD019892-05	93.310	_	273,475
Trans-NIH Research Support	5U24DK112341-03	93.310	297,623	833,643
Trans-NIH Research Support	1U2CES026560-01 REVISED	93.310	204,325	1,466,860
Trans-NIH Research Support	U2CES030163	93.310	_	973,687
Trans-NIH Research Support Trans-NIH Research Support	5R21GM122632-02 5U01GM116254-03	93.310		(164)
Trans-NIH Research Support	5R01CA163256-05REVISED	93.310 93.310	82,624 152,436	181,748 156,175
Trans-NIH Research Support	5DP7OD018424-05	93.310	132,430	890
Trans-NIH Research Support	5K01OD023039-03	93.310	21,588	256,947
Trans-NIH Research Support	DP5OD019792-05	93.310	_	457,458
Trans-NIH Research Support	UH3OD023318	93.310	_	1,367,823
Pass-through Pennsylvania State University	R33EB019785	93.310	_	(10)
Pass-through Research Foundation for Mental Hygiene	UH3OD023328	93.310	_	1,579
Pass-through State University of New York Buffalo	U01CA221244	93.310	_	36,792
Pass-through University of Miami Pass-through University of Michigan	OT2OD025285 R01HD086676	93.310 93.310	=	25,647 22,867
Pass-through University of North Carolina	UG3OD023348	93.310	_	3,728
Pass-through Women & Infants Hospital of Rhode Island	R01HD084515	93.310	_	(1,176)
Pass-through Women & Infants Hospital of Rhode Island	UH3OD023347	93.310	_	272,931
Pass-through University of Miami	1OT2OD26551-01	93.310		3,168,972
Total CFDA No. 93.310			812,562	9,798,520
Rare Disorders: Research, Surveillance, Health Promotion, and Education Pass-through Research Foundation for Mental Hygiene	U01DD001189	93.315	_	17,528
Total CFDA No. 93.315	00110001109	50.010		17,528
Research, Monitoring and Outcomes Definitions for Vaccine Safety	6 VSRNV000003-01-01	93.344		81,878
Total CFDA No. 93.344	0 43/4/4000003-01-01	55.544		81,878
				01,070

Supplementary Schedule of Expenditures of Federal Awards Year ended August 31, 2019

Federal CFDA Passed through to Federal Program title/federal grantor/pass-through entity Award number numbe ubrecipients penditures National Center for Advancing Translational Sciences 5KL2TR002381-02 \$ 448.828 1,483,604 National Center for Advancing Translational Sciences
Pass-through University of Pittsburgh 5R21TR001751-02 93.350 261.798 51 154TR001456-08 REVISED 93 350 306 216 813 023 TL1TR002382 UL1TR002378 93.350 2,970,693 93.350 8,389,384 UL1TR001857 93.350 17.750 35.125 Total CFDA No. 93.350 3,904,016 11,831,279 Research Infrastructure Programs 5R24OD010930-13 93.351 126.728 Research Infrastructure Programs Research Infrastructure Programs 1S10OD021773-01A1 4R24OD010445-04 93.351 93.351 342,129 285,972 194.640 Research Infrastructure Programs 5R24OD020174-04 93.351 431.380 Research Infrastructure Programs Research Infrastructure Programs Research Infrastructure Programs 5I I42OD011023-16 93.351 1 808 946 P51OD011023-P51OD011132 R24OD020349 11,195,637 647,494 68,837 93.351 Research Infrastructure Programs Pass-through Jackson Laborator R25GM129213 93.351 243.210 U54 OD020351 93.351 8,504 Total CFDA No. 93,351 263,477 15.090.000 21st Century Cures Act – Beau Biden Cancer Moonshot Pass-through Dana Farber Cancer Institute U24CA233243 93.353 58,758 Total CFDA No. 93,353 58,758 Nurse Education, Practice and Retention Grants 6 UD7HP250460301 93.359 326 Nurse Education, Practice and Retention Grants 6 UK1HP31697--02 93.359 25.278 550.423 Total CFDA No. 93.359 25,278 550,749 Nursing Research 1F31NR017348-01A1 RE 93.361 36.408 Nursing Research Nursing Research 5R00NR014587-05 5R00NR014675-06 REVI 93.361 93.361 (84) (27) Nursing Research 1F31NR015722-02 REVI 93.361 8.487 Nursing Research Nursing Research Nursing Research 93.361 93.361 1F31NR015975-03 1,803 89.157 1F31NR017580-01REVIS 1K01NR016984-02 27,029 40,068 93.361 Nursing Research 1K01NR017664-01 93.361 282.379 Nursing Research Nursing Research 1R01NR017018-02 REVI 3P30NR014134-04S1 93.361 93.361 202,694 31,999 82,158 Nursing Research 4P30NR014134-05 93.361 32,261 Nursing Research Nursing Research Nursing Research 4T32NR012715-05 93.361 3.507 5F31NR015180-02REVIS 5F31NR015400-02 REVI 93.361 93.361 74,504 89,066 Nursing Research 5K01NR015733-03 93.361 87.044 Nursing Research Nursing Research 93.361 93.361 5K01NR016971-02 86,686 5R01NR012923 5R01NR013700-05 REVI 506,328 Nursing Research 93.361 202,445 Nursing Research Nursing Research Nursing Research 5R01NR014973-04 Revi 93.361 174.426 729.083 5R01NR015783-03REVIS 5R21NR014544-02 93.361 93.361 158,483 32,308 5R21NR014544-02 Nursing Research 93.361 159,072 Pass-through New York University 60044948 FU 93.361 178.640 Pass-through Northwestern University
Pass-through Virginia Commonwealth University UA15-058 M15A11961 (CON-80000 93.361 26,776 93.361 10,623 Total CFDA No. 93,361 258,387 3,094,936 Cancer Cause and Prevention Research 1F99CA234959-01 44,461 93.393 1R01CA218389-01A1 REVISED 74.517 Cancer Cause and Prevention Research 93.393 634,632 Cancer Cause and Prevention Research 4R01CA077337-15 5R01CA166825-05 REVISED 5R01CA179424-04 93.393 93.393 11,443 502,749 367,679 93.393 18,594 Cancer Cause and Prevention Research 5U01CA217875-02 93.393 825.829 R01CA095318 R01CA178999 305,031 307,179 93.393 93.393 320.619 Cancer Cause and Prevention Research R01CA207467 93.393 643.987 Cancer Cause and Prevention Research
Cancer Cause and Prevention Research
Cancer Cause and Prevention Research
Cancer Cause and Prevention Research 93.393 93.393 229,954 573,923 R01CA208758 R01CA215155 R01CA230268 132,522 93.393 62,114 Cancer Cause and Prevention Research R01CA234538 93.393 118.578 Cancer Cause and Prevention Research Cancer Cause and Prevention Research R37CA234119 U01CA220401 93.393 93.393 12,844 381,667 200,243 Cancer Cause and Prevention Research 2U10EY013272-11A1 93.393 (432)Cancer Cause and Prevention Research
Cancer Cause and Prevention Research
Pass-through Dartmouth College R01CA236871 93.393 116,091 R21CA208161 R01CA188038 93.393 11,506 93.393 (15) 352,900 Pass-through Mayo Clinic U01CA195568 93.393 Pass-through Ohio State University
Pass-through State University of New York Stony Brook
Pass-through University of Michigan 104,491 167,445 (397) R01CA169363 93.393 93.393 1UG3CA22502101 P01CA163233 93.393 126.160 Pass-through University of Michigan
Pass-through University of Southern California R01CA201198 93.393 U19CA214253 93.393 105,941 Total CFDA No. 93.393 1.095.580 5,656,675 Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research 4R01CA169188-05 5R01CA169937-05 REVISED 93.394 93.394 1,015 59,506 Cancer Detection and Diagnosis Research 5R01CA202846-04 93.394 53,353 335,305 5R21CA206508-02 REVISED 5U01CA172027-05 5U01CA207821-03 Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research 93.394 93.394 42,308 115,015 45,341 111,678 93.394 525,778 Cancer Detection and Diagnosis Research
Cancer Detection and Diagnosis Research 5U24CA194362-04 REVISED 93.394 217,741 698.165 R01CA203388 U01CA113913 U01CA198913 93.394 93.394 467,045 897,909 178,598

93.394

8,299

559,042

Supplementary Schedule of Expenditures of Federal Awards

Year ended August 31, 2019

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Cancer Detection and Diagnosis Research	5U01CA168449-04	93.394	s —	(174)
Pass-through Dartmouth College	PO1CA190193	93.394	- -	180,527
Pass-through Massachusetts General Hospital	R01CA237133	93.394	_	1,241
Pass-through Radboud University	R01CA181171	93.394	_	33,732
Pass-through State University of New York Stony Brook	U24CA180924	93.394	_	105,143
Pass-through University of Arkansas for Medical Services	U01CA187013	93.394	_	200,223
Pass-through University of Arkansas for Medical Services	U24CA215109	93.394	_	445,823
Pass-through University of California Los Angeles	R01CA169508	93.394	_	4,061
Pass-through University of Texas Dallas	R01CA204254	93.394		40,325
Total CFDA No. 93.394			615,010	4,711,989
Cancer Treatment Research	1R01CA223220-01A1	93.395	_	285,711
Cancer Treatment Research	1R01CA226992-01A1	93.395	_	155,276
Cancer Treatment Research	1R01CA228414-01	93.395	_	227,371
Cancer Treatment Research	1R21CA223300-01A1	93.395	_	187,419
Cancer Treatment Research	4R01CA157754-05 REVISED 5 R01 CA176001-05REVISED	93.395	_	59,422
Cancer Treatment Research Cancer Treatment Research		93.395 93.395	_	43,997
	5R01CA136534-09 5R01CA180805-03	93.395	_	432,368 287
Cancer Treatment Research	5R01CA186129-05	93.395	_	101,492
Cancer Treatment Research Cancer Treatment Research	5R01CA188523-05 REVISED	93.395	_	110,983
Cancer Treatment Research	5R01CA194027-04	93.395	_	537,700
Cancer Treatment Research	5R01CA200905-03	93.395	_	313,773
Cancer Treatment Research	5R01CA207768-02	93.395	_	313,820
Cancer Treatment Research	5R01CA214557-03	93.395	141,308	387,037
Cancer Treatment Research	5R01CA214557-03 5R01CA215718-02	93.395	1+1,500	355,765
Cancer Treatment Research	5U10CA180864-05	93.395	_	275,558
Cancer Treatment Research	5U10CA180950-05 REVISED	93.395	599,550	654,502
Cancer Treatment Research	7R01CA172385-05	93.395	-	76,332
Cancer Treatment Research	R01CA186918	93.395	_	348,752
Cancer Treatment Research	R01CA193828	93.395	_	380,535
Cancer Treatment Research	R01CA202763	93.395	104,666	490,384
Cancer Treatment Research	R01CA203928	93.395	_	349,045
Cancer Treatment Research	R01CA208253	93.395	92,515	322,973
Cancer Treatment Research	R01CA208328	93.395	100,967	336,451
Cancer Treatment Research	R01CA228406	93.395	· —	28,469
Cancer Treatment Research	R01CA238471	93.395	_	61,033
Cancer Treatment Research	UG1CA233259	93.395	_	32,963
Cancer Treatment Research	5R01CA154129-05	93.395	_	418
Cancer Treatment Research	UG1CA233247	93.395	_	317,216
Pass-through Childrens Healthcare of Atlanta	657004-0219-01/AMND	93.395	_	90,000
Pass-through Childrens Healthcare of Atlanta	U01CA180886	93.395	_	13,995
Pass-through City of Hope	R01CA181045	93.395	_	(6,552)
Pass-through City of Hope	R01CA194742	93.395	_	52,754
Pass-through Duke University	R01CA175759	93.395	41,199	107,340
Pass-through Ecog-Acrin Medical Research Foundation	U10CA180820	93.395	_	18,248
Pass-through Georgia Institute of Technology	R01CA207619	93.395	_	101,396
Pass-through Georgia State University	R01CA180519	93.395	_	257,333
Pass-through Johns Hopkins University	UM1CA186691	93.395	_	39,812
Pass-through Nrg Oncology Foundation, Inc.	U10CA180868	93.395	_	134,134
Pass-through Nrg Oncology Foundation, Inc.	UG1CA189867	93.395	_	165,055
Pass-through Ohio State University	R01CA201382	93.395	_	78,121
Pass-through St Jude Childrens Research Hospital	UM1CA081457	93.395	7,931	69,806
Pass-through Stanford University	U01CA199241	93.395	_	240,972
Pass-through University of Arizona	R21CA178603	93.395	_	(288)
Pass-through University of California Los Angeles	UM1CA121947	93.395	_	332,097
Pass-through University of Colorado Denver	R01CA200817	93.395	<u> </u>	19,379
Pass-through University of Florida	R01CA200867	93.395 93.395	_	84,414 21,144
Pass-through University of Minnesota Pass-through University of Tennessee HIth Science	5P01CA111412-13 R01CA193609	93.395	_	52,214
Pass-through University of Itah	R01CA206522	93.395	<u>=</u>	446,398
Total CFDA No. 93.395			1,088,136	9,504,824
Cancer Biology Research	3R01CA163722-05S1REVISED	93.396		3,746
Cancer Biology Research	3R01CA163722-0551REVISED 3R01CA201340-04S1	93.396	11,070	434.979
Cancer Biology Research	5R01CA201340-0451 5R01CA123490-10 REVISED	93.396	11,070	434,979 64,146
Cancer Biology Research	5R01CA123490-10 REVISED 5R01CA140515-09	93.396	22,836	348,703
Cancer Biology Research	5R01CA140515-09 5R01CA175316-05 REVISED	93.396	22,030	126,543
Cancer Biology Research	5R01CA175316-05 REVISED 5R01CA183594-05 REVISED	93.396	2,551	309,495
Cancer Biology Research	5R01CA192844-04	93.396	63.598	334.048
	5U01CA160882-05	93.396	36,589	36,589
Pancer Riology Research		93.396		1,223,338
	7R35CA197603-03			2,895,409
Cancer Biology Research	7R35CA197603-03 P30CA138292		62.562	
Cancer Biology Research Cancer Biology Research	P30CA138292	93.396	62,562	
Zancer Biology Research Cancer Biology Research Cancer Biology Research	P30CA138292 R00CA197804	93.396 93.396	_	243,759
Cancer Biology Research	P30CA138292 R00CA197804 R01CA174786	93.396 93.396 93.396	62,562 — 4,567 —	243,759 218,550
Zancer Biology Research Zancer Biology Research Cancer Biology Research Zancer Biology Research Zancer Biology Research	P30CA138292 R00CA197804 R01CA174786 R01CA175316	93.396 93.396 93.396 93.396	4,567 —	243,759 218,550 114,587
Jancer Biology Research	P30CA138292 R00CA197804 R01CA174786 R01CA175316 R01CA236369	93.396 93.396 93.396 93.396 93.396	4,567 — —	243,759 218,550 114,587 37,017
Jancer Biology Research	P30CA138292 R00CA197804 R01CA1774786 R01CA175316 R01CA236369 U01CA214354	93.396 93.396 93.396 93.396 93.396 93.396	4,567 —	243,759 218,550 114,587 37,017 45,099
Jancer Biology Research Pass-through Georgia Institute of Technology Pass-through Roswell Park Cancer Institute	P30CA138292 R00CA197804 R01CA174786 R01CA175316 R01CA236389 U01CA214354 R01CA121044	93.396 93.396 93.396 93.396 93.396 93.396	4,567 — — — —	243,759 218,550 114,587 37,017 45,099 17,502
Jancer Biology Research Jancer	P30CA138292 R00CA197804 R01CA1774786 R01CA175316 R01CA236369 U01CA214354 R01CA121044 1R43C224642-01A1	93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396	4,567 — — — — —	243,759 218,550 114,587 37,017 45,099 17,502 3,223
Zancer Biology Research Zanser Biology Research Zanser Biology Research Zanser-Biology Research Zancer-Biology Research Zancer	P30CA138292 R00CA137804 R01CA177866 R01CA175316 R01CA236369 U01CA214354 R01CA121044 1R43C224642-01A1 U01CA223976	93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396	4,567 — — — —	243,759 218,550 114,587 37,017 45,099 17,502 3,223 43,348
Jancer Biology Research Pass-through Roswell Park Cancer Institute Pass-through Sophia Bioscience Inc Pass-through University of Alabama Birmingham Pass-through University of Arizona	P30CA138292 R00CA197804 R01CA1774786 R01CA175316 R01CA236369 U01CA214354 R01CA121044 1R43C224642-01A1	93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396	4,567 — — — — — — —	243,759 218,550 114,587 37,017 45,099 17,502 3,223 43,348 61,136
Cancer Biology Research Pass-through Georgia Institute of Technology Pass-through Roswell Park Cancer Institute Pass-through Sophia Bioscience Inc Pass-through University of Alabama Birmingham Pass-through University of Arizona Total CFDA No. 93.396	P30CA138292 R00CA137804 R01CA177876 R01CA175316 R01CA236369 U01CA214354 R01CA121044 1R43C224642-01A1 U01CA223976 1U01CA198946-01	93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396	4,567	243,759 218,550 114,587 37,017 45,099 17,502 3,223 43,348 61,136
Cancer Biology Research Cancer Biology Roswell Park Cancer Institute Cass-through Sophia Bioscience Inc Cass-through University of Alabama Birmingham Cass-through University of Arizona Total CFDA No. 93.396 Cancer Centers Support Grants	P30CA138292 R00CA197804 R01CA1774786 R01CA175316 R01CA236369 U01CA214354 R01CA121044 1R43C224642-01A1 U01CA223976 1U01CA198946-01 5P20CA210298-02 REVISED	93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396	4,567 — — — — — — —	243,759 218,550 114,587 37,017 45,099 17,502 3,223 43,348 61,136 6,561,217 257,723
Cancer Biology Research Pass-through Georgia Institute of Technology Pass-through Roswell Park Cancer Institute Pass-through Diversity of Alabama Birmingham Pass-through University of Alabama Birmingham Pass-through University of Arizona Total CFDA No. 93.396 Cancer Centers Support Grants Cancer Centers Support Grants	P30CA138292 R00CA197804 R01CA1774786 R01CA175316 R01CA236389 U01CA214354 R01CA121044 1R43C224642-01A1 U01CA223976 1U01CA198946-01 5P20CA210298-02 REVISED P50CA217691	93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396	4,567	243,759 218,550 114,587 37,017 45,099 17,502 3,223 43,348 61,136 6,561,217 257,723 40,659
Pass-through Roswell Park Cancer Institute Pass-through Sophia Bioscience Inc Pass-through University of Alabama Birmingham Pass-through University of Arizona	P30CA138292 R00CA197804 R01CA1774786 R01CA175316 R01CA236369 U01CA214354 R01CA121044 1R43C224642-01A1 U01CA223976 1U01CA198946-01 5P20CA210298-02 REVISED	93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396 93.396	4,567	243,759 218,550 114,587 37,017 45,099 17,502 3,223 43,348 61,136 6,561,217 257,723

