

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

Year ended August 31, 2016

## **Table of Contents**

	Page(s)
Independent Auditors' Report	1–2
Consolidated Financial Statements and Supplementary Schedules – Years ended August 31, 2016 and 2015	3–51
Supplementary Schedule of Expenditures of Federal Awards – Year ended August 31, 2016	52–78
Supplementary Schedule of Cash Receipts and Expenditures of State of Georgia Awards – Year ended August 31, 2016	79
Notes to Supplementary Schedules of Expenditures of Federal Awards and Cash Receipts and Expenditures of State of Georgia Awards	80–81
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 <i>Government Auditing Standards</i>	82–83
Independent Auditors' Report on Compliance for Each 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	84–86
Schedule of Findings and Questioned Costs	87



**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 subsidiaries (Emory University), which comprise the consolidated statements of financial position as of August 31, 2016 and 2015, 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 as of August 31, 2016 and 2015, and the changes in its net assets and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



#### Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplementary information included in Schedules 1 through 3 is presented for purposes of additional analysis 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 information is fairly stated, in all material respects, in relation to the consolidated financial statements as a whole.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 20, 2016 on our consideration of Emory 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 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 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 Emory University's internal control over financial reporting and compliance.



December 20, 2016

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

August 31, 2016 and August 31, 2015

(Dollars in thousands)

	August 31, 2016			Au	gust 31, 2015
ASSETS:			-		
Cash and cash equivalents	\$	492,549		\$	607,163
Patient accounts receivable, net		375,966			367,433
Student accounts receivable, net		47,972			46,715
Loans receivable, net		26,672			28,411
Contributions receivable, net		99,674			92,724
Other receivables, net		239,858			241,639
Prepaid expenses, deferred charges and other assets		348,058			256,160
Investments		6,917,239			6,842,183
Interests in perpetual funds held by others		1,170,348			1,071,531
Property and equipment, net		3,009,906	_		2,883,412
Total assets	\$	12,728,242	=	\$	12,437,371
LIABILITIES AND NET ASSETS:					
Accounts payable and accrued liabilities	\$	538,509		\$	473,188
Deferred tuition and other revenue		468,813			440,272
Interest payable		28,307			28,955
Liability for derivative instruments		268,735			176,791
Bonds, notes and mortgages payable		1,862,330			1,906,377
Accrued liabilities for benefit obligations and professional liabilities		595,466			515,625
Funds held in trust for others		665,215			645,996
Annuities payable		15,579			17,073
Government advances for federal loan programs		18,724	-		17,834
Total liabilities		4,461,678			4,222,111
Unrestricted net assets:					
Net assets controlled by Emory		3,537,370			3,428,363
Net assets related to noncontrolling interests		81,273	_		78,344
Total unrestricted net assets		3,618,643	-		3,506,707
Temporarily restricted net assets		2,602,814			2,807,376
Permanently restricted net assets		2,045,107	-		1,901,177
Total net assets		8,266,564	-		8,215,260
Total liabilities and net assets	\$	12,728,242	=	\$	12,437,371