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditur
Cancer Research Manpower	1F31CA225124-01A1	93.398	\$ <u> </u>	42,6
Cancer Research Manpower	1F31CA236493-01A1	93.398	_	30,4
Cancer Research Manpower	4T32CA160040-04	93.398	_	135,3
Cancer Research Manpower Cancer Research Manpower	5F31CA210601-03 5F31CA221002-02	93.398 93.398	_	41,1 44,7
Cancer Research Manpower Cancer Research Manpower	5F31CA221002-02 5F31CA225049-02	93.398	_	50,3
Cancer Research Manpower	5F31CA225119-02	93.398	_	45,7
Cancer Research Manpower	5F32CA199834-02 REVISED	93.398	_	(1,8
Cancer Research Manpower	5F99CA223074-02	93.398	_	44,4
Cancer Research Manpower	5K07CA211956-02	93.398	4,155	157,9
Cancer Research Manpower	5K08CA194162-05	93.398	_	164,4
Cancer Research Manpower	5K24CA201524-04	93.398	_	153,7
Cancer Research Manpower	5K25CA181503-05REVISED	93.398	_	
Cancer Research Manpower	F30CA206291	93.398	_	47,7
Cancer Research Manpower	F30CA216939	93.398	_	49,4
Cancer Research Manpower Cancer Research Manpower	F30CA236231 F31CA232531	93.398 93.398	_	35,3 46,8
Cancer Research Manpower	F31CA232531 F31CA239566	93.398	_	7,8
Cancer Research Manpower	F31CA243220	93.398	_	2,7
Cancer Research Manpower	K01CA160798	93.398	_	1,2
Cancer Research Manpower	K01CA226346	93.398	_	78,5
Cancer Research Manpower	K24CA208132	93.398	_	144,5
Pass-through Health Research Roswell Park	R01CA121044	93.398	_	7,0
-				
Total CFDA No. 93.398 Strengthening Public Health Systems and Services through National Partnerships to Improve and			4,155	1,331,1
Protect the Nation's Health	LIMICOLOGEO	02.424		20
Pass-through University of Washington	UWSC10958	93.421		28,1
Total CFDA No. 93.421				28,
NON-ACA/PPHF—Building Capacity of the Public Health System to Improve				
Population Health through National Nonprofit Organizations Pass-through Organization of Teratology Information Specialists	5 NU38OT000199-04-00	93.424		2,5
Pass-tillough Organization of Teratology Information Specialists	51003601000199-04-00	93.424		
Total CFDA No. 93.424				2,
Improving the Health of Americans through Prevention and Management of Diabetes and Heart				
Disease and Stroke				
Pass-through Mississippi State Department of Health	NU58DP006546	93.426	_	20,
Pass-through South Dakota Department of Health	19SC090343	93.426	_	182,
Pass-through South Dakota Department of Health	20SC090343	93.426	_	4,
T . LOTDA N				
Total CFDA No. 93.426				206,
Strengthening Public Health Infrastructure for Improved Health Outcomes	200-2016-91596	93.507		17,
Total CFDA No. 93.507				17,
Total GFDA No. 93.507				17,
Health Care Innovation Awards	_			
Pass-through Georgia Department of Community Health	19032G	93.610		57,
Total CFDA No. 93.610			_	57,
Children's Justice Grants to States	40700 040 000070040	00.040		
Pass-through Georgia Department of Human Services	42700-040-0000072848	93.643		71.
Total CFDA No. 93.643			_	71.
Medical Assistance Program	0011001501	00 770		40
Pass-through Ohio State University	ODM201534	93.778		13.
Total CFDA No. 93.778			_	13.
Health Careers Opportunity Program	1D18HP32120-01-00	93.822	67,040	552
Health Careers Opportunity Program	6 D18HP290340301	93.822		98.
Total CFDA No. 93.822			67,040	651.
Ebola Support: Transmission and Prevention Control, Public Health Preparedness,				
Vaccine Development	1U54CK000453-01-06	93.823	210,069	539.
Total CFDA No. 93.823			210,069	539
National Elada Tarinina and Education Contra	C LIODED450540 04 04	00.005	4 004 007	4.005
National Ebola Training and Education Center	6 U3REP150549-04-01	93.825	1,281,307	1,965
National Ebola Training and Education Center	6 U3REP170552-03-01	93.825	2,441,291	3,455
Total CFDA No. 93.825			3,722,598	5,421.
0 C 000 D C D	4DE0111 404050 04 DE1/105D		0.007	
Section 223 Demonstration Programs to Improve Community Mental Health Services	1R56HL131059-01 REVISED	93.829	3,607	20.
Total CFDA No. 93.829			3,607	20,
Diserting County for the little by the little by County Control Control Control Control				
Planning Grant for Healthcare and Public Health Sector Cybersecurity Information Sharing Pass-through University of Florida	R01NS112291	93.835		7.
Total CFDA No. 93.835	KU1N3112291	93.633		7
Cardiovascular Diseases Research	1F31HL145974-01	93.837	_	21
Cardiovascular Diseases Research	1F32HL137401-01-A1REVISED	93.837	_	22
Cardiovascular Diseases Research	1R01HL135575-02	93.837	_	451
Cardiovascular Diseases Research	1R01HL136915-01A1	93.837	400 500	332
Cardiovascular Diseases Research	1R01HL137338	93.837	199,596	448
Cardiovascular Diseases Research	1R01HL140223-01A1	93.837		394
Cardiovascular Diseases Research	1R01HL144741-01	93.837	60,456	227
Cardiovascular Diseases Research Cardiovascular Diseases Research	1R01HL145644-01	93.837	34,547	180
Cardiovascular Diseases Research Cardiovascular Diseases Research	1R56HL142762-01	93.837	100 000	388
	2R01HL119798-06A1	93.837	106,929	310
Cardiovascular Diseases Research	4R00HL127295-03	93.837	_	201
Cardiovascular Diseases Research	4U54HL112309-05 REVISED	93.837	_	46
Cardiovascular Diseases Research Cardiovascular Diseases Research	5F31HL137367-02	93.837	_	
	5F32HL134290-02 REVISED	93.837	_	(1
				75 132
				132
Cardiovascular Diseases Research Cardiovascular Diseases Research Cardiovascular Diseases Research	5K08HL124292-05 5K08HL136873-03	93.837		152
	5K08HL119592-05	93.837 93.837	_	

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Cardiovascular Diseases Research	5P01HL095070-09	93.837	\$ —	1,815,784
Cardiovascular Diseases Research	5R00HL119567-05	93.837	_	(757)
Cardiovascular Diseases Research	5R01HL111646-05	93.837	5,582	5,582
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL119291-05 5R01HL119798-05REVISED	93.837 93.837	33,817	91,924 33,817
Cardiovascular Diseases Research	5R01HL122200-02	93.837	13,684	47,402
Cardiovascular Diseases Research	5R01HL127236-04	93.837	54,341	365,902
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL127726-04 5R01HL127759-04	93.837 93.837	1,103	357,367 305,574
Cardiovascular Diseases Research	5R01HL129511-03	93.837	21,922	339,976
Cardiovascular Diseases Research	5R01HL130471-04	93.837	68,531	859,495
Cardiovascular Diseases Research	5R01HL133667	93.837	_	319,300
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R25HL131507-03 5T15HL098122-05	93.837 93.837	_	335,680 (7,850)
Cardiovascular Diseases Research	5T32HL007745-25	93.837	_	399,766
Cardiovascular Diseases Research	5U01HL105561-07REVISED	93.837	9,037	9,037
Cardiovascular Diseases Research	5U10HL110302-07REVISED	93.837	_	141,480
Cardiovascular Diseases Research Cardiovascular Diseases Research	7R01HL117759-06 F31HL136184	93.837 93.837	_	180,355 44,974
Cardiovascular Diseases Research	F31HL136194	93.837	_	43,556
Cardiovascular Diseases Research	F31HL143900	93.837	_	41,774
Cardiovascular Diseases Research	F32HL147547	93.837	_	13,731
Cardiovascular Diseases Research	K23HL122361	93.837	_	11,341
Cardiovascular Diseases Research Cardiovascular Diseases Research	K23HL124287 K23HL127251	93.837 93.837	41,684	149,817 186,303
Cardiovascular Diseases Research	K23HL128795	93.837	-1,004	182,049
Cardiovascular Diseases Research	K23HL143164	93.837	_	135,226
Cardiovascular Diseases Research	K24HL148521	93.837	_	8,533
Cardiovascular Diseases Research Cardiovascular Diseases Research	R01HL119291 R01HL122392	93.837 93.837	=	58,272 945
Cardiovascular Diseases Research	R01HL125246-04	93.837	30,536	633,888
Cardiovascular Diseases Research	R01HL125442	93.837	521,888	820,981
Cardiovascular Diseases Research	R01HL125761	93.837	772,762	952,593
Cardiovascular Diseases Research Cardiovascular Diseases Research	R01HL130915	93.837 93.837	104,826	440,327
Cardiovascular Diseases Research Cardiovascular Diseases Research	R01HL135145 R01HL135183	93.837	16,995	384,176 410,417
Cardiovascular Diseases Research	R01HL136205	93.837	33,373	847,942
Cardiovascular Diseases Research	R01HL136345	93.837	_	309,382
Cardiovascular Diseases Research	R01HL139757	93.837	_	425,627
Cardiovascular Diseases Research Cardiovascular Diseases Research	R01HL141335 R01HL143065	93.837 93.837	_	576,796 232,811
Cardiovascular Diseases Research	R01HL143348	93.837	_	598,267
Cardiovascular Diseases Research	R01HL143350	93.837	79,543	461,897
Cardiovascular Diseases Research	R01HL146147	93.837	_	137,413
Cardiovascular Diseases Research Cardiovascular Diseases Research	R03HL146874 R03HL146879	93.837 93.837	_	12,590 5,139
Cardiovascular Diseases Research	R21HL145486	93.837	_	18,376
Cardiovascular Diseases Research	R34HL122557	93.837	5,855	18,235
Cardiovascular Diseases Research	T32HL007745	93.837	_	103,930
Cardiovascular Diseases Research Cardiovascular Diseases Research	T32HL130025 U01HL128566	93.837 93.837	261,003	456,139 850,521
Cardiovascular Diseases Research	U54HL141981	93.837	8,187	1,531,805
Cardiovascular Diseases Research	UG1HL135682	93.837	128,714	267,734
Cardiovascular Diseases Research	U01HL146241	93.837	_	643,193
Cardiovascular Diseases Research Cardiovascular Diseases Research	5P20HL113451-04	93.837 93.837	_	(63)
Pass-through Boston Children's Hospital	5R01HL095479-04S1 P01HL046925	93.837	_	(17) 256,198
Pass-through Boston University	R01HL139867	93.837		114,441
Pass-through Boston University	U01HL146382	93.837		22,894
Pass-through Children's Hospital of Philadelphia	R34HL142142	93.837 93.837	_	292 14,984
Pass-through Duke University Pass-through Georgia Institute of Technology	R01HL130443 R01HL124417	93.837	_	8,650
Pass-through Georgia Institute of Technology	R01HL140325	93.837	_	231,560
Pass-through Henry M Jackson Foundation	R01HL130448	93.837	790	4,413
Pass-through Medical College of Wisconsin	R01HL119747	93.837	_	3,637
Pass-through Michigan Technological University Pass-through Morehouse School of Medicine	R15HL140596 P50HL117929	93.837 93.837	_	3,714 123,734
Pass-through Mount Sinai School of Medicine	U01HL125488	93.837	_	12,421
Pass-through Ohio State University	R01HL128857	93.837	_	51,126
Pass-through St Jude Childrens Research Hospital	R34HL 127162	93.837	20,145	37,503
Pass-through University of Minnesota Pass-through University of Minnesota	01HL096902 R01HL126837	93.837 93.837	_	33,724 11,905
Pass-through University of Minnesota	R01HL136679	93.837	_	12,336
Pass-through University of Minnesota	R01HL141288	93.837	_	15,614
Pass-through University of Pennsylvania	P01HL139420	93.837	_	31,089
Pass-through University of Pittsburgh Pass-through University of Utah	R01HL128818	93.837 93.837	_ _ _	11,273
Pass-through University of Virginia	U24HL135691 R01HL130918	93.837	_	821 93,234
Pass-through University of Virginia	R01HL137112	93.837	_	147,867
Pass-through Vanderbilt University	R01HL132338	93.837	_	30,726
Pass-through Wake Forest University	01HL130856	93.837	_	57,068
Pass-through Wake Forest University Pass-through Wake Forest University	01HL135853 10HL098103	93.837 93.837	7,740	53,269 9,907
Pass-through Washington University	U54HL112303	93.837	- 7,740	1,881
Total CFDA No. 93.837			2,643,586	22,617,876
			2,043,586	
Lung Diseases Research	1R01HL142866-01	93.838		466,045
Lung Diseases Research Lung Diseases Research	2R01HL113548-06A1 4R01HL113548-05	93.838 93.838	39,876	332,706 408
Lung Diseases Research	5F31HL136101-02REVISED	93.838	_	47,532
Lung Diseases Research	5R01HL122559-05	93.838	_	251,499
Lung Diseases Research	5R01HL125042-04	93.838	,	104,685
Lung Diseases Research Lung Diseases Research	5R01HL136414-02 5T32HL116271-05 REVISED	93.838 93.838	137,694	273,892 (2,396)
Lung Diseases Research	F31HL139109	93.838	_	42,623
				,