## CONSOLIDATED STATEMENT OF ACTIVITIES

Year Ended August 31, 2016 (with summarized financial information for the year ended 2015)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total August 31, 2016	Total August 31, 2015
OPERATING REVENUES:	Circstricted	Restricted	Restricted	August 51, 2010	August 51, 2015
Tuition and fees	\$ 640,025	_	_	\$ 640,025	\$ 617,826
Less: Scholarship allowances	(232,208)	_	_	(232,208)	(221,694)
Net tuition and fees	407,817	_		407,817	396,132
Endowment spending distribution	172,261	_	_	172,261	165,880
Distribution from perpetual funds	33,199	_	_	33,199	32,490
Other investment income designated for current operations	57,499	_	_	57,499	41,266
Gifts and contributions	51,849	_	_	51,849	49,520
Grants and contracts	400,030	_	_	400,030	372,791
Indirect cost recoveries	122,148	_	_	122,148	113,945
Net patient service revenue	2,935,464	_	_	2,935,464	2,706,682
Medical services	273,896			273,896	267,327
Sales and services of auxiliary enterprises	72,688		_	72,688	71,743
Independent operations	23,440			23,440	22,006
Other revenue	153,580			153,580	167,254
Net assets released from restrictions	39,469	(8,074)	-	31,395	6,341
Total operating revenues	4,743,340	(8,074)	_	4,735,266	4,413,377
OPERATING EXPENSES:	2.077.002			2.075.002	2 (07 250
Salaries and fringe benefits	2,875,003	-	-	2,875,003	2,687,359
Student financial aid	14,774	-	-	14,774	11,699
Professional fees and purchased services	463,513	-	-	463,513	408,839
Supplies and pharmaceuticals	712,016	-	-	712,016	657,482
Other operating expenses	285,720	-	-	285,720	275,563
Interest on indebtedness	78,487	-	-	78,487	79,490
Depreciation	237,857	-	-	237,857	232,401
Total operating expenses	4,667,370	-	-	4,667,370	4,352,833
NET OPERATING REVENUES/(EXPENSES):	75,970	(8,074)	-	67,896	60,544
NONOPERATING ACTIVITIES:					
Investment return (less than) in excess of spending distribution					
for current operations	50,785	(89,420)	926	(37,709)	(305,807)
Change in undistributed income from perpetual funds held by others		-	98,817	98,817	(58,532)
Gifts and contributions	2,098	40,862	44,250	87,210	62,965
(Loss) on disposal of property and equipment	(3,678)			(3,678)	(4,230)
Change in fair value of derivative instruments	(91,944)	_	_	(91,944)	(26,296)
Pension and postretirement benefit plans	(45,712)	_	_	(45,712)	(23,064)
Other nonoperating items, net	7,290	592	(63)	7,819	20,335
Net assets released from restrictions	117,127	(148,522)	(03)	(31,395)	(6,341)
	•	<u> </u>	142 020		
Total nonoperating activities	35,966	(196,488)	143,930	(16,592)	(340,970)
CHANGE IN NET ASSETS	111,936	(204,562)	143,930	51,304	(280,426)
Less change in net assets related to noncontrolling interests	2,929	-	-	2,929	11,764
CHANGE IN NET ASSETS CONTROLLED BY EMORY	\$ 109,007	\$ (204,562)	\$ 143,930	\$ 48,375	\$ (292,190)

## CONSOLIDATED STATEMENT OF ACTIVITIES

Year ended August 31, 2015

(Dollars in thousands)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total August 31, 2015
OPERATING REVENUES:				
Tuition and fees	\$ 617,826	-	-	\$ 617,826
Less: Scholarship allowances	(221,694)			(221,694)
Net tuition and fees	396,132	-	=	396,132
Endowment spending distribution	165,880	-	-	165,880
Distribution from perpetual funds	32,490	-	-	32,490
Other investment income designated for current operations	41,266	-	-	41,266
Gifts and contributions	49,520	-	-	49,520
Grants and contracts	372,791	-	-	372,791
Indirect cost recoveries	113,945	-	-	113,945
Net patient service revenue	2,706,682	-	-	2,706,682
Medical services	267,327	-	-	267,327
Sales and services of auxiliary enterprises	71,743	-	-	71,743
Independent operations	22,006	-	-	22,006
Other revenue	167,254	-	-	167,254
Net assets released from restrictions	11,371	(5,030)		6,341
Total operating revenues	4,418,407	(5,030)		4,413,377
OPERATING EXPENSES:				
Salaries and fringe benefits	2,687,359	_	-	2,687,359
Student financial aid	11,699	_	-	11,699
Professional fees and purchased services	408,839	_	-	408,839
Supplies and pharmaceuticals	657,482	_	-	657,482
Other operating expenses	275,563	_	-	275,563
Interest on indebtedness	79,490	_	-	79,490
Depreciation	232,401			232,401
Total operating expenses	4,352,833			4,352,833
NET OPERATING REVENUES/(EXPENSES):	65,574	(5,030)		60,544
NONOPERATING ACTIVITIES:				
Investment return (less than) in excess of spending distribution				
for current operations	(136,661)	(171,080)	1,934	(305,807)
Change in undistributed income from perpetual funds held by others	-	- -	(58,532)	(58,532)
Gifts and contributions	552	21,978	40,435	62,965
Gain (Loss) on disposal of property and equipment	(4,230)	-	-	(4,230)
Change in fair value of derivative instruments	(26,296)	-	-	(26,296)
Pension and postretirement benefit plans	(23,064)	-	-	(23,064)
Other nonoperating items, net	21,657	(1,114)	(208)	20,335
Net assets released from restrictions	36,298	(42,639)	-	(6,341)
Total nonoperating activities	(131,744)	(192,855)	(16,371)	(340,970)
CHANGE IN NET ASSETS	(66,170)	(197,885)	(16,371)	(280,426)
Less change in net assets related to noncontrolling interests	11,764	-	-	11,764
CHANGE IN NET ASSETS CONTROLLED BY EMORY	\$ (77,934)	\$ (197,885)	\$ (16,371)	\$ (292,190)