Supplementary Schedule of Expenditures of Federal Awards

Year ended August 31, 2019

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Lung Diseases Research	F31HL139134	93.838	\$ -	51,625
Lung Diseases Research	F31HL143863	93.838	_	44,348
Lung Diseases Research	R01HL102167	93.838	_	223,038
Lung Diseases Research	R01HL126603-04	93.838	180,000	278,688
Lung Diseases Research Lung Diseases Research	R01HL133053	93.838 93.838	_	333,040
Lung Diseases Research	R01HL138508 R01HL139876	93.838	183,511	240,292 543,380
Lung Diseases Research	R01HL144478	93.838	-	155,090
Lung Diseases Research	R35HL145000	93.838	_	106,914
ung Diseases Research	T32HL116271	93.838	_	525,928
Lung Diseases Research	UM1HL134590	93.838	5,361,564	7,455,976
Pass-through Medical College of Georgia	R01HL138410	93.838	_	107,953
Pass-through University of Arizona	U01HL130045	93.838	_	126,113
Pass-through University of Georgia	R01HL136707	93.838	<u> </u>	231,961
Pass-through University of Pittsburgh Total CFDA No. 93.838	R01HL125049	93.838	5,902,645	31,020 11,972,360
Blood Diseases and Resources Research	1K99HL141638-01A1	93.839		6,335
Blood Diseases and Resources Research	1U01HL139483-01A1	93.839	_	863,004
Blood Diseases and Resources Research	5K01HL131333-04	93.839	_	108,324
Blood Diseases and Resources Research	5K23HL128942-03	93.839	_	153,551
Blood Diseases and Resources Research	5K23HL136900-02	93.839	_	137,774
Blood Diseases and Resources Research	5R01HL082808-13	93.839	108,873	304,336
Blood Diseases and Resources Research	5R01HL095479-08	93.839	297,215	410,247
Blood Diseases and Resources Research	5R01HL117061-06	93.839	_	262,106
Blood Diseases and Resources Research	5R01HL123984-04	93.839	_	347,642
Blood Diseases and Resources Research	5R01HL131414-03	93.839	_	590,043
Blood Diseases and Resources Research	5R21HL133584-02	93.839	_	3,445
Blood Diseases and Resources Research Blood Diseases and Resources Research	5R21HL138062-02 5T32HL069769-15 REVISED	93.839 93.839	_	181,786 131,236
Blood Diseases and Resources Research	F31HL134241	93.839	_	45,081
Blood Diseases and Resources Research	F31HL138934	93.839	_	19,842
Blood Diseases and Resources Research	K23HL133446	93.839	_	20,663
Blood Diseases and Resources Research	K23HL133457	93.839	_	112,030
Blood Diseases and Resources Research	K23HL140142	93.839	_	154,988
Blood Diseases and Resources Research	K25HL141636	93.839	_	45,100
Blood Diseases and Resources Research	P01HL086773	93.839	1,024,099	2,136,333
Blood Diseases and Resources Research	R01HL129141	93.839	_	312,735
Blood Diseases and Resources Research	R01HL130995	93.839	_	385,121
Blood Diseases and Resources Research	R01HL137128	93.839	1,886	362,785
Blood Diseases and Resources Research Blood Diseases and Resources Research	R01HL138423 R01HL138656	93.839 93.839	277,749	485,184 543,134
Blood Diseases and Resources Research	R01HL140589	93.839	160,484	297,044
Blood Diseases and Resources Research	R01HL143794	93.839	70,176	379,680
Blood Diseases and Resources Research	R21HL146299	93.839	_	13,848
Blood Diseases and Resources Research	T32HL139443	93.839	_	81,672
Blood Diseases and Resources Research	U01HL117721	93.839	325,708	572,201
Blood Diseases and Resources Research	5R01HL121264-05 REVISED	93.839	18,374	147,746
Pass-through Bloodcenter of Wisconsin	PO1HL081588	93.839	_	13,038
Pass-through Bloodworks Northwest Research Institute	PO1HL132819	93.839	_	334,674
Pass-through Georgia Institute of Technology	56HL136210	93.839	_	23,651
Pass-through Medical College of Wisconsin Pass-through Medical University of South Carolina	U01HL143477 R01HL133896	93.839 93.839	_	3,694 19,768
Pass-tillough Medical Onliversity of South Carolina	RUTHL133090	93.039	_	
Pass-through Scripps Research Institute	R21HL136272	93.839	_	(477
Pass-through University of Florida	UG1HL069301	93.839	_	82,385
Pass-through University of Iowa	01HL046925	93.839	_	5,006
Pass-through University of Washington Pass-through Washington University	R01HL141781 R21HL128863	93.839 93.839	_	5,577 12
Total CFDA No. 93.839	NZ IIIEIZO000	33.003	2,284,564	10,102,344
ranslation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	1R61HL138657-01 REVISED	93.840		9,336
ranslation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	R33HL138657	93.840	_	553,588
Pass-through All India Institute of Medical Sciences	1 U01 HL138635-01	93.840	_	63,347
Total CFDA No. 93.840	1 001112130033 01	33.040		626,271
urthritis, Musculoskeletal and Skin Diseases Research	1R21AR073593-01A1	93.846		61,105
nthritis, Musculoskeletal and Skin Diseases Research orthritis, Musculoskeletal and Skin Diseases Research	5R01AR048266-15	93.846	7,523	378,910
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR040200-15 5R01AR050501-14	93.846	7,525	503,609
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR064307-05	93.846	4,735	224,809
urthritis, Musculoskeletal and Skin Diseases Research	5R01AR067786-04	93.846		387,115
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR071397-02	93.846	_	380,738
Arthritis, Musculoskeletal and Skin Diseases Research	5U01AR067169-03 REVISED	93.846	_	(19
arthritis, Musculoskeletal and Skin Diseases Research	7R21AR067903-03	93.846	_	142,845
Arthritis, Musculoskeletal and Skin Diseases Research	F30AR069472	93.846	_	62,303
urthritis, Musculoskeletal and Skin Diseases Research	F32AR074249	93.846	_	20,790
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR047901	93.846	_	253,794
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR048615	93.846	_	393,372
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR061987	93.846	_	340,452
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR068157	93.846	_	600,809
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR070091	93.846	_	707,533
	R01AR070736 R01AR070898	93.846 93.846	27,144	249,384 818,487
	MUTAKU/U898	93.846 93.846	21,144	818,487 92,593
arthritis, Musculoskeletal and Skin Diseases Research	R214R071520		18,689	119,319
urthritis, Musculoskeletal and Skin Diseases Research urthritis, Musculoskeletal and Skin Diseases Research	R21AR071529 R21AR071536	93.846	,	(642
vthritis, Musculoskeletal and Skin Diseases Research vthritis, Musculoskeletal and Skin Diseases Research vthritis, Musculoskeletal and Skin Diseases Research		93.846 93.846	_	
vthritis, Musculoskeletal and Skin Diseases Research vthritis, Musculoskeletal and Skin Diseases Research vthritis, Musculoskeletal and Skin Diseases Research	R21AR071536 5R01AR061987-05REVISED R01AR065493			
nthritis, Musculoskeletal and Skin Diseases Research rthritis, Musculoskeletal and Skin Diseases Research rthritis, Musculoskeletal and Skin Diseases Research rthritis, Musculoskeletal and Skin Diseases Research	R21AR071536 5R01AR061987-05REVISED	93.846	 	106,973
urthritis, Musculoskeletal and Skin Diseases Research rthritis, Musculoskeletal and Skin Diseases Research rthritis, Musculoskeletal and Skin Diseases Research urthritis, Musculoskeletal and Skin Diseases Research Pass-through Auburn University Pass-through Duke University Pass-through Duke University	R21AR071536 5R01AR061987-05REVISED R01AR065493	93.846 93.846 93.846 93.846		106,973 36,899
uthritis, Musculoskeletal and Skin Diseases Research Pass-through Auburn University	R21AR071536 5R01AR061987-05REVISED R01AR065493 U19AR069522	93.846 93.846 93.846 93.846 93.846	3,063	106,973 36,899 2,032
rthritis, Musculoskeletal and Skin Diseases Research Pass-through Auburn University Pass-through Duke University Pass-through Duke University Pass-through Georgia Institute of Technology Pass-through Louisiana State University	R21AR071536 5R01AR061987-05REVISED R01AR065493 U19AR069522 U19AR069525 R01AR071026 R01AR073277	93.846 93.846 93.846 93.846 93.846 93.846	3,063	106,973 36,899 2,032 13,963 42,607
vrhritis, Musculoskeletal and Skin Diseases Research Pass-through Auburn University Pass-through Duke University Pass-through Duke University Pass-through Georgia Institute of Technology Pass-through Georgia Institute of Technology Pass-through University of Alabama Birmingham	R21AR071536 SR01AR061987-05REVISED R01AR065493 U19AR069522 U19AR069525 R01AR071026 R01AR073277 1R01AR072697-01	93.846 93.846 93.846 93.846 93.846 93.846	3,063 657 —	106,973 36,899 2,032 13,963 42,607 10,835
Arthritis, Musculoskeletal and Skin Diseases Research Pass-through Aubrur University Pass-through Duke University Pass-through Duke University Pass-through Duke University Pass-through Louisiana State University Pass-through Louisiana State University Pass-through University of Alobama Birmingham Pass-through University of Connecticut	R21AR071536 SR01AR061987-05REVISED R01AR065493 U19AR069522 U19AR069525 R01AR071026 R01AR073277 1R01AR072697-01 R01AR06661	93.846 93.846 93.846 93.846 93.846 93.846 93.846	3,063 657 — — —	106,973 36,899 2,032 13,963 42,607 10,835 102,310
Pass-through Duke University Pass-through Duke University Pass-through Georgia Institute of Technology Pass-through Louisiana State University Pass-through University of Alabama Birmingham	R21AR071536 SR01AR061987-05REVISED R01AR065493 U19AR069522 U19AR069525 R01AR071026 R01AR073277 1R01AR072697-01	93.846 93.846 93.846 93.846 93.846 93.846	3,063 657 — —	106,973 36,899 2,032 13,963 42,607 10,835 102,310 48,101

Debenson, Departies, and Karlery Browner Demand Recearch 1905/11/14 or 10 10 10 10 10 10 10 1	Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Dispose Collegation and George Dispose Collegation (1997) 1997 199	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R13DK115222-01	93.847	s —	13,092
Debter Depter Debter D					357
Desire Digitative and Karlow Diseases Emmand Research 19-200 KIR (1999) 19-20 KIR (29,642	639,709
Deleties Dipetities and Korney Disease Enternantial Research				_	(26,708) 29,974
Debeton, Digitative, and Kidney (Debtones) Exercised (1997) Debeton, Digitative, and Kidney (Debtones) Exercised (1997) Debtones, Digitative, and Kidn				_	87,659
Debeto, Digisthe, and Krary Disease Entermulal Research 1900				_	88,345
Displace			93.847	_	61,356
Debeton, Dipplein, and Kishing Disease: Estimated Research				_	251,000
Debetes Dipplers and Kidney Disease Enaminal Research				_	31
Diabetes Digistes Company Co				_	79,537 418,130
Diabete, Diposine, and Kindroy Disease Entermail Research				_	299,381
Diabetes Digitaries and Kindery Diabetes Esternation Research				318.922	411,497
Diabete, Dijeste, and Kohrey Desease Caramusi Research 5810 PK/0700-04 20.447 -2.0 20.047 -2.0 2					(3,518)
Dicheler, Digether, and Kidney Disease Entimus Research	Diabetes, Digestive, and Kidney Diseases Extramural Research		93.847	_	36,660
Databets Digitals Am Kintery Diseases Entermunal Research 68(1) DK11464-02 0.447 - 0.64 0.447			93.847	100,164	355,323
Disbette, Dijeste, and Kindery Disease Estambural Research SR010K112946-02 S3.937				_	286,510
Discheels Dipellary and Kidney Disease Estimative Research SROID(N1521)-92 S3,947 G-16				_	224,059
Distance, Dijestine, and Kohrey Dissasse Estamulari Research SEZENICISES SEZENIC				_	653,728
Disbete, Dijesthe, and Körlery Diseases Extransural Research S22DK1112966				6 726	632,597 6,736
Diabetes, Dijesthe, and Kindry Diseases Entimurual Research SRZDMO1390-05 93.847 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,				0,730	213,545
Diabetes Digestive, and Kotery Diaesses Entimusal Research \$1,774 \$1,000.000 \$1,474 \$1,774 \$1,000.000 \$1,474 \$1				_	54,827
Dabetes, Dijestive, and Kforey Dissesses Entimurual Research \$100 FD(005270-15 \$33.47 \$-1.774 \$-1.00				_	170,987
Dabbete, Dijesther, and Kofery Diseases Entamusal Research F300K117570 93.847 -				13,774	396,536
Dabetes Digestive, and Kidney Diseases Extramural Research K010 N15922 33.447 10.			93.847	· —	52,981
Dabetes, Digether, and Kindry Diseases Extramular Research K010K169025 33.847 1		F31DK111171		_	25,534
Diabetes, Digestive, and Kidery Diseases Extramural Research K000K11498 93.847 1 1 1 1 1 1 1 1 1				_	121,231
Diablets Digistri, and Kidny Diseases Extramural Research K280K113241 33,847				_	99,352
Diabetes, Digestive, and Krimpy Diseases Extramural Research R200K11024 93.847 68.130 6 6 6 6 6 6 6 6 6				_	101,836
Diabetes, Digestive, and Kridney Diseases Extramural Research P300KH11024 93.847 - 9.50 Diabetes, Digestive, and Kridney Diseases Extramural Research R010K047987 93.847 - 9.50 Diabetes, Digestive, and Kridney Diseases Extramural Research R010K047987 93.847 134.44 - 2.50 Diabetes, Digestive, and Kridney Diseases Extramural Research R010K047787 93.847 134.44 - 2.50 Diabetes, Digestive, and Kridney Diseases Extramural Research R010K047781 93.847 1.0666 33.847 1.0666				_	172,678
Diabetes, Digestive, and Kidney Diseases Extramural Research R010K047887 93.847 55,340 10 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K060888 93.847 55,340 11 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K060888 93.847 110,868 33 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10970 93.847 110,868 33 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 11 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 11 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 11 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 11 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10537 93.847 225,707 4 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K10400 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K104000 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K104000 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research R010K104000 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research U10K104000 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research U10K104000 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research U10K104000 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research U10K104000 93.847 1 Diabetes, Digestive, and Kidney Diseases Extramural Research U10K1040000 93.847 1 Diabetes, Digestive, an				60 120	31,232 630,191
Diabetes, Digestive, and Kidney Diseases Extramural Research R010K087984 93.847 133,142 7 73,				00,130	501,018
Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K087604 33.847 134.142 70 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K1070719 33.847 110.666 33 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K104070 33.847 110.666 33 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K110407 33.847 10.666 33 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K1104079 33.847 225,707 44 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K11937 33.847 225,707 44 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K11937 33.847 225,707 44 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K11922 33.847 225,707 45 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K11922 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K11923 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K11927 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K11947 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research TOID K11947 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research TOID K11947 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research UID K1196994 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research UID K1196994 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K119799 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K119799 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K119799 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K119799 33.847 25 Diabetes, Digestive, and Krishny Diseases Estramural Research ROID K119799 33.847 25 Diabetes, Digestive				55 340	162,163
Diabetes, Digestive, and Krimpy Diseases Extramural Research ROIDM(1077)9 33.847 — 2 2 2 2 2 2 2 2 2					790,819
Diabetes, Digestive, and Kinkey Diseases Extramural Research ROIDM(108070 33,847 3.					235,036
Diabetes, Digestive, and Kirley Diseases Extramural Research R01DK114991 93.447				110,666	331,919
Diabetes, Dijesthe, and Kidnipy Diseases Extramural Research R010K11593 93.447 25.707 4 4 4 4 4 4 4 4 4	Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK110409	93.847	_	391,562
Diabetes, Digestive, and Kidney Diseases Extramural Research R01DK116799 93.847 — 2 Diabetes, Digestive, and Kidney Deseases Extramural Research R01DK116229 93.847 — 3 3 3 3 3 4 — 3 3 3 3 3 4 — 3 3 3 3 3 4 — 3 3 3 3 3 4 — 3 3 3 3 3 3 4 — 3 3 3 3 3 3 4 — 3 3 3 3 3 3 3 3 3				_	158,313
Diabetes, Digestive, and Kidnyo Diseases Extramural Research R30KH17246 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R180KH18467 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R180KH18467 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R25KH01390 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R25KH01390 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R35KK044224 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R35KK044234 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research U015K10934 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research U015K10999 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research U015K10999 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research S712DK0076562551 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diseases Extramural Research R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diabetes Digestive R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diabetes Digestive R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diabetes R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diabetes R015K119793 33.847 Diabetes, Digestive, and Kidnyo Diabetes R015K119793 33.847 Diabetes,				225,707	479,103
Diabetes, Dipestlew, and Kidney Diseases Extramural Research R13DK117246 93.847 — 33.8				_	467,885
Diabetes, Dijesettw, and Kidney Diseases Extramural Research R18DK119467 93.847 — 30 Diabetes, Dijesettw, and Kidney Diseases Extramural Research R25DK044234 93.847 — 41 Diabetes, Dijesettw, and Kidney Diseases Extramural Research R25DK044234 93.847 — 41 Diabetes, Dijesettw, and Kidney Diseases Extramural Research T32DK106735 93.847 — 22 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 22 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 22 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 22 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 10 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 10 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 10 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 10 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 10 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 — 10 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10 KN106994 93.847 —				_	215,982 131,112
Diabetes, Dijestew, and Kidney Diseases Extramural Research R250K(10130) 93.847 — 44 Diabetes, Dijestew, and Kidney Diseases Extramural Research T32DK(107656 93.847 — 14 Diabetes, Dijestew, and Kidney Diseases Extramural Research T32DK(107656 93.847 — 2 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10K(106934 93.947 — 2 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10K(106934 93.947 — 2 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10K(106934 93.947 — 2 Diabetes, Dijestew, and Kidney Diseases Extramural Research U10K(106934 93.947 — Diabetes, Dijestew, and Kidney Diseases Extramural Research 97.00 Diabetes, Dijestew, and Kidney Diseases					353,093
Diabetes, Digestive, and Kidney Diseases Extramural Research R56DK044234 33.847 — 4 1 1 1 1 1 1 1 1 1				_	81,235
Diabetes, Digestive, and Kidney Diseases Extramural Research T3ZDK007656 93.847				_	449,730
Diabetes, Digestive, and Kidney Diseases Extramural Research				_	197,715
Diabetes, Digestive, and Kidney Diseases Extramural Research SR010K47987-24 93.847 5.000 1 Diabetes, Digestive, and Kidney Diseases Extramural Research 5732DK007686-2551 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	T32DK108735	93.847	_	274,793
Diabetes, Digestive, and Kidney Diseases Extramural Research				_	209,881
Diabetes, Digestive, and Kidney Diseases Extramural Research R132DK007666-25S1 93.847 — 3.00 Diabetes, Digestive, and Kidney Diseases Extramural Research R01DK119793 93.847 — 93.84				5,000	163,182
Diabetes, Digestive, and Kidney Diseases Extramural Research R01DK119734 93.847 4.92 93.857 4.92 93.857 4.92 93.857 4.92 93.857 4.92 93.857 4.92 93.857 4.92 93.857 4.92 93.857 4.92 93.857 4.92 93.857 93.847				_	4,034
Pass-through Children's Hospital of Philadelphia R010K110749 33.847 4.492 Pass-through Connectious Children's Medical Center 4.401DK095745-05 33.847 — 1.7010K107545-05 33.847 — 1.7010K107545-05 33.847 — 1.7010K107545-05 33.847 — 1.7010K107545 33.847 — 1.7010K10754				_	(1,827) 345,378
Pass-through Connecticut Childrens Medical Center 4U01DK095745-05 93.847 — 19				4.492	46,922
Pass-through Joslin Diabetes Center Uc4DK101108 93,847 — 11 Pass-through Kaiser Foundation Research Institute R01DK05070 93,847 — 2 Pass-through Mayo Clinic RC2DK118619 93,847 — 2 Pass-through Mount Sinal School of Medicine U01DK115495 93,847 — 2 Pass-through Mount Sinal School of Medicine U01DK119200 93,847 — (0,000 0,0				-,452	(496)
Pass-through Kalser Foundation Research Institute RC2DK118619 33.847 — 20				_	107,779
Pass-through Mourt Sinal School of Medicine		R01DK085070	93.847	_	37,627
Pass-through Mount Sinal School of Medicine U01DK119200 93.847 — (7 Pass-through Natl Jewish Health R01DK107735 93.847 — (7 Pass-through Research Institute At Nationwide Children's Hospital 1DK100866 93.847 55.65 1 1 1 1 1 1 1 1 1	Pass-through Mayo Clinic	RC2DK118619	93.847	_	221,392
Pass-through Natl Jewish Health R01DK107735 93.847			93.847	_	6,973
Pass-through Research Institute At Nationwide Children's Hospital 10K108866 33.847 55,165 11 Pass-through Research Institute At Nationwide Children's Hospital 10K108866 33.847 55,165 11 Pass-through University of Alabama Birmingham R010K115473 33.847				_	25,708
Pass-through Research Institute At Nationwide Children's Hospital 1DK100866 93.847 55.165 1 Pass-through Translational Genomics Research Inst R0 1DK107735 33.847 Pass-through University of Alabama Birmingham R01DK115473 93.847 Pass-through University of Colorado Denver PY19, 220.005 93.847 Pass-through University of Kansas Medical Center R01DK1131111 93.847 Pass-through University of Manyland, Baltimore R01DK113111 93.847 Pass-through University of Manyland, Baltimore R01DK10375 93.847 Pass-through University of Manyland, Baltimore R01DK10375 93.847 Pass-through University of Manyland, Baltimore R01DK10375 93.847 Pass-through University of Pennsylvania R01DK089763 93.847 Pass-through University of Pennsylvania R01DK089763 93.847 Pass-through University of Pittsburgh 01DK072145 93.847 Pass-through University of Pittsburgh R01DK103985 93.847 Pass-through University of South Florida 1UC4DK111709-01 93.847 Pass-through Virginia Commonwealth University U01DK061731 93.847 Pass-through Welli Cornell Medical College R01DK103046 93.853 Extramural Research Programs in the Neurosciences and Neurological Disorders F31 NS110312 93.853 Extramural Research Programs in the Neurosciences and Neurological Disorders F31 NS110312 93.853 Extramural Research Programs in the Neurosciences and Neurological Disorders F31 NS1103694-01A1 93.853 Extramural Research Programs in the Neurosciences and Neurological Disorders F31 NS10594-01A1 93.853 Extramural Research Programs in the Neurosciences and Neurological Disorders F21 NS100244-01A1 93.853 Extramural Research Pro				_	(24,280)
Pass-through Translational Genomics Research Inst R01 DK107735 93.847				EE 105	21,301 113,621
Pass-through University of Alabama Birmingham R01DK115473 93.847 — 1.79.20.05 93.853 — 1.79.20.05 93.8				55,165	64,960
Pass-through University of Colorado Deriver				_	36,391
Pass-through University of Kansas Medical Center R01DK113111 93.847				_	21,840
Pass-through University of Maryland, Baltimore R01DK110375 93.847	Pass-through University of Kansas Medical Center	R01DK113111	93.847	_	186,123
Pass-through University of Michigan R01DK089763 93.847	Pass-through University of Maryland, Baltimore	1701936/PO#SR0000484	93.847	_	223,367
Pass-through University of Pennsylvania R01DK101480 93.847 — 1.7				_	33,628
Pass-through University of Pittsburgh				_	375,442
Pass-through University of Pittsburgh R01Dk109365 93.847 — Pass-through Virginia Commonwealth University 1UC4Dk117009-01 93.847 — 10 Pass-through Will Cornell Medical College R01Dk056626 93.847 — 1.1 Pass-through Weill Cornell Medical College R01Dk056626 93.847 — 1.1 Pass-through Weill Cornell Medical College R01Dk103046 93.847 — 1.1 Total CFDA No. 93.847 — 1.1 1.129,373 14,50 Extramural Research Programs in the Neurosciences and Neurological Disorders 6 U3REP170552-03-01 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders F31 NS110312 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1F31NS100406-02 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1F31NS106896-01 REVISED 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1K308NS105929-01A1 93.853 — 1 Extramural Research Programs in the Neurosciences and Neurol				_	23,665
Pass-through University of South Fiorida 1UCADK117009-01 93.847				_	(35)
Pass-through Virginia Commonwealth University U01DK061731 93.847 1,492 1.					3,313
Pass-through Weill Cornell Medical College R01DK056626 93.847 — 1. Pass-through Weill Cornell Medical College R01DK103046 93.847 — 1. Total CFDA No. 93.847 — 1.129,373 14,50 Extramural Research Programs in the Neurosciences and Neurological Disorders 6 U3REP170552-03-01 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders F31 NS110312 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1731NS100406-02 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1731NS106986-01 REVISED 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1160NS105899-01A1 93.853 — 11 Extramural Research Programs in the Neurosciences and Neurological Disorders 11K2NS105944-01A1 93.853 — 11 Extramural Research Programs in the Neurosciences and Neurological Disorders 11R21NS100244-01A1 93.853 — 11 Extramural Research Programs in the Neurosciences and Neurological Disorders 11R21NS102913-01 93.853 — </td <td></td> <td></td> <td></td> <td></td> <td>67,935</td>					67,935
Pass-through Weill Cornell Medical College R01DK103046 93.847 — 1. Total CFDA No. 93.847 1,129,373 14,50 Extramural Research Programs in the Neurosciences and Neurological Disorders 6 U3REP170552-03-01 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders F31 NS110312 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1F31NS100840-02 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1F31NS106898-01 REVISED 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1K08NS105929-01A1 93.853 — 1* Extramural Research Programs in the Neurosciences and Neurological Disorders 1K23NS105944-01A1 93.853 — 1* Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS102943-01A1 93.853 — * Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS102913-01 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS104901-01A1 93.853 — <td></td> <td></td> <td></td> <td>1,492</td> <td>144,742 148,996</td>				1,492	144,742 148,996
Total CFDA No. 93.847				_	137,013
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurological Disorders Extramural Research Programs in the Neurological Disorders		1.015/1.1000.10	00.017	1,129,373	14,582,438
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurological Disorders Extramural Research Prog	Extramural Research Programs in the Neurosciences and Neurological Disorders	6 U3REP170552-03-01	93.853	_	583
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders 1531NS10898-01 REVISED 93.853 — 17 Extramural Research Programs in the Neurosciences and Neurological Disorders 11K20NS105929-01A1 93.853 — 27 Extramural Research Programs in the Neurosciences and Neurological Disorders 11K21NS100244-01A1 93.853 — 28 Extramural Research Programs in the Neurosciences and Neurological Disorders 11K21NS1002913-01 93.853 — 38.853 — 38.853 Extramural Research Programs in the Neurosciences and Neurological Disorders 11R21NS102913-01 11R21NS104801-01A1 93.853 5,353 5,353				_	15,673
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS100406-02			43,587
Extramural Research Programs in the Neurosciences and Neurological Disorders 1K23NS105944-01A1 93.853 — 13.853 — 24.85100294-01A1 93.853 — 34.853 — 35.853 — 35.853 — 36.8	Extramural Research Programs in the Neurosciences and Neurological Disorders		93.853		36,774
Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS100244-01A1 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS102913-01 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS104801-01A1 93.853 5,353 2:					170,458
Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS102913-01 93.853 — Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS104801-01A1 93.853 5,353 22				_	130,646
Extramural Research Programs in the Neurosciences and Neurological Disorders 1R21NS104801-01A1 93.853 5,353 2:				_	14,167
					44,976
Extramutal Research Programs in the Neurosciences and Neurological Disorders 19/21NS104653-0141 03 953 4				5,353	231,703
		1R21NS104953-01A1		_	172,506
				_	263,387 152,192
				_	93,705
				_	343,362

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R56NS045962-09	93.853	\$ —	300,975
Extramural Research Programs in the Neurosciences and Neurological Disorders	3R01NS092122-03S1 REVISED	93.853	32,161	344,528
Extramural Research Programs in the Neurosciences and Neurological Disorders	3R01NS093362-04S1	93.853	_	217,299
Extramural Research Programs in the Neurosciences and Neurological Disorders	3U01NS038455-15S1	93.853	47,316	91,820
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS078095-05 4R01NS079625-05	93.853 93.853	11,700	(885) 11,700
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS079625-05 4R01NS085006-04	93.853	11,700	3,821
Extramural Research Programs in the Neurosciences and Neurological Disorders	4U10NS059032-10	93.853	_	(59)
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS098648-03	93.853	_	40,233
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS098663-02	93.853	_	42,964
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS098673-03	93.853	_	42,553
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS098736-03 REVISED 5F31NS101786-02	93.853 93.853	_	37,746 42,153
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS101766-02 5F31NS101806-02	93.853	_	44,546
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS101932-03	93.853	_	46,334
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS103363-02	93.853	_	44,324
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS110193-02	93.853	_	43,722
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F32NS098615-03 REVISED	93.853	_	56,231
Extramural Research Programs in the Neurosciences and Neurological Disorders	5K08NS087121-05	93.853	_	164,373
Extramural Research Programs in the Neurosciences and Neurological Disorders	5K08NS099474-03	93.853 93.853	_	222,100
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5K23NS083748-05 5K23NS097576-02 REVISED	93.853	_	172,504 167,569
Extramural Research Programs in the Neurosciences and Neurological Disorders	5P30NS055077-09	93.853	_	454,404
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS036232-19	93.853	_	256,154
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS036654-20	93.853	_	354,624
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS037112-18	93.853	_	307,916
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS047357-13REVISED	93.853	.	68,033
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS051630-13 REVISED	93.853	135,361	135,361
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS065371-09 5R01NS073994-05	93.853 93.853	_	(904) 293
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS073994-05 5R01NS073994-05 REVISED	93.853	_	4,285
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS079331-05 REVISED	93.853	_	30,712
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS079858-05REVISED	93.853	_	330,144
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS083386-05	93.853	_	35,719
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS084844-05 REVISED	93.853	_	59,367
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS085387-05	93.853	_	306,601
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS085568-05	93.853	_	286,407
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS087142-05 5R01NS088413-05	93.853 93.853	_	487,382 99,853
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS088528-05	93.853	106.505	378,046
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS088748-05	93.853	165,760	439,843
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS089719-04	93.853		376,157
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS090319-04	93.853	152,416	442,034
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS090677-04	93.853	136,699	553,139
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS091201-04	93.853	_	219,559
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS091585-04	93.853	_	425,411
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS093016-04 5R01NS095269-03 REVISED	93.853 93.853	_	279,701 326,252
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS095279-04	93.853	_	269,535
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS097776-03	93.853	_	435,994
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS100864-02	93.853	_	373,930
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS100967-03	93.853	_	533,787
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS105971-02	93.853	_	428,474
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R03NS103155-02	93.853 93.853	_	57,966
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS091038-02 5R21NS092385-02	93.853	_	(19) 652
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS093550-02	93.853	_	134,302
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS096455-02 REVISED	93.853	_	51,004
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS098776-02	93.853	_	194,311
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS101167-02	93.853	141,048	564,663
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS102652-02	93.853	_	200,754
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS104410-02	93.853	_	210,497
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS106323-02 5R24NS092989-03	93.853 93.853	_	272,920 328,277
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R25NS065739-10	93.853	_	6,257
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R31NS098764-03	93.853	_	44,335
Extramural Research Programs in the Neurosciences and Neurological Disorders	5T32NS007480-18	93.853	71,380	251,339
Extramural Research Programs in the Neurosciences and Neurological Disorders	5T32NS096050-23	93.853	_	315,964
Extramural Research Programs in the Neurosciences and Neurological Disorders	5U01NS094302-03S1	93.853	61,784	234,786
Extramural Research Programs in the Neurosciences and Neurological Disorders	5U10NS077366-07 REVISED	93.853	_	571
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5U10NS086607-05 5UG3NS100559-02 REVISED	93.853 93.853	_	(67,067) 852,514
Extramural Research Programs in the Neurosciences and Neurological Disorders	7R01NS083654-06 REVISED	93.853	_ _ _	172,810
Extramural Research Programs in the Neurosciences and Neurological Disorders	7U13NS087848-05	93.853	_	65,650
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS103595	93.853	_	46,291
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS106755	93.853	_	1,128
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS106887	93.853	_	47,336
Extramural Research Programs in the Neurosciences and Neurological Disorders	K00NS105218	93.853	_	17,167
Extramural Research Programs in the Neurosciences and Neurological Disorders	K08NS083626	93.853	-	164,986
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	NS097549	93.853	388,345	835,526
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	P50NS098685 R01 NS084844	93.853 93.853	_	1,523,711 34,548
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS037112	93.853	_	17,754
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS051630	93.853	112,779	311,599
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS065992	93.853	<i>′</i> –	380,204
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS078095	93.853	_	228,831
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS089694	93.853	_	394,587
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS092343	93.853	_	242,442
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS095181	93.853	_	231,958
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS096236-04 R01NS098441	93.853 93.853	_ _	438,412 562,175
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS099375	93.853	_	222,368
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS100908	93.853	_	393,554
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS101701	93.853	_	191,924
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS102306	93.853	157,546	341,766

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS102850	93.853	\$ <u> </u>	414.959
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS102871	93.853	_	271,030
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS105982	93.853	_	432,866
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS107505	93.853	_	363,372
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS109237 R01NS109242	93.853 93.853	_	63,812 289
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS110110	93.853	_	11,484
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS111280	93.853	_	7,031
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS111470	93.853	_	36,841
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS106120 R21NS106209	93.853 93.853	_	(4,483) 229,010
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS106325	93.853	_	197,563
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS106554	93.853	_	54,540
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS108758	93.853	_	62,003
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS108760	93.853	_	158,240
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS111765 R35NS111619	93.853 93.853	_	18,111 72,473
Extramural Research Programs in the Neurosciences and Neurological Disorders	U24NS100673	93.853	41,941	151,359
Extramural Research Programs in the Neurosciences and Neurological Disorders	U24NS107234	93.853	· —	301,168
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS087488-02	93.853	_	220
Pass-through Case Western Reserve University Pass-through Childrens Healthcare of Atlanta	R01 NS096956 R21NS103507	93.853 93.853	_	40,956 97,411
Pass-through Duke University	R37NS040894	93.853	_	9,136
Pass-through Duke University	R37NS0B94	93.853	_	70
Pass-through George Washington University	R24NS092988	93.853	_	108,971
Pass-through Georgia Institute of Technology	P01NS057228	93.853	_	10,409
Pass-through Georgia Institute of Technology Pass-through Georgia State University	R01NS109226 R21NS111355	93.853 93.853	_	28,713 17,509
Pass-through Johns Hopkins University	P01NS097206	93.853	- - - - - -	2,977
Pass-through Johns Hopkins University	R01NS082338	93.853	_	232
Pass-through Mount Sinai School of Medicine	UH3NS103550	93.853	_	898,867
Pass-through Stanford University	U01NS038455 R03 NS103000	93.853	_	496,018
Pass-through University of Arkansas For Medical Services Pass-through University of Cincinnati	U01NS086872	93.853 93.853	_	10,665 10,639
Pass-through University of Georgia	R01NS099596	93.853	_	41,479
Pass-through University of Melbourne	01NS077367	93.853	_	2,546
Pass-through University of Miami	R01NS084288	93.853	_	154,756
Pass-through University of Michigan Pass-through University of North Carolina	IU24NSI00659-01 R01NS090029	93.853 93.853	_	10,112 261,669
Pass-through University of Pennsylvania	P01NS097206	93.853	_	290,168
Pass-through University of Utah	R01NS097819	93.853	_	26,136
Pass-through University of Wisconsin-Madison	R01NS099158	93.853	_	16,172
Pass-through Wright State University	R56NS107398	93.853		70,197
Total CFDA No. 93.853			1,768,094	28,516,932
Allergy, Immunology and Transplantation Research	1F31AI138391-01	93.855	_	44,541
Allergy, Immunology and Transplantation Research	1K23AI144036-01	93.855	_	65,505
Allergy, Immunology and Transplantation Research	1R01Al139675-01	93.855	=	263,470
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1R01Al143875-01 1R03Al139871-01	93.855 93.855	16,233 11,736	86,768 43,121
Allergy, Immunology and Transplantation Research	1R21Al122001-01	93.855	12,237	57,963
Allergy, Immunology and Transplantation Research	1R21Al130918-01	93.855	6,768	78,156
Allergy, Immunology and Transplantation Research	1R21Al141094-01	93.855	_	177,614
Allergy, Immunology and Transplantation Research	1R21Al142489-01	93.855 93.855	33,150	70,254 426,505
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1U01AI132904 2RO1AI1072435-12A1	93.855	33,150	426,505 484,111
Allergy, Immunology and Transplantation Research	3R01Al134244-03	93.855	_	613,286
Allergy, Immunology and Transplantation Research	4R01Al028731-26	93.855	_	9,832
Allergy, Immunology and Transplantation Research	4R01Al058057-12	93.855	_	83
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4R01Al058706-14 4R01Al064462-10 REVISED	93.855 93.855	_	74,715 305
Allergy, Immunology and Transplantation Research	4R01Al070101-10 revised	93.855	_	215,408
Allergy, Immunology and Transplantation Research	4R01Al072435-11REVISED	93.855	_	1,390
Allergy, Immunology and Transplantation Research	4R01Al098628-05	93.855	_	5,157
Allergy, Immunology and Transplantation Research	4R01Al099000-05	93.855	_	1,624
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4R01Al100110-05 4U19Al051731-15	93.855 93.855	_	(3,732) 265
Allergy, Immunology and Transplantation Research	5011649 / 8470038	93.855	_	371,960
Allergy, Immunology and Transplantation Research	51R21AI129607-02	93.855	_	28,728
Allergy, Immunology and Transplantation Research	5F30Al124568-03	93.855	_	48,968
Allergy, Immunology and Transplantation Research	5F31AI122926-03 REVISED 5F31AI124611-03 REVISED	93.855 93.855	_	37,441 34,060
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5F31Al33950	93.855	_	45,007
Allergy, Immunology and Transplantation Research	5K01Al106961-03	93.855	_	2,883
Allergy, Immunology and Transplantation Research	5K08AI110528-06	93.855	_	154,963
Allergy, Immunology and Transplantation Research	5K22Al130223-02	93.855	- - - -	143,068
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5K23AI103044-05 5K23AI4407-05	93.855 93.855	_	105,509 102,219
Allergy, Immunology and Transplantation Research	5R23AI4407-03 5R01AI020211-32	93.855	_	392,244
Allergy, Immunology and Transplantation Research	5R01AI053668-17 REVISED	93.855	_	5,926
Allergy, Immunology and Transplantation Research	5R01Al065429-15	93.855	_	560,577
Allergy, Immunology and Transplantation Research	5R01Al073707-08 5R01Al076119-11	93.855 93.855	_	387,902
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01Al076119-11 5R01Al093406-05	93.855	_	466,180 2,145
Allergy, Immunology and Transplantation Research	5R01Al104699-05	93.855	_	93,845
Allergy, Immunology and Transplantation Research	5R01Al107960-05	93.855	278,782	558,441
Allergy, Immunology and Transplantation Research	5R01Al110334-05	93.855	78,406	406,228
Allergy, Immunology and Transplantation Research	5R01Al110680-05 5R01Al110720-05	93.855 93.855	132,954 252,592	844,033 289,282
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01Al1110720-05 5R01Al111557-04	93.855	252,592 144,975	289,282 337,578
Allergy, Immunology and Transplantation Research	5R01AI111851-04	93.855	77,517	320,774
Allergy, Immunology and Transplantation Research	5R01Al111948-05	93.855	47,750	426,908
Allergy, Immunology and Transplantation Research	5R01Al112723-04	93.855	6,877	477,803
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01Al113021-05 5R01Al113883-02	93.855 93.855	_	358,851
Allergy, immuliology and transplantation research	3RUTATT13883-UZ	93.833	_	(2,356)