## **EMORY UNIVERSITY** CONSOLIDATED STATEMENTS OF CASH FLOWS Years Ended August 31, 2016 and 2015

(Dollars in thousands)

CASH FLOWS FROM OPERATING ACTIVITIES:	<u>20</u>	<u>16</u>		<u>2015</u>
Change in net assets	\$	51,304	\$	(280,426)
Adjustments to reconcile change in net assets to net cash				
provided by operating activities:				
Capital contributions from noncontrolling interests		3,587		(13,677)
Gifts and contributions for endowment and capital projects		(29,902)		3,794
Net realized gains on sale of investments	(	101,009)		(281,593)
Net unrealized (gains) loss on investments		(20,769)		437,738
Loss on disposal of property and equipment		3,678		4,230
Interests in perpetual funds held by others		(98,817)		58,532
Depreciation and amortization		237,857		231,744
Provision for uncollectible patients accounts receivable		183,518		189,154
Accretion/amortization of bond discounts/premiums and issuance costs		(1,798)		(1,878)
Actuarial adjustments for retiree pension and benefit plans		45,712		23,064
Change in fair value of derivative instruments		91,944		26,296
Gifts of securities and other assets		-		(7,910)
Decrease (increase) in operating assets:				
Accounts and other receivables, net	(	191,527)		(211,359)
Contributions receivable for operations		10,600		(10,068)
Prepaid expenses, deferred charges and other assets		(24,326)		(15,293)
Increase in operating liabilities:				
Accounts payable, accrued liabilities and interest payable		48,374		40,268
Accrued liabilities for benefit obligations and professional liabilities		34,129		36,114
Deferred tuition and other revenue		28,541		13,611
Net cash provided by operating activities		271,096		242,341
CASH FLOWS FROM INVESTING ACTIVITIES:				
Disbursements for loans to students		(3,226)		(4,863)
Repayment of loans from students		4,965		4,919
Proceeds from sales and maturities of investments		900,249		22,494,607
Purchases of investments		853,527)	(	(22,453,709)
Purchases of property, plant and equipment	(.	351,730)		(252,240)
Increase in funds held in trust for others		19,219		2,094
Net cash used in investing activities	(2	284,050)		(209,192)
				(G

(Continued)

## EMORY UNIVERSITY CONSOLIDATED STATEMENTS OF CASH FLOWS

Years Ended August 31, 2016 and 2015

(Dollars in thousands)

	<u>2016</u>	<u>2015</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Gifts and contributions for endowment and capital projects	12,352	49,218
Principal repayments of bonds and mortgages payable	(42,249)	(38,713)
Required posting of collateral for debt related derivatives	(67,572)	(6,700)
Decrease in annuities payable	(1,494)	(748)
Increase in government advances for federal loan programs	890	32
Capital (distributions to) contributions from noncontrolling interests	 (3,587)	 13,677
Net cash (used in) provided by financing activities	 (101,660)	 16,766
Net (decrease) increase in cash and cash equivalents	(114,614)	49,915
Cash and cash equivalents at beginning of year	 607,163	557,248
Cash and cash equivalents at end of year	\$ 492,549	\$ 607,163
Supplemental disclosure:		
Cash paid for interest	\$ 81,799	\$ 82,769
Change in accrued liabilities attributable to property, plant and equipment purchases	16,299	15,223
Income taxes paid, net	1,760	368
Pledge payments received in form of securities and immediately sold	33,756	28,000

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

## (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 7,800 undergraduate students and 6,700 graduate and professional students within its nine schools and colleges. Included within the University is the Emory Healthcare system, Emory Medical Care Foundation (EMCF) and Emory Innovations, LLC.