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Allergy, Immunology and Transplantation Research	5R01AI116379-05	93.855	\$ —	933,105
Allergy, Immunology and Transplantation Research	5R01Al116933-04	93.855	_	373,013
Allergy, Immunology and Transplantation Research	5R01Al118853-04	93.855	_	321,574
Allergy, Immunology and Transplantation Research	5R01Al124680-04	93.855	133,749	522,407
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01Al125064-04 5R01Al128799-03	93.855 93.855	11,194	835,632 705,603
Allergy, Immunology and Transplantation Research	5R01Al133706-02	93.855	11,134	950,718
Allergy, Immunology and Transplantation Research	5R01Al136533-02	93.855	117,763	509,933
Allergy, Immunology and Transplantation Research	5R01AI137679-02	93.855	158,604	368,235
Allergy, Immunology and Transplantation Research	5R01Al138646-02	93.855	187,283	582,281
Allergy, Immunology and Transplantation Research	5R21Al113485-02	93.855 93.855	_	2,096
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21Al121860-02 5R21Al122192-02	93.855	_	40,660 136,113
Allergy, Immunology and Transplantation Research	5R21AI128313-02	93.855	_	141,488
Allergy, Immunology and Transplantation Research	5R21Al135711-02	93.855	_	163,162
Allergy, Immunology and Transplantation Research	5R21Al135753-02	93.855	30,949	190,879
Allergy, Immunology and Transplantation Research	5R33AI104278-05	93.855	_	65,785
Allergy, Immunology and Transplantation Research	5R37Al049660-16	93.855	_	347,182
Allergy, Immunology and Transplantation Research	5R37Al051231-16 5R37Al112787-05	93.855 93.855	20.207	(179)
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5T32AI106699-05REVISED	93.855	20,307	272,938 138,103
Allergy, Immunology and Transplantation Research	5U01AI103408-05REVISED	93.855	87,963	1,688,601
Allergy, Immunology and Transplantation Research	5U01AI115651-05	93.855	387,789	730,401
Allergy, Immunology and Transplantation Research	5U19Al051731-17	93.855	968,803	2,297,351
Allergy, Immunology and Transplantation Research	5U19Al057266-15	93.855	1,667,582	2,509,859
Allergy, Immunology and Transplantation Research	5U19Al090023-05	93.855	_	(7,974)
Allergy, Immunology and Transplantation Research	5U19Al109633-05	93.855	43,440	1,008,706
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5U19AI110483-05 5U19AI111211-05REVISED	93.855 93.855	1,159,286	316,440 3,109,832
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5UH2AI132345-02	93.855	1,159,200	138,575
Allergy, Immunology and Transplantation Research	5UM1AI069418-13	93.855	1,692,446	5,099,210
Allergy, Immunology and Transplantation Research	5UM1AI124436-03REVISED	93.855	1,271,296	6,909,160
Allergy, Immunology and Transplantation Research	F31AI131532	93.855	_	45,883
Allergy, Immunology and Transplantation Research	F31Al136310	93.855	_	44,223
Allergy, Immunology and Transplantation Research	F31AI145178	93.855	_	22,805
Allergy, Immunology and Transplantation Research	K08Al132747	93.855	_	187,483
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	K22AI137306 K23AI124913	93.855 93.855	_	140,897 157,854
Allergy, Immunology and Transplantation Research	K23AI134182	93.855	_	161,713
Allergy, Immunology and Transplantation Research	K23AI143479	93.855	_	54,544
Allergy, Immunology and Transplantation Research	K24Al114444	93.855	_	23,344
Allergy, Immunology and Transplantation Research	P01AI125180	93.855	531,966	2,070,867
Allergy, Immunology and Transplantation Research	P30Al050409	93.855	488,482	3,000,381
Allergy, Immunology and Transplantation Research	R01Al030048	93.855		829,668
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R01Al051231 R01Al053668	93.855 93.855	267,529 246	1,485,705 72,511
Allergy, Immunology and Transplantation Research	R01Al064060	93.855	809,840	2,030,479
Allergy, Immunology and Transplantation Research	R01Al088025	93.855	6,133	443,827
Allergy, Immunology and Transplantation Research	R01Al110482	93.855	559,718	809,259
Allergy, Immunology and Transplantation Research	R01Al120860	93.855	300,658	653,218
Allergy, Immunology and Transplantation Research	R01Al121252	93.855	-	967,683
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R01Al121315 R01Al123126	93.855 93.855	376,173	703,618 305,389
Allergy, Immunology and Transplantation Research	R01Al123733	93.855	_	293,387
Allergy, Immunology and Transplantation Research	R01Al125268	93.855	_	695,609
Allergy, Immunology and Transplantation Research	R01Al125405	93.855	374,391	734,840
Allergy, Immunology and Transplantation Research	R01Al126322	93.855	223,604	1,105,465
Allergy, Immunology and Transplantation Research	R01Al127799	93.855	142,428	405,619
Allergy, Immunology and Transplantation Research	R01Al128837	93.855	55,672	1,078,170
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R01Al129862 R01Al130163	93.855 93.855	118,714 184.958	485,648 443,247
Allergy, Immunology and Transplantation Research	R01Al132833	93.855	181,369	551,398
Allergy, Immunology and Transplantation Research	R01Al135806	93.855	31,283	355,339
Allergy, Immunology and Transplantation Research	R01Al136581	93.855	· —	412,646
Allergy, Immunology and Transplantation Research	R01Al137127	93.855	_	426,331
Allergy, Immunology and Transplantation Research	R01Al138783	93.855	126,570	345,382
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R01Al139406 R01Al141327	93.855 93.855	39,670	303,607
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R01AI141327 R01AI141883	93.855	51,888	301,690 583,168
Allergy, Immunology and Transplantation Research	R01AI143414	93.855	_	313,626
Allergy, Immunology and Transplantation Research	R01AI144067	93.855	_	95,569
Allergy, Immunology and Transplantation Research	R01AI146017	93.855	_	20,472
Allergy, Immunology and Transplantation Research	R01Al147609	93.855	_	14,411
Allergy, Immunology and Transplantation Research	R01Al47839	93.855	_	984
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R13Al143192	93.855 93.855	_	5,000
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R13Al143393 R21Al144571	93.855	_	20,000 69,061
Allergy, Immunology and Transplantation Research	R21AI145650	93.855	_	11,743
Allergy, Immunology and Transplantation Research	R21AI146443	93.855	_	31,422
Allergy, Immunology and Transplantation Research	R21Al38079	93.855	_	31,836
Allergy, Immunology and Transplantation Research	R37AI021150	93.855	38,677	392,506
Allergy, Immunology and Transplantation Research	R37AI066998	93.855	_	619,501
Allergy, Immunology and Transplantation Research	R37AI11278	93.855	_	406,491
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	R38AI140299 R56AI145231	93.855 93.855	_	61,278 39,937
Allergy, Immunology and Transplantation Research	T32Al070081	93.855	_	111,781
Allergy, Immunology and Transplantation Research	T32Al074492	93.855	_	367,732
Allergy, Immunology and Transplantation Research	U01AI131566	93.855	_	317,860
Allergy, Immunology and Transplantation Research	U01AI138909	93.855	_	505,517
Allergy, Immunology and Transplantation Research	U01Al141993	93.855	_	211,368
Allergy, Immunology and Transplantation Research	U19Al057266	93.855	2740.000	355,359
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	U19Al090023 U19Al110483	93.855 93.855	2,749,932	4,631,998 133,307
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	U19AI110483 U19AI117891	93.855	495,971	1,769,337
Allergy, Immunology and Transplantation Research	U24AI120134	93.855	.55,571	436,225
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Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
llergy, Immunology and Transplantation Research	UH3AI122320	93.855	\$ 274,037	791,05
Illergy, Immunology and Transplantation Research	4R01HD067359-05 REVISED	93.855		44,83
llergy, Immunology and Transplantation Research	5R21AI126816-02	93.855	_	88
llergy, Immunology and Transplantation Research	5R33Al21684-04	93.855	112,706	454,13
llergy, Immunology and Transplantation Research	R01Al064462	93.855	_	377,34
llergy, Immunology and Transplantation Research llergy, Immunology and Transplantation Research	R01Al148378 R21Al136563	93.855 93.855	9,115	3,61 213,73
Pass-through Albert Einstein College of Medicine	R01I114304	93.855		26,99
Pass-through Benaroya Research Institute At Virginia	5UM1AI109565-05	93.855		2,00
Pass-through Benaroya Research Institute At Virginia	FY18ITN215	93.855	_	3,25
Pass-through Benaroya Research Institute At Virginia	UM1AI109565	93.855	_	92,98
Pass-through Benaroya Research Institute At Virginia	UM1AI4109565	93.855	_	42,35
Pass-through Beth Israel Deaconess Medical Center	R01Al143457	93.855	_	85,37
Pass-through Beth Israel Deaconess Medical Center	UM1Al124377	93.855	_	204,53
Pass-through Boston Children's Hospital	R33AI116184	93.855	_	75,12
Pass-through Boston Children's Hospital Pass-through Brigham and Womens Hospital	U01AI126614 01AI098558	93.855 93.855	_	83,44 12,80
Pass-through Brigham and Womens Hospital	R01Al138801	93.855		49,78
Pass-through Brigham and Womens Hospital	UM1AI068636	93.855	_	174,76
Pass-through Case Western Reserve University	1R37Al141258-01	93.855	_	465,11
Pass-through Case Western Reserve University	R01Al072219	93.855	_	47,17
Pass-through Case Western Reserve University	R21AI122380	93.855	_	(1,31
Pass-through Case Western Reserve University	R33AI116171	93.855	_	414,98
Pass-through Dana Farber Cancer Institute	R21AI129017	93.855	_	208,15
Pass-through Dana Farber Cancer Institute	R33AI129017	93.855	_	78,44
Pass-through Duke University	A039048	93.855	_	112,14
Pass-through Duke University	P01Al131276	93.855	_	763,03
Pass-through Duke University	PO1Al131276	93.855	_	869,6
Pass-through Duke University	R21Al136556	93.855	_	3,49
Pass-through Duke University	UM1AI104681	93.855	_	72,8
Pass-through Family Health International	PO15004277	93.855	501,888	732,62
Pass-through Fred Hutchinson Cancer Research Center	0000966185	93.855	_	49,3
Pass-through Fred Hutchinson Cancer Research Center	UM1 Al06861	93.855	_	68,51
Pass-through Fred Hutchinson Cancer Research Center	UM1 Al06863	93.855	_	43,39
Pass-through Fred Hutchinson Cancer Research Center	UM1Al068614	93.855	_	302,79
Pass-through Fred Hutchinson Cancer Research Center	UM1Al068635	93.855		16,63
Pass-through Georgia Institute of Technology	R01AI044902	93.855	_	19,24
Pass-through Georgia Institute of Technology	R0I107116	93.855	_	3,46
Pass-through Georgia Institute of Technology	U01AI124270	93.855	_	229,90
Pass-through Georgia State University	R01Al071002	93.855	_	133,87
Pass-through Georgia State University	R01Al116835	93.855	_	27,42
Pass-through Georgia State University	R01Al141222	93.855	_	187,4
Pass-through Georgia State University	R03Al133172	93.855	_	17,8
Pass-through Harvard University	P01Al056299	93.855	_	333,4
Pass-through Henry M. Jackson Foundation	U19Al113170 U19Al144180	93.855 93.855	_	152,9
Pass-through Henry M Jackson Foundation Pass-through Johns Hopkins University	R01Al108695	93.855	_	8,4 ⁻ 166,9:
Pass-through Johns Hopkins University	R21Al139784	93.855		73,9
Pass-through Johns Hopkins University	U19AI113127	93.855		31,7
Pass-through Johns Hopkins University	UG3AI133669	93.855	_	209,9
Pass-through Johns Hopkins University	UM1 Al068632	93.855	_	3,0
Pass-through La Jolla Institute for Allergy	R01Al125068	93.855	_	506,3
Pass-through Massachusetts General Hospital	R01Al124718	93.855	_	23,5
Pass-through Mayo Clinic Rochester	R01AI121054	93.855	_	246,2
Pass-through Md Anderson	R01CA110709	93.855	_	14,8
Pass-through Medical University of South Carolina	R21AI124687	93.855	_	3
Pass-through Medical University of South Carolina	U01AI125159	93.855	_	226,5
Pass-through Mount Sinai School of Medicine	P01AI097092	93.855	_	390,0
Pass-through Mount Sinai School of Medicine	U01A163594	93.855	_	128,4
Pass-through Mount Sinai School of Medicine	U19Al118610	93.855	_	199,7
Pass-through Ohio State University	R01Al127863	93.855	_	137,2
Pass-through Regents of The University of California	R01Al125842	93.855	_	107,6
Pass-through Regents of The University of California	U01Al034989	93.855	_	21,5
Pass-through Research Institute At Nationwide Children's Hospital	R01AI096882	93.855	_	125,7
Pass-through Research Institute At Nationwide Children's Hospital	R01AI126890	93.855	_	255,9
Pass-through Scripps Research Institute	1AI100663	93.855	_	101,0
Pass-through Scripps Research Institute	UM1 Al144462	93.855	_	39,8
Pass-through Seattle Childrens Hospital	R33AI116184	93.855	_	(2,5
Pass-through South Dakota State University	R01Al14188	93.855	_	70,2
Pass-through St Jude Childrens Research Hospital	U01Al144616	93.855	_	3
Pass-through Stanford University	U19Al057229	93.855	_	199,9
Pass-through Texas Biomedical Research Institute	RO1Al111943	93.855	<u> </u>	148,1
Pass-through Texas Biomedical Research Institute	RO1Al123047	93.855	_	196,6
Pass-through Tulane University	R01Al111943	93.855	_	140,7
Pass-through Tulane University	R01Al123047	93.855	_	97,4
Pass-through Tulane University	R21Al140840	93.855	_	4,1
Pass-through University of Alabama Birmingham	R01Al112566	93.855	_	(7,3
Pass-through University of Alabama Birmingham	U19Al109962	93.855	_	285,1
Pass-through University of California Davis	01AI098670	93.855	_	174,4
Pass-through University of California Los Angeles	UM1Al068636	93.855	_	21,2
Pass-through University of California Los Angeles	UM1Al068636	93.855	_	2,7
Pass-through University of California San Francisco Pass-through University of California San Francisco	01Al00807 5UM1Al110498-05	93.855	_	3,4
Pass-through University of California San Francisco Pass-through University of California San Francisco		93.855	_	16,6 19,6
Pass-through University of California San Francisco Pass-through University of California San Francisco	R13Al102630	93.855	_	19,6
Pass-through University of California San Francisco Pass-through University of California San Francisco	U01l118594 U54Al082973	93.855 93.855	_	27,5
Pass-through University of California San Francisco Pass-through University of California San Francisco	UM1AI10498	93.855	_	26,3
Pass-through University of California San Francisco Pass-through University of California San Francisco	UM1AI10498	93.855	_	207,4
	R01Al125738	93.855	_	147,3
Pass-through University of Georgia		93.855	_	147,3
Pass-through University of Georgia	DU1VI10E3E3		_	140,3
Pass-through University of Houston	R01Al125362 R01Al111907		_	17 2
Pass-through University of Houston Pass-through University of Louisiana At Lafayette	R01Al111907	93.855	_	
Pass-through University of Houston Pass-through University of Louisiana At Lafayette Pass-through University of Maryland, Baltimore	R01Al111907 P01Al124912	93.855 93.855	_ _	1,919,1
Pass-through University of Houston Pass-through University of Louisiana At Lafayette	R01Al111907	93.855		17,25 1,919,13 127,50 1,18

Supplementary Schedule of Expenditures of Federal Awards Year ended August 31, 2019

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R01GM113228

R01GM116065 R01GM118012

R01GM120271

R01GM121967 R01GM122083 R01GM124061

R01GM124280

R01GM124472 R21GM127971

R35GM122591

R35GM133509

T32GM008367 1R01GM125842-01A1

2R01GM072808-14

2T32GM008490-26

56,728

36,875

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162,597

226,344

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397,186 263,177

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328,427 355,945

420,641

281.831

396,277 92,462

564,617

26,369

329,395 154,120

377.136

484,849

Federal CFDA through to Federal Program title/federal grantor/pass-through entity Award number penditures numbe ubrecipients Pass-through University of Nevada RO1Al122266 \$ 63,305 Pass-through University of North Carolina UM1AI126619 93.855 1.476.536 Pass-through University of North Carolina Chapel Hill 477,200 27,718 24,411 R014I136990 93 855 R21Al33004 U01Al114378 93.855 93.855 Pass-through University of North Carolina Chapel Hill Pass-through University of North Carolina Chapel Hill Pass-through University of Pennsylvania Pass-through University of Pennsylvania U19AI100625 93.855 5.281 UAI100625C 93.855 93.855 33,015 699,320 PO1Al131338 R01AI139188 93.855 69,844 Pass-through University of Pennsylvania Pass-through University of Pennsylvania Pass-through University of Texas Southwestern U19-AI-109646 93.855 159 U19Al131130 R33Al105980 93.855 93.855 73,795 51,476 Pass-through University of Utah R01AI123425 93.855 43.182 Pass-through University of Washington
Pass-through University of Washington Seattle
Pass-through University of Wisconsin-Madison R014I142647 93 855 126.520 U19Al083019 U01Al102456 357,002 139,829 93.855 93.855 Pass-through Vanderbilt University
Pass-through Vanderbilt University
Pass-through Vanderbilt University Medical Center 19AI095227 93.855 (682) 93.855 93.855 276,334 2,348 1110AI005227 U01AI104336 209,772 Pass-through Wistar Institute U19AI109646 93.855 Pass-through Yale University R01Al112970 93.855 17.599 Total CFDA No. 93.855 18,092,049 94,808,372 Microbiology and Infectious Diseases Research Pass-through Baylor College of Medicine
Pass-through University of Florida HHSN2722013000151 RF1AG052476 93.856 475 035 93.856 370,826 Total CFDA No. 93,856 845,861 Biomedical Research and Research Training 368,324 R01AI150451 93.859 Biomedical Research and Research Training 1F31GM130112-01A1 93.859 4.136 1F31GM131609-01 1F32GM128407-01REVISED 93.859 93.859 27,936 57,999 1F32GM130020-01 Biomedical Research and Research Training 93.859 38.372 Biomedical Research and Research Training 507,272 201,496 385,510 1R01GM120405-01 93.859 1R01GM131099-01 2R01GM084070-10 93.859 Biomedical Research and Research Training 2R01GM100151-05 93.859 (13.434) 3R25GM099644-03S1REVISED 4R01GM103613-04 4R01GM105813-04REVISED Biomedical Research and Research Training Biomedical Research and Research Training 93.859 93.859 (16,074) 23,838 Biomedical Research and Research Training 93.859 53,627 Biomedical Research and Research Training 4T32GM008602-20 93.859 (25.246) Biomedical Research and Research Training Biomedical Research and Research Training 52T32GM008169-32 5F31GM111047-03 REVISED 93.859 93.859 1,149,261 (2,182) Biomedical Research and Research Training 5F31GM115178-03REVISED 93.859 26.497 Biomedical Research and Research Training 5F31GM123750-02 REVISED 93 859 27.353 5F32GM125350-02 5K99GM127671-02 60,367 87,190 93.859 93.859 65,571 Biomedical Research and Research Training 5R01GM051173-34 93.859 379.157 5R01GM051173-34 5R01GM069971-12 REVISED 5R01GM072808-13 5R01GM084070-09 Biomedical Research and Research Training Biomedical Research and Research Training 93.859 93.859 50,742 34,551 Biomedical Research and Research Training 93.859 1,788 Biomedical Research and Research Training 5R01GM090158-07REVISED 93.859 78.795 Biomedical Research and Research Training Biomedical Research and Research Training 5R01GM091875-17 5R01GM093278-09S1 93.859 223,647 427,285 78,628 93.859 Biomedical Research and Research Training 5R01GM106565-04 REVISED 93.859 94 Biomedical Research and Research Training 5R01GM109779-04 REVISED 5R01GM110000-04REVISED 5R01GM110663-04 93.859 _ 5.256 Biomedical Research and Research Training Biomedical Research and Research Training 27,205 (28,439) 93.859 5R01GM114612-03 REVISED (9.576) Biomedical Research and Research Training 93.859 167.642 Biomedical Research and Research Training Biomedical Research and Research Training 93.859 93.859 384,475 219,188 5R01GM116001-03 5R01GM117946-04 5R01GM123136-02 Biomedical Research and Research Training 93.859 184,266 327,442 (1,698) 82,743 460,008 Biomedical Research and Research Training 5R25GM099644-03REVISED 93.859 Biomedical Research and Research Training Biomedical Research and Research Training 5R25GM102789-05 REVISED 5R35GM122549-02 93.859 93.859 Biomedical Research and Research Training 5R35GM122568-02 93.859 505,052 5T32GM008490-25REVISED 5T32GM008602-22 F31GM116556 Biomedical Research and Research Training 93.859 _ 2.249 Biomedical Research and Research Training Biomedical Research and Research Training 93.859 315,204 7,447 93.859 Biomedical Research and Research Training F32GM126734 93.859 55.557 Biomedical Research and Research Training Biomedical Research and Research Training 93.859 93.859 10,080 1,475,533 F32GM133091 K12GM000680 R01Al150453

Biomedical Research and Research Training

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Biomedical Research and Research Training

Biomedical Research and Research Training

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Biomedical Research and Research Training	K23GM128221	93.859	s –	175,196
Biomedical Research and Research Training	R01GM109501	93.859	22,636	135,876
Biomedical Research and Research Training	R25GM125598	93.859	_	302,628
Biomedical Research and Research Training	R35GM119426	93.859	_	355,426
Biomedical Research and Research Training	T32GM095442	93.859	_	188,881
Biomedical Research and Research Training	5R01GM053640-21	93.859	_	(1,960)
Biomedical Research and Research Training	R01GM134245	93.859	_	31,116
Pass-through Albert Einstein College of Medicine Pass-through Albert Einstein College of Medicine	P01GM068036 R01GM123540	93.859 93.859	_	302,891 341
Pass-through Fred Hutchinson Cancer Research Center	5 U54 GM111274-05	93.859	_	222,052
Pass-through Georgetown University	R01GM123007	93.859	_	14,978
Pass-through Georgia Institute of Technology	R01GM118803	93.859	_	16,504
Pass-through Ohio State University	1R01GM30135-01	93.859	_	67,385
Pass-through Ohio State University	R01GM065183		_	53,484
Pass-through Pennsylvania State University	R01GM121650	93.859	_	121,750
Pass-through Scripps Research Institute	U54GM103368	93.859	_	543,056
Pass-through University of California San Diego	R01GM118609	93.859	_	108,247
Pass-through University of Georgia Pass-through University of Texas Health Sciences Ctr	P01GM085354 R01GM130147	93.859	_	180,915 213,538
Pass-through University of Texas Medical Branch	R01GM18534	93.859 93.859	_	135,818
Pass-through University of Washington	R01GM125440	93.859	_	20,094
	1010W120440	30.003		
Total CFDA No. 93.859			1,306,325	18,619,401
Child Health and Human Development Extramural Research	1F32HD096816-01	93.865	_	28,730
Child Health and Human Development Extramural Research	1R03HD097737-01	93.865	_	89,754
Child Health and Human Development Extramural Research	1R21HD089160-02	93.865	_	182,911
Child Health and Human Development Extramural Research	1R21HD095138-01	93.865	34,995	103,099
Child Health and Human Development Extramural Research	3R21HD092785-02S1	93.865	_	183,519
Child Health and Human Development Extramural Research	5F31HD088043-03	93.865	_	46,291
Child Health and Human Development Extramural Research	5K01HD074726-05	93.865	_	1,043
Child Health and Human Development Extramural Research	5K01HD079584-05	93.865	_	123,530
Child Health and Human Development Extramural Research	5K01HD080722-04	93.865	_	118,928
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5K12HD072245-07 5K12HD085850-04	93.865 93.865	=	457,264 457.639
Child Health and Human Development Extramural Research	5K23HD083630-04 5K23HD078153-05	93.865	_	106,508
Child Health and Human Development Extramural Research	5K23HD078133-03 5K23HD080837-04	93.865	_	97,538
Child Health and Human Development Extramural Research	5K25HD086276-03	93.865	_	127,729
Child Health and Human Development Extramural Research	5R01HD074486-05	93.865	_	5,842
Child Health and Human Development Extramural Research	5R01HD075784-05	93.865	136,538	512,997
Child Health and Human Development Extramural Research	5R01HD077623-05	93.865	· —	2,340
Child Health and Human Development Extramural Research	5R01HD085877-03 REVISED	93.865	9,983	355,533
Child Health and Human Development Extramural Research	5R01HD090925-02	93.865	_	733,674
Child Health and Human Development Extramural Research	5R03HD081438-02	93.865	_	3,385
Child Health and Human Development Extramural Research	5R03HD087606-02	93.865	_	48,823
Child Health and Human Development Extramural Research	5R21HD086491-02	93.865	66,767	78,356
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R21HD086762-02 REVISED 5R21HD087760-02 REVISED	93.865 93.865	20,968	78,791 153,014
Child Health and Human Development Extramural Research	5R21HD087760-02 REVISED 5R21HD089056-02	93.865	2,628	72,197
Child Health and Human Development Extramural Research	5R21HD093027-02	93.865	125,983	204,865
Child Health and Human Development Extramural Research	5R25HD079102-05 REVISED	93.865		43,073
Child Health and Human Development Extramural Research	5U01HD066439-04	93.865	_	(1,997)
Child Health and Human Development Extramural Research	F31HD096815	93.865	_	17,124
Child Health and Human Development Extramural Research	F31HD097918	93.865	_	41,412
Child Health and Human Development Extramural Research	F31HD098816	93.865	_	18,916
Child Health and Human Development Extramural Research	F31HD92025	93.865	_	(1,154)
Child Health and Human Development Extramural Research	F32HD097920	93.865	_	20,990
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	HD071845 K99HD097290	93.865 93.865	_	236,730 39,150
Child Health and Human Development Extramural Research	R00HD092625	93.865	_	107,673
Child Health and Human Development Extramural Research	R00HD093858	93.865	_	7,678
Child Health and Human Development Extramural Research	R01HD046922	93.865	54,751	603,645
Child Health and Human Development Extramural Research	R01HD082373	93.865	_	232,932
Child Health and Human Development Extramural Research	R01HD090642	93.865	281,909	378,682
Child Health and Human Development Extramural Research	R01HD092033	93.865	_	433,327
Child Health and Human Development Extramural Research	R01HD092580	93.865	68,990	166,560
Child Health and Human Development Extramural Research	R01HD092595	93.865	364,786	601,298
Child Health and Human Development Extramural Research	R01HD095741	93.865	_	455,005
Child Health and Human Development Extramural Research	R01HD097175	93.865	_	6,115
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	UG1HD027851 5U54NS091859-04	93.865	_	288,591
	4P01HD032571-20	93.865 93.865	_	1,718,765 28
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5K12HD072245-04REVIS	93.865	_	130
Pass-through Bradley Hospital	7127549	93.865	_	1,947
Pass-through Georgia State University	R01HD079327	93.865	_	109,428
Pass-through Harvard School of Public Health	R01HD093761	93.865	_	12,285
Pass-through Mclean Hospital	R21HD088931	93.865	_	21,542
Pass-through Mclean Hospital	R21HD097524	93.865	_	37,578
Pass-through Medical University of South Carolina	P2CHD086844	93.865	_	18,743
Pass-through Phoenix Children's Hospital	R01HD088528	93.865	_	53,884
Pass-through Research Triangle Institute	U24HL137729	93.865	_	(4,817)
Pass-through Seattle Children's Research Institute	R01HD086978	93.865	36,989	104,257
Pass-through Tulane University	UO1HD052104	93.865	_	31,908
Pass-through University of California Davis Pass-through University of California San Francisco	01HD074346 R01HD084813	93.865 93.865	_	(2,853) 36,461
Pass-through University of California San Francisco Pass-through University of Cape Town	R01HD084813 R01HD083040	93.865	_	135,701
Pass-through University of Georgia	R01HD080749	93.865	_	23,161
Pass-through University of Georgia	R01HD090126	93.865		(31,258)
Pass-through University of Massachusetts Medical School	U54HD082013	93.865	=	384,427
Pass-through University of Michigan	R01-HD-075655-05	93.865	_	41,818
Pass-through University of Michigan	R01HD078131	93.865	_	80,123
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Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Pass-through University of North Carolina Chapel Hill	R01HD094009	93.865	s –	44,700
Pass-through University of North Carolina Chapel Hill	U19HD089881	93.865	_	1,759,978
Pass-through University of North Carolina Chapel Hill	U24HD089880	93.865	_	263,189
Pass-through University of North Carolina Chapel Hill	U24HD089980	93.865	_	333,470
Pass-through University of Washington	R01HD089831	93.865	_	185,769
Pass-through Washington University	K12HD055931	93.865		2,972
Total CFDA No. 93.865			1,205,287	13,433,386
Aging Research	1R21AG054206-01A1	93.866	_	53,376
Aging Research	1R21AG058866-01	93.866	_	164,320
Aging Research	1R56AG060757-01	93.866	42,213	708,434
Aging Research	1R56AG062256-01	93.866	51,507	776,144
Aging Research	1RF1AG047667-01	93.866	_	496,941
Aging Research	1RF1AG051538-01A1	93.866	_	1,143,230
Aging Research	1RF1AG057247-01	93.866	_	489,471
Aging Research	1RF1AG057470-01 REVISED	93.866	70,799	878,165
Aging Research	1RF1AG057471-01	93.866	19,426	182,274
Aging Research	1RF1AG057965-01A1 REVISED	93.866	_	323,201
iging Research	1RF1AG060285-01A1 REVISED	93.866	18,333	242,677
ging Research	2R56AG019206-16A1	93.866	_	338,094
ging Research	3RF1AG051514-01S1 REVISED	93.866	17,355	729,376
ging Research	3RF1AG051633-01S2	93.866	46,878	1,297,312
iging Research	3U01AG052460-03S1	93.866	_	887,561
iging Research	5K01AG042498-06	93.866	_	80,250
ging Research	5K23AG042856-05	93.866	_	1,365
ging Research	5P50AG025688-14 REVISED	93.866	149,146	2,050,449
ging Research	5R01AG023695-10	93.866	_	160,597
ging Research	5R01AG042127-06 REVISED	93.866	_	95,140
ging Research	5R01AG049752-04	93.866	_	783,344
ging Research	5R01AG058704-02	93.866	230,101	484,067
ging Research	5R03AG055810-02	93.866	_	67,324
Aging Research	5R13AG047064-04 REVISED	93.866	_	46,993
ging Research	5R21AG055995-02 REVISED	93.866	_	140,361
ging Research	5R21AG058445-02	93.866	59,637	164,952
ging Research	R01AG047408	93.866	61,303	386,305
ging Research	R01AG054046	93.866	_	515,233
ging Research	R01AG054079	93.866	222,458	1,029,020
iging Research	R01AG054991	93.866	_	170,401
iging Research	R01AG055634	93.866		277,147
Aging Research	R01AG056533	93.866	38,376	1,108,617
iging Research	R01AG057714	93.866	32,127	473,810
Aging Research	R01AG061175	93.866	936	144,102
iging Research	R01AG061179	93.866 93.866		97,585
ging Research ging Research	R01AG061971 R01AG062577	93.866	56,499	343,595 14,428
iging Research	R01AG062691	93.866		46,679
ging Research	R03AG056448	93.866	_	132,350
ging Research	R21AG054903	93.866	_	96,417
ging Research	U01AG046161	93.866	434,669	1,353,468
ging Research	U01AG061357	93.866	9,077	193,639
ging Research	U54AG062334	93.866	173,922	936,802
Pass-through Baylor College of Medicine	R01AG53960	93.866		218,431
Pass-through Baylor College of Medicine	R01SH057339	93.866	_	28,305
Pass-through Beth Israel Deaconess Medical Center	1RF2AG062181-01	93.866	_	171,073
Pass-through Boston University	5U34AG051418	93.866	_	21,712
Pass-through Duke University	5R01AG057235-07	93.866	_	373,213
Pass-through Duke University	R01AG057235	93.866	_	70,371
Pass-through Georgia Institute of Technology	R21AG056781	93.866	_	158,593
Pass-through Georgia State University	R01AG062310	93.866	_	59,551
Pass-through Georgia State University	R01CA175112	93.866	_	13,477
Pass-through Indiana University	U01AG057195	93.866	_	911
Pass-through Medical University of South Carolina	R01AG046543	93.866	_	7,349
Pass-through Northwestern University	60051680EU	93.866	_	15,578
Pass-through Northwestern University	R01AG030611	93.866	_	13,123
Pass-through Northwestern University	R01AG046352	93.866	_	25,386
Pass-through Northwestern University	U2CAG057441	93.866	_	103,588
Pass-through Rush University Medical Center	R01AG033678	93.866	_	21,810
Pass-through Rush University Medical Center	R01AG057911	93.866	_	308,528
Pass-through University of Alabama Birmingham	R01AG061800	93.866	_	38,199
Pass-through University of California San Diego	R01AG062387	93.866	_	81,110
Pass-through University of Georgia	R01AG059260	93.866	_	18,565
Pass-through University of Minnesota	R01AG04893	93.866	_	15,060
Pass-through University of Minnesota	R21AG059068	93.866	_	17,808
Pass-through University of Pittsburgh	RF1 AG051538	93.866	_	18,826
Pass-through University of Southern California	U19AG024904	93.866	_	85,535
Pass-through University of Southern California	U24AG057437	93.866	_	22,224
Pass-through University of Texas Health Sciences Ctr	R01AG059993	93.866	_	24,421
Pass-through University of Washington	U01AG016976	93.866	_	88,074
Pass-through University of Washington Saint Louis	RAG056639A	93.866	_	12,834
	R01AG058680	93.866	_	32,925
Pass-through University of Wisconsin-Madison				
Pass-through Wake Forest University	R01AG055606	93.866	_	(4,305)
Pass-through Wake Forest University	R01AG055606	93.866	_	(4,305)

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Vision Research	5R01EY004864-34S1	93.867	s —	66,748
Vision Research	5R01EY025978-03 REVISED	93.867	45,336	193,965
Vision Research	5T32EY007092-33	93.867	22,509	123,864
Vision Research	5UG1EY013287-15	93.867	_	197,275
Vision Research	F31EY028855	93.867	_	44,565
Vision Research Vision Research	P30EY006360	93.867 93.867	_	596,512 272,178
Vision Research	R01EY014852 R01EY021592	93.867	_	294,994
Vision Research	R01EY027711	93.867	208,772	374,013
Vision Research	R01EY028450	93.867	43,057	459,332
Vision Research	R01EY028859	93.867	31,936	334,926
Vision Research	R01EY029724	93.867	· —	58,916
Vision Research	R21EY028320	93.867	_	44,399
Vision Research	UG1EY025553	93.867	95,653	211,684
Vision Research	5T32EY007092-28Revis	93.867	_	(2,395)
Pass-through Georgia Institute of Technology	K8501-G1	93.867	_	3,087
Pass-through Georgia Institute of Technology	R01EY016435	93.867	_	56,717
Pass-through Georgia Institute of Technology	R21EY026685	93.867	<u> </u>	30,031
Pass-through Jaeb Center For Health Research Pass-through Johns Hopkins University	U10EY11751 U10EY024527	93.867 93.867	_	264 53,704
Pass-through Morehouse School of Medicine	01EY022216	93.867	_	(342)
Pass-through Morehouse School of Medicine	R01EY026291	93.867	_	64,828
Pass-through New England College of Optometry	RO1EY025307	93.867	_	24,792
Pass-through University of Alabama Birmingham	R01EY028578	93.867	_	14,873
Pass-through University of California San Francisco	U10EY023939	93.867	_	29,854
Pass-through Washington University	UG1EY025181	93.867		3,358
Total CFDA No. 93.867			447,263	3,552,142
Medical Library Assistance	5R01LM012372-02	93.879	,	107,161
Medical Library Assistance	K01LM012372-02 K01LM012924	93.879	_	152,313
Medical Library Assistance	R01LM013049	93.879	41,249	103,633
Medical Library Assistance	R21LM013014	93.879	-1,245	124,699
Pass-through University of Maryland, Baltimore	UG4LM012340	93.879	_	4,733
Total CFDA No. 93.879			41,249	492,539
Grants for Training in Primary Care Medicine and Dentistry	6 T0BHP285710401	93.884		296,184
Pass-through Grady Memorial Hospital	T0BHP29995	93.884		249,966
Total CFDA No. 93.884 IIV Care Formula Grants				546,150
Pass-through University of Washington	HED23192	93.917		21,706
Total CFDA No. 93.917				21,706
HIV Demonstration, Research, Public and Professional Education Projects	5U01PS004977-04	93.941	244,963	1,039,551
HIV Demonstration, Research, Public and Professional Education Projects HIV Demonstration, Research, Public and Professional Education Projects	U01PS005112 U01PS005181	93.941 93.941	193,470	314,643 512,711
Total CFDA No. 93.941			438,433	1,866,905
Geriatric Education Centers	U1QHP3307	93.969		43,801
Total CFDA No. 93.969	5 · q 5557	00.000		43,801
International Research and Research Training	5D43TW007124-14-REVISED	93.989		313,257
International Research and Research Training International Research and Research Training	D43TW009127	93.989	33,254	187,891
International Research and Research Training	D43TW010934	93.989	- 50,204	26,790
International Research and Research Training	R01TW010664	93.989	363,561	503,397
International Research and Research Training	U2RTW010114	93.989	178,043	293,157
International Research and Research Training	4K01TW009664-04	93.989	· —	17,061
Pass-through Addis Ababa University	D43TW010143	93.989	_	186,355
Pass-through Addis Ababa University	R25TW011214	93.989	_	54,182
Pass-through Aga Khan University	D43TW007585	93.989	_	(279)
Pass-through Universidad Peruana Cayetano Heredia	U01TW010107	93.989	_	12,455
Pass-through Vanderbilt University	D43TW009337	93.989	_	7,226
	2D43TW009337-07 D43TW009337	93.989 93.989	59,320	80,321 111,389
Pass-through Vanderbilt University Medical Center		33.303	39,320	35,089
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center	VUMC67443	93.989		33,009
Pass-through Vanderbilt University Medical Center		93.989	634,178	1,828,291
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346	93.989 93.RD	634,178	1,828,291 149,628
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278		634,178	1,828,291
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract Contract Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002	93.RD 93.RD 93.RD		1,828,291 149,628 521,816 119,491
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract Contract Contract Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890	93.RD 93.RD 93.RD 93.RD		1,828,291 149,628 521,816 119,491 92,660
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-95899	93.RD 93.RD 93.RD 93.RD 93.RD		1,828,291 149,628 521,816 119,491 92,660 82,646
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-95390 200-2017-95890 200-2017-M-95879 75D30118C02645	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD		1,828,291 149,628 521,816 119,491 92,660 82,646 133,426
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	= -	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-95390 200-2017-95390 200-2017-95890 200-2017-95890 75D30118C02645 75D30118P01681 HHSH258201800013C	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD		1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829 12,722
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	= -	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829 12,722 125,728
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681 HHSH258201800013C HHS0100201900015C	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	-	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829 12,722
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681 HHSH258201800013C HHSD100201300015C HHSD1002013000015C	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	-	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829 12,722 125,728 375,000
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681 HHSPL258201800013C HHS0100201900015C HHSN126100006 Mod 6 HHSN26100151	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	-	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829 12,722 125,728 375,000 16
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118C02645 75D30118P01681 HHSN1258201800013C HHSN26100006 Md 6 HHSN26102130000151 HHSN2612018000031 HHSN268201702050A	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	-	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 66,829 12,722 125,728 375,000 16 2,883,026 59,301 199,980
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681 HHSH258201800013C HHS0100201900015C HHSN261201300015C HHSN2612013000151 HHSN2612013000151 HHSN2612013000151 HHSN26201700205A HHSN268201700205A	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	375,000	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829 12,722 125,728 375,000 16 2,883,026 59,301 169,980 2,829,769
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-95890 200-2017-95890 75D30118C02645 75D30118P01681 HHSH258201800013C HHS0100201900015C HHSN2610006 Mod 6 HHSN2612013000051 HHSN2612013000051 HHSN268201800209P HHNS26201800209P HHNS272201300006C HHSN2722013000018	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	375,000	1,828,291 149,628 521,816 521,816 92,660 82,646 133,426 56,829 12,722 125,728 375,000 16 2,883,026 59,301 169,980 2,829,769
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681 HHSH258201800013C HHS0100006 Mod 6 HHSN2612013000151 HHSN2612013000151 HHSN268201700205A HHSN268201700205A HHSN268201700205A HHSN268201700205A HHSN2722013000161 HHSN2722013000161	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	375,000	1,828,291 149,628 521,816 119,491 92,660 82,646 133,426 56,829 12,722 125,728 375,000 16 2,883,026 59,301 169,980 2,829,769 177,122 2,300,698
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-95890 200-2017-95890 200-2017-95890 200-2017-95890 200-2017-95890 75D30118C02645 75D30118P01681 HHSH258201800013C HHS0100201900015C HHSN2612013000151 HHSN2612013000151 HHSN26120130000151 HHSN2612013000051 HHSN262017100205A HHSN262201300006C HHSN272201300006C HHSN2722013000181 HHSN2722013000181	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	375,000 	1,828,291 149,628 521,816 521,816 119,491 92,660 82,646 133,426 56,829 12,722 125,728 375,000 16 2,883,026 59,301 169,980 2,829,769 177,122 2,300,698 4,285,904
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-95890 200-2017-M-95879 75D30118C02645 75D30118P01681 HHSPL258201800013C HHS010001900015C HHSN26100100015C HHSN26120130000151 HHSN26120130000151 HHSN26201700205A HHSN268201700205A HHSN268201700205A HHSN262201300006C HHSN272201300018 HHSN2722013000181 HHSN2722013000181	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	375,000	1,828,291 149,628 521,816 119,491 92,660 82,646 56,829 12,722 125,728 375,000 16 2,883,026 59,301 169,980 2,829,769 177,122 2,300,698 4,285,904 262,581
Pass-through Vanderbilt University Medical Center Pass-through Vanderbilt University Medical Center Total CFDA No. 93.989 Contract	VUMC67443 00HCVJCG-2018-25346 200-2011-41278 200-2017-92309/0002 200-2017-95890 200-2017-95890 200-2017-95890 200-2017-95890 200-2017-95890 200-2017-95890 75D30118C02645 75D30118P01681 HHSH258201800013C HHS0100201900015C HHSN2612013000151 HHSN2612013000151 HHSN26120130000151 HHSN2612013000051 HHSN262017100205A HHSN262201300006C HHSN272201300006C HHSN2722013000181 HHSN2722013000181	93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD 93.RD	375,000 	1,828,291 149,628 521,816 521,816 119,491 92,660 82,646 133,426 56,829 12,722 125,728 375,000 16 2,883,026 59,301 169,980 2,829,769 177,122 2,300,698 4,285,904

Supplementary Schedule of Expenditures of Federal Awards

Year ended August 31, 2019

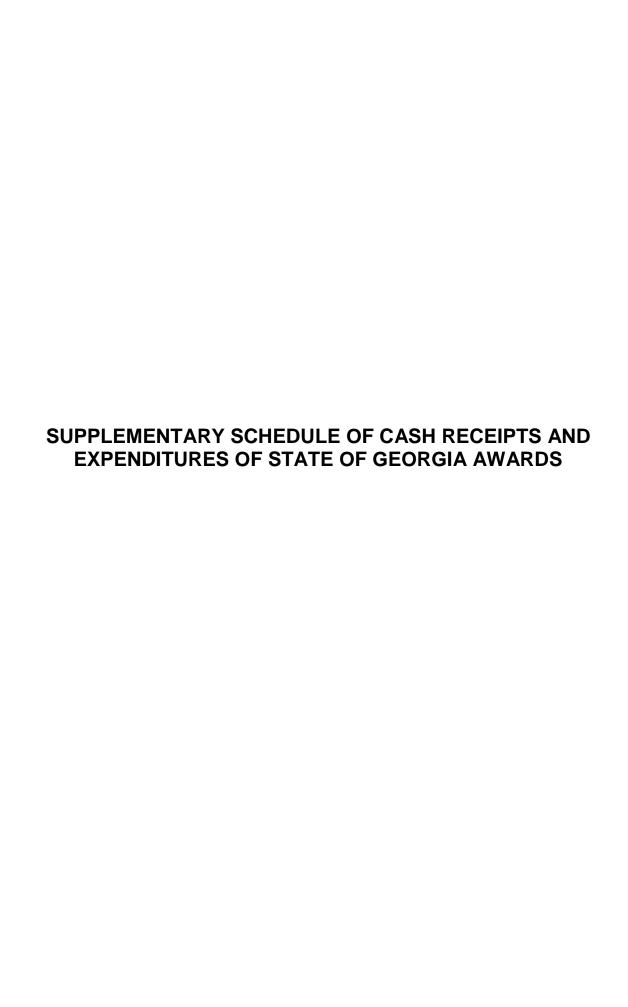
Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Contract	HHSN275201400017C	93.RD	\$ _	3,448
Contract	HHSN275201500001I	93.RD	1,500	118,332
Contract	HHSN312201800027P	93.RD	· –	18,170
Pass-through CDC Foundation	652 and 1051	93.RD	_	204,745
Pass-through Childrens Hospital & Research Center Oak	200-2017-96231	93.RD	_	19,706
Pass-through Georgia Dept of Public Health	40500-032-18182513	93.RD	_	12,460
Pass-through Georgia Dept of Public Health	40500-036-19172240	93.RD	_	45,539
Pass-through Georgia Institute of Technology	200-2017-95889	93.RD	_	7,429
Pass-through Georgia State University	R01HL14205	93.RD	_	13,642
Pass-through Hennepin Healthcare Research Institute	HHSN250201500009C	93.RD	_	16,508
Pass-through Human Sciences Research Council	GH000258	93.RD	_	4,864
Pass-through Leidos Biomedical Research	18Q145-HHSN261201500003I	93.RD	_	202,228
Pass-through Leidos Biomedical Research	HHSN261200800001E	93.RD	1,814	143,070
Pass-through Medical University of South Carolina	3U24NS100655-02S1	93.RD	_	6,805
Pass-through Morehouse School of Medicine	2U54MD007602-31A1	93.RD	_	20,697
Pass-through New England Research Institutes	HHSN268201200001I	93.RD	_	18,688
Pass-through Norc At The University of Chicago	HHSD2002013M53955B	93.RD	_	39,786
Pass-through Norc At The University of Chicago	HHSD2002013M54955B	93.RD	_	40,758
Pass-through Ocean Nanotech	HHSN261201800037C	93.RD	_	226,987
Pass-through Organization of Teratology Information Specialists	U38 OT000199	93.RD	_	61,112
Pass-through Research Support Services Inc	200-2013-57341	93.RD	_	(12,590)
Pass-through Research Support Services Inc	200-2013-57341 Order 4	93.RD	_	4,002
Pass-through Research Support Services Inc	200-2013-57341 Order 5	93.RD	_	17,062
Pass-through Research Triangle Institute	200-2016-92270	93.RD	_	(16,160)
Pass-through Scripps Research Institute	UM1AI100663	93.RD	_	552,325
Pass-through State University of New York Stony Brook	R21AR07157302	93.RD	_	18,770
Pass-through University of Alabama Birmingham	HHSN2722013000121	93.RD	_	12,210
Pass-through University of Alabama Birmingham	HHSN272201300012I/HHSN27200014	93.RD	_	65
Pass-through University of Arkansas For Medical Services	HHSN26100800001E	93.RD	_	23,742
Pass-through University of Arkansas For Medical Services	HHSN261200800001E	93.RD	_	68,072
Pass-through University of Maryland, Baltimore	U01CK000556	93.RD	_	4,367
Pass-through University of Minnesota	ASTWH150031	93.RD	_	133,177
Pass-through University of Minnesota	R01HL131579	93.RD	_	29,607
Pass-through University of North Carolina Chapel Hill	2538	93.RD	_	64,455
Pass-through University of Southern California	HHSF223201400115C	93.RD	_	16,567
Pass-through University of Southern California	HHSF223201810034C	93.RD	_	17,402
Pass-through University of Utah	U01CK000555	93.RD	_	118,040
Pass-through University of Wisconsin-Madison	U01AI102456	93.RD	_	39,600
Pass-through Veterans Medical Research Foundation	688D97020	93.RD		25,456
Total CFDA No. 93.RD			1,861,257	22,025,124
U.S. Department of Health and Human Services Total			62,875,052	417,975,436
U.S. Agency for International Development:	AUD 44 44 4700000	00.004	070.050	4 004 404
USAID Foreign Assistance for Programs Overseas	AID114A1700003	98.001	678,256	1,224,491
Pass-through Intl Aids Vaccine Initiative	AID-OAA-A-16-00032	98.001	1,074,236	1,396,515
Pass-through Natl Academy of Sciences	AID-391-A-17-00001	98.001		53,291
Total CFDA No. 98.001			1,752,492	2,674,297
0			· · · · · · · · · · · · · · · · · · ·	
Cooperative Development Program (CDP):	3AID OAA E 16 00004	98.002		40.000
Pass-through Queensland Institute of Medical Research	2AID-OAA-F-16-00094	96.002		49,893
Total CFDA No. 98.002				49,893
U.S. Agency for International Development Total			1,752,492	2,724,190
Total Research and Development Cluster			71,508,752	458,048,524
Student Financial Assistance Cluster (notes 2 and 3):				
U.S. Department of Education:				
Federal Work Study Program		84.033	_	1,439,124
Federal Supplemental Education Opportunity Grant Program		84.007	_	1,815,016
Federal Pell Grant Program		84.063	_	7,923,658
Federal Direct Stafford Loan Program		84.268	_	79,181,963
Federal Direct PLUS Loan Program		84.268	_	45,903,263
Federal Perkins Loan Program		84.038		9,473,058
Total U.S. Department of Education			_	145,736,082
Total Student Financial Assistance Cluster				145,736,082
LLC Department of Agricultures				
U.S. Department of Agriculture:				
Community Food Projects	2044 22222 2222	40.005		0.074
Pass-through Grady Memorial Hospital	2014-33800-22390	10.225		2,871
Total CFDA No. 10.225			_	2,871
0 :10 1 .18.4% 0 .7.84 17.4 10.71				
Special Supplemental Nutrition Program for Women, Infants, and Children				
Pass-through Georgia Dept of Public Health	40500-041-20161820	10.557		115,633
Total CFDA No. 10.557			_	115,633
U.S. Department of Agriculture Total				118,504
U.S. Department Of Energy:				
Office of Science Financial Assistance Program				
Pass-through Southface Energy Institute	DE-EE0007575	81.049		19,554
Total CFDA No. 81.049				19,554
National Endowment for The Arts and Humanities Total				19,554
U.S. Department of Health and Human Services:				
National Family Caregiver Support, Title III, Part E	/00/04 O 4 D ! !	00.050		7.005
Pass-through Henry M Jackson Foundation	1901GAOAPH	93.052		7,836
Total CFDA No. 93.052			_	7,836

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
Global AIDS Global AIDS Global AIDS	6NU2GGH001815-02-02 NU2GGH001443 NU2GGH001815	93.067 93.067 93.067	\$ 1,690,826	(532) 1,690,826 254,479
Total CFDA No. 93.067	Nozodiloototo	33.007	1,690,826	1,944,773
Birth Defects and Developmental Disabilities – Prevention and Surveillance	6 NU50DD004932-04-01	93.073	1,000,020	460,758
Total CFDA No. 93.073				460,758
Blood Disorder Program: Prevention, Surveillance, and Research Pass-through Hemophilia of Georgia	NU27DD001155	93.080		37,280
Total CFDA No. 93.080				37,280
Prevention of Disease, Disability, and Death by Infectious Diseases	NU38PS004646	93.084	733,341	1,454,556
Total CFDA No. 93.084			733,341	1,454,556
Food and Drug Administration_Research Pass-through Georgia Institute of Technology	R01FD004814 P50FD004193	93.103 93.103	3,471 ———	281,197 9,868
Total CFDA No. 93.103			3,471	291,065
Maternal and Child Health Federal Consolidated Programs Maternal and Child Health Federal Consolidated Programs Pass-through Hemophilia of Georgia	4 H46MC24090-05-02 UH7MC30772-03-00 6H30MC24046-07-01	93.110 93.110 93.110	96,210 —	13,869 626,907 52,500
Total CFDA No. 93.110			96,210	693,276
Project Grants and Cooperative Agreements for Tuberculosis Control Programs Pass-through Georgia Dept of Public Health	40500-046-18151505	93.116		28,211
Total CFDA No. 93.116				28,211
AIDS Education and Training Centers				
Pass-through University of Washington	U1OHA32104	93.145		24,621
Total CFDA No. 93.145				24,621
Health Program for Toxic Substances and Disease Registry: Pass-through Amer Academy of Pediatrics Pass-through Amer Academy of Pediatrics	NU61TS000237 U61TS000237	93.161 93.161		245,934 388
Total CFDA No. 93.161				246,322
Disabilities Prevention: Pass-through Georgia State University	U58DD001138	93.184	_	103,623
Total CFDA No. 93.184				103,623
Centers for Disease Control and Prevention_Investigations and Technical Assistance	HHSD200201691959C	93.283	19,600	28,004
Pass-through Association of American Medical Colleges Pass-through Fdtn For Atlanta Veterans Educ and Res	U360E000004 40500-036-18182166	93.283 93.283	6,129 —	7,067 (23)
Total CFDA No. 93.283			25,729	35,048
Sickle Cell Treatment Demonstration Program Pass-through Carolinas Healthcare System	1UEMC31108-01-00	93.365		86,350
Total CFDA No. 93.365				86,350
Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health Pass-through CDC Foundation	4001.01.01.04	93.421	_	70,014
Total CFDA No. 93.421	4001.01.01.04	33.421		70,014
Improving the Health of Americans through Prevention and Management of Diabetes and Heart				70,014
Disease and Stroke	00.40.400/0004.40400	00.400		05.000
Pass-through Alabama Department of Public Health Pass-through Colorado Department of Public Health & Environment	GC-19-199/C901 16126 1 NU58DP006553-01-00	93.426 93.426	_	35,922 6,764
Pass-through Tennessee Department of Health	34347-61319	93.426		21,867
Total CFDA No. 93.365				64,553
Children's Justice Grants to States: Pass-through Georgia Department of Human Services	42700-040-0000068299	93.643		1,436
Total CFDA No. 93.643				1,436
Diabetes Prevention – State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart				
Pass-through South Carolina Dept of Hlth and Env Ctrl	U5DP005490	93.757		13,594
Total CFDA No. 93.757				13,594
Preventive Health and Health Services Block Grant funded solely with Prevention and Public Health Funds (PPHF) Pass-through State of New Hampshire	SS-2017-DPHS-14-Life	93.758	_	(114)
Total CFDA No. 93.758	SO EST. SETTO 14 ENG	55.750		(114)
Medical Assistance Program				(114)
Pass-through Georgia Department of Behavioral Health Total CFDA No. 93.778	44100-907-0000099734	93.778		553,942
				553,942
Hospital Preparedness Program (HPP) Ebola Preparedness and Response Activities Pass-through Georgia Dept of Public Health	40500-033-16161809	93.817	100,026	561,616
Total CFDA No. 93.817			100,026	561,616

Supplementary Schedule of Expenditures of Federal Awards Year ended August 31, 2019

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number	Passed through to subrecipients	Federal expenditures
HIV Emergency Relief Project Grants	/wara namboi		- Cabi Colpionio	
Pass-through Fulton County	2H9HA00007-28-00	93.914	s –	646,646
Pass-through Fulton County	6 H89HA00007-26-01	93.914	_	303,076
Total CFDA No. 93.914				949,722
Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease	H76HA07848-13-00	93.918		719,619
Total CFDA No. 93.918				719,619
Cooperative Agreements to Support State-Based Safe Motherhood and Infant Health Initiative	5 U01 DP003894-05	93.946	24,782	77,129
Total CFDA No. 93.946			24,782	77,129
Block Grants for Prevention and Treatment of Substance Abuse				
Pass-through Georgia Dept of Behavioral Health	44100-906-0000118070	93.959	_	458,236
Pass-through Georgia Dept of Behavioral Health	44100-907-0000100119	93.959		79,434
Total CFDA No. 93.959				537,670
Contract	1891136	93.CTR	_	24,154
Contract	1990029	93.CTR	_	4,961
Contract	200-2012-51332	93.CTR	_	100,798
Contract	200-2015-87862 00007	93.CTR	_	1,094,214
Contract	PO # 200-2017-M-95264	93.CTR	_	59,222
Pass-through American Thrombosis and Hemostasis Network	UC8MC2409	93.CTR	_	36,423
Pass-through Arkansas Dept of Health	PO NO. 4501887937	93.CTR	_	5,491
Pass-through Assoc For Prevention Teaching and Research	18-16-TH01	93.CTR	_	118,034
Pass-through Assoc of State & Territorial Dental Directors	ASTDD072215/AMND 3	93.CTR	_	9,705
Pass-through Atlanta Regional Commission	42700-373-0000060323	93.CTR	_	29,305
Pass-through Georgia Department of Community Health	2017001	93.CTR	_	226,859
Pass-through Georgia Dept of Public Health	40500-036-19161798	93.CTR	_	83,172
Pass-through Georgia Dept of Public Health	40500-036-20161798	93.CTR	_	13,301
Pass-through Natl Network of Public Health Institutes	NU1ROT000004	93.CTR	_	173,010
Pass-through North Carolina Dept of HIth and Human Services	PO #NC10528502	93.CTR	_	3,134
Pass-through Northwestern University	HHSF223201510126C GS-10F-0097L	93.CTR 93.CTR	_	19,438
Pass-through RTI International Pass-through South Dakota Department of Health	HHSI241201700586P	93.CTR 93.CTR	_	5,790 5.927
Pass-through State of New Hampshire	NB01OT009098	93.CTR 93.CTR	_	2,746
Pass-through University of Southern California	HHSF223201400115C	93.CTR	_	11,342
Total CFDA No. 93.CTR	11131 2232014001130	93.011		2,027,026
U.S. Department of Health And Human Services Total			2,674,385	10,989,926
Total Expenditures of Federal Awards				.0,000,020

See accompanying notes to Supplementary Schedule of Expenditures of Federal Awards and Schedule of Cash Receipts and Expenditures of State of Georgia Awards.



Supplementary Schedule of Cash Receipts and Expenditures of State of Georgia Awards

Year ended August 31, 2019

State of Georgia contract number	State of Georgia Agency	Program title		Cash receipts	Expenditures
2017001	GEORGIA DEPARTMENT OF COMMUNITY HEALTH	Evaluation Services for the Planning for Healthy Babies Family Planning Waiver Program	\$	1,123,236	226,858
40500-032-18182513	GEORGIA DEPT OF PUBLIC HEALTH	Georgia Department of Public Health Contract for Services 2017		45,750	12,460
40500-033-16161809	GEORGIA DEPT OF PUBLIC HEALTH	Hospital Preparedness Program (HPP) Ebola Preparedness and Response Activities		806,714	561,616
40500-036-15110270	GEORGIA DEPT OF PUBLIC HEALTH	Operation of the Statewide Georgia Comprehensive Cancer Registry		3,432,391	621,188
40500-036-19161798	GEORGIA DEPT OF PUBLIC HEALTH	Georgia Coverdell Acute Stroke Registry		67,510	83,172
40500-036-19172240	GEORGIA DEPT OF PUBLIC HEALTH	Innovative Prevention Project		50,000	45,539
40500-041-20161820	GEORGIA DEPT OF PUBLIC HEALTH	Medical Foods For WIC Participants With Positive Inborn Errors of Metabolic Disorder		172,075	· –
40500-046-18151505	GEORGIA DEPT OF PUBLIC HEALTH	Georgia Department of Public Health – Blumberg 2017		26,960	28,211
42700-040-0000068299	GEORGIA DEPARTMENT OF HUMAN SERVICES	2018 Summer Child Advocacy Program		60,916	1,436
42700-040-0000072848	GEORGIA DEPARTMENT OF HUMAN SERVICES	2019 Summer Child Advocacy Program		29,341	71,942
44100-906-0000118070	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Fetal Alcohol and Drug Screening project: MASCD		374,994	458,236
44100-907-0000099734	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Emory Neuro Developmental Exposure Clinic		760,000	206,511
44100-907-0000100119	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Fetal Alcohol and Drug Screening project: MASCD		83,331	79,434
6H89HA00007-26-01	FULTON COUNTY	17RW2018A-MH, FY 18 Ryan White Part A		221,280	290,380
PO 118018C112874B-RD	FULTON COUNTY	17RW2018A-MH, FY 18 Ryan White Part A	_	640,813	646,646
			\$	7,895,311	3,333,629

See accompanying notes to Supplementary Schedule of Expenditures of Federal Awards and Schedule of Cash Receipts and Expenditures of State of Georgia Awards.

Notes to Supplementary Schedules of Expenditures of Federal Awards and Cash Receipts and Expenditures of State of Georgia Awards

Year ended August 31, 2019

(1) Summary of Significant Accounting Policies

The accompanying supplementary schedule of expenditures of federal awards (the Schedule) includes the federal grant activity of Emory University and its Subsidiaries (the University) and is presented on the accrual basis of accounting. The Schedule presents all grants, contracts and similar agreements entered into directly between agencies and departments of the federal government and subawards to the University from nonfederal organizations pursuant to federal grants, contracts and similar agreements. The schedule also presents awards passed through from the University to other nonfederal subrecipient organizations. The information in the Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Therefore, some amounts presented in the Schedule may differ from amounts presented in, or used in the preparation of, the consolidated financial statements.

The accompanying supplementary schedule of cash receipts and expenditures of State of Georgia awards includes expenditures incurred (i.e., on an accrual basis) by the University and grant revenues received from State of Georgia agencies under various state contracts.

Negative balances represent programs with unfunded expenditures prior to normal closeout procedures, which were subsequently transferred to unrestricted cost centers.

(2) Noncash Federal Assistance

Most federal financial assistance is in the form of cash awards. However, there are a number of federal programs that do not involve cash transactions with the University. These noncash transactions in which the University obtains other assistance are the Federal Direct Student Loan Program (FDSLP) and revolving loan programs, such as the Federal Perkins Loan Program.

The loans advanced and related expenditures are as follows for the various student loan programs:

	CFDA		
_	number		Amount
Federal Direct Student Loan Programs: Student loans advanced:			
Subsidized Stafford Loan Program	84.268	\$	8,963,636
Unsubsidized Stafford Loan Program	84.268	_	70,218,327
Total Direct Stafford Loan Program			79,181,963
Federal Direct PLUS Loan Program	84.268	_	45,903,263
Total Direct Student Loan Programs		\$_	125,085,226

68 (Continued)

Notes to Supplementary Schedules of Expenditures of Federal Awards and Cash Receipts and Expenditures of State of Georgia Awards

Year ended August 31, 2019

The Federal Perkins Loan Program is administered directly by the University and balances and transactions relating to this program are included in the University's consolidated financial statements. The amount presented on the Schedule represents the Federal Perkins loans outstanding as of August 31, 2018. Federal Perkins loans outstanding at August 31, 2019 totaled \$7,497,009.

The University is responsible for the performance of certain administrative duties with respect to the FDSLP loan program. It is not practicable to determine the balance of loans outstanding to students and former students of the University under this program as of August 31, 2019. These loans are not included in the University's consolidated financial statements.

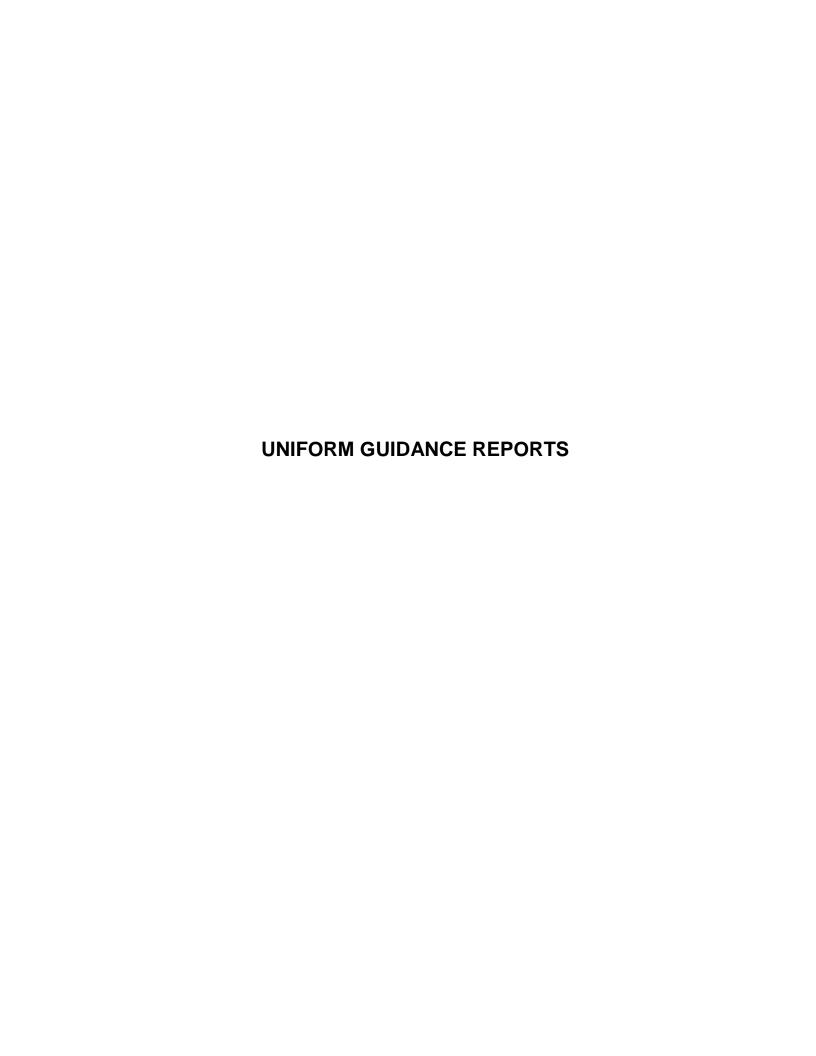
(3) Matching

Under the Federal Supplemental Educational Opportunity Grant program, the University matched \$453,755 in funds awarded to students for the year ended August 31, 2019 in addition to the federal share of expenditures included in the Schedule.

Under the Federal Work Study program, the University matched \$431,737 in total compensation to students for the year ended August 31, 2019 in addition to the federal share of expenditures included in the Schedule.

(4) Indirect Costs

For the year ended August 31, 2019, the University did not elect to use the 10% de minimis Indirect Cost Rate permitted by the Uniform Guidance.





KPMG LLP Suite 2000 303 Peachtree Street, N.E. Atlanta, GA 30308-3210

Independent Auditors' Report on Compliance for Major Program; Report on Internal Control Over Compliance; and Report on Supplementary Schedule of Expenditures of Federal Awards Required by the Uniform Guidance and Supplementary Schedule of Cash Receipts and Expenditures of State of Georgia Awards

The Board of Trustees Emory University:

Report on Compliance for Major Federal Program

We have audited Emory University's compliance with the types of compliance requirements described in the OMB Compliance Supplement that could have a direct and material effect on Emory University's major federal program for the year ended August 31, 2019. Emory University's major federal program is identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

Management 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 Emory University's major federal program 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 the Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (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 Emory University's compliance with those requirements and performing such other procedures as we consider necessary in the circumstances.

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

Opinion on Major Federal Program

In our opinion, Emory University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended August 31, 2019.



Report on Internal Control Over Compliance

Management of Emory 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 Emory University's internal control over compliance with the types of requirements that could have a direct and material effect on Emory University's major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for Emory University's 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 Emory 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, or 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.



Report on Supplementary Schedules of Expenditures of Federal Awards Required by the Uniform Guidance and Cash Receipts and Expenditures of State of Georgia Awards

We have audited the consolidated financial statements of Emory University and subsidiaries as of and for the year ended August 31, 2019, and have issued our report thereon dated December 19, 2019, which contained an unmodified opinion on those consolidated financial statements. Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying supplementary schedules of expenditures of federal awards and cash receipts and expenditures of State of Georgia awards are presented for purposes of additional analysis as required by the Uniform Guidance and the State of Georgia, respectively, and is not a required part of the consolidated financial statements. Such 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 supplementary schedules of expenditures of federal awards and schedule of cash receipts and expenditures of State of Georgia awards are fairly stated, in all material respects, in relation to the consolidated financial statements as a whole.

KPMG LLP

Atlanta, Georgia March 3, 2020

Schedule of Findings and Questioned Costs Year ended August 31, 2019

(1) Summary of Auditors' Results

- (a) The type of auditors' report issued on whether the consolidated financial statements were prepared in accordance with U.S. generally accepted accounting principles: **Unmodified**
- (b) Internal control deficiencies over financial reporting disclosed by the audit of the consolidated financial statements:
 - Material weaknesses: No
 - Significant deficiencies: None reported
- (c) Noncompliance which is material to the consolidated financial statements: No
- (d) Internal control deficiencies over major program disclosed by the audit:
 - Material weaknesses: No
 - Significant deficiencies: None reported
- (e) Type of auditors' report issued on compliance for major program: Unmodified
- (f) Audit findings which are required to be reported under 2 CFR 200.516(a): None
- (g) Major program: Research and Development Cluster (various CFDA numbers)
- (h) Dollar threshold used to distinguish between Type A and Type B programs: \$3,000,000
- (i) Auditee qualified as a low-risk auditee: Yes
- (2) Findings Relating to the Consolidated Financial Statements Reported in Accordance with Government Auditing Standards

None.

(3) Findings and Questioned Costs Relating to Federal Awards

None.

Summary Schedule of Prior Audit Findings

Finding No. 2018-001

Enrollment Reporting Federal Program:

Student Financial Assistance Cluster

CFDA Numbers:

84.033; 84.007; 84.063; 84.268; 84.038

Federal Agency:

U.S. Department of Education

Federal Award Year:

July 1, 2017 to June 30, 2018

Planned Corrective Action:

At the mid-point of each semester the Office of the University Registrar (OUR) will send a notice to all Registrar Liaisons requesting a list of all students who are likely unofficial drops due to lack of significant academic activity. Liaisons will prepare information which will include an effective date on applicable students and submit it through the prescribed workflow system on a mandatory deadline, which will be defined as the determining date of status change for reporting this information to the NSC. The new methodology will employ more immediate notification of the minimally required info to process the required status change within the prescribed reporting period.

These process changes will be communicated by the Office of the University Registrar to all Registrar Liaisons via email and then reiterated in the next school liaison meeting, which will occur on May 31. These communications will highlight the University's expectation and commitment to receiving these initial notifications from the departments within 5 business days. Likewise, the Office of the University Registrar will adjust production schedules to allow processing of NSC updates within 5 days of department notification. The aforementioned corrective action should ensure timely reporting to the NSLDS.

Status:

Corrective action was taken in the spring semester of 2019. The corrective action was not made prior to the spring semester due to the timing of finding the issue.



Finding No. 2018-002

Reporting – Pell Disbursements Federal Program:

Student Financial Assistance Cluster

CFDA Number:

84.063

Federal Agency:

U.S. Department of Education

Federal Award Year:

July 1, 2017 to June 30, 2018

Planned Corrective Action:

The annual cost of attendance (COA) for Emory schools exceeds \$50,000. Delivered logic within PeopleSoft combined with standard operational practices created instances where a student's COA calculated an annual, 2 semester, Pell COA rather than a semester, Pell COA. As a result, subsequent reporting looks to have COA 3 times the allowable amount, and therefore the disbursement record rejects. To resolve this problem, the Office of Financial Aid made two changes. First, a systematic process was created to build fall and spring semester COAs at the same time. Secondly, as part of a system upgrade to Oracle 9.2 security access was removed to prevent advising staff from building a semester COA. These two changes have eliminated the possibility of having an annual Pell COA reject at COD. Further, rather than solely relying on one staff member to monitor Pell reporting several staff members will be reviewing reporting rejects twice a week.

Status:

Corrective action was taken in the spring semester of 2019. The corrective action was not made prior to the spring semester due to the timing of finding the issue.