The Emory Healthcare system (Emory Healthcare) consists of Emory Healthcare, Inc. (EHC), Emory University Hospital Midtown (EUHM), Emory University Hospital (EUH), Emory Johns Creek Hospital (EJCH), Emory Saint Joseph's Hospital (ESJH), Saint Joseph's Translational Research Institute (SJTRI) d/b/a T3 Laboratories (T3) (sold in 2016), 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), Emory Rehabilitation Hospital (ERH) and Clifton Casualty Insurance Company, Ltd. (CCIC).

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

EUH, EUHM, EJCH and ESJH are sometimes referred to herein, collectively, as "the Hospitals."

#### (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 revenues, 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:

*Unrestricted Net Assets* – Net assets that are not subject to donor imposed stipulations. Certain unrestricted net assets are designated for specific purposes or uses under various internal operating and administrative arrangements of the University.

*Temporarily Restricted Net Assets* – Net assets that are subject to donor imposed stipulations that will be met either by actions of the University and/or the passage of time.

*Permanently Restricted Net Assets* – Net assets that are subject to donor imposed restrictions that the University maintains permanently. 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.

Revenues are reported as increases in unrestricted net assets unless their use is limited by donor-imposed restrictions. Expenses are reported as decreases in unrestricted net assets. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in unrestricted net assets unless their use

## Notes to Consolidated Financial Statements August 31, 2016 and 2015

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 between the applicable classes of net assets.

Income and realized and unrealized gains on investments of permanently donor-restricted endowment net assets are reported as follows:

- As increases in permanently restricted net assets if the terms of the gift require that they be added to the principal of a permanent endowment fund.
- As increases in temporarily restricted net assets until appropriated for expenditure by the University and/or donor restrictions are met.

Revenues earned, expenses incurred, and returns made available for the University's operating purposes of teaching, research, patient care, and other programs and services are components of the net operating revenues/expenses presented in the consolidated statement of activities. The University considers the following items to be nonoperating: gifts and contributions for capital and long-term investment and the related net assets released from restriction, investment return in excess of or less than spending distribution for current operations, actuarial gain or loss on annuity obligations, unrealized gain or loss on interest rate swaps, pension and postretirement related changes other than net periodic cost, gain or loss from affiliates (equity method), and other, net.

#### (a) Cash Equivalents

Cash equivalents consist primarily of short-term money market mutual funds and treasury bills with original maturities of 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 are shown within investments as those funds generally are not used for daily operating purposes.

#### (b) Contributions Receivable

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 a risk-adjusted rate. Amortization of discounts is recorded as additional contribution revenue. An allowance for uncollectible contributions receivable is provided based upon 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 governmental 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 financial statements, loans to qualified students are funded principally with government advances to Emory under the Perkins, Nursing and Health Professions Student Loan Programs.

Notes to Consolidated Financial Statements August 31, 2016 and 2015

#### (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 include U.S. and non-U.S. equities and fixed income instruments, both publicly traded and privately held. Fair value for these investments is measured based upon quoted prices in active markets, if available. If the market is inactive, fair value is determined by underlying managers and reviewed by the University after considering various sources of information. Due to variations in trading volumes and the lack of quoted market prices for fixed income, the fair value of fixed income is normally derived through recent reported trades for identical or similar securities, making adjustments through the reporting date based upon available market observable data described above.

Investments in funds primarily include investments in commingled equity and fixed income funds and other investments in funds (hedged strategies, private market investments, real estate partnerships and natural resources) and are reported at fair value as determined by the University in accordance with the University's valuation policies and procedures. The University has estimated the fair value of the majority of its investments in investment funds on the basis of 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 NAV has been calculated by the fund manager as of the University's fiscal year end date. If the reported NAV is not as of the University's fiscal year end date or is not fair value based, the University will adjust the NAV, if deemed necessary. If the University determines it is not practicable to calculate an adjusted NAV as of the University's fiscal year end date, the practical expedient will not be utilized and other valuation methodologies will be used. Typically, real estate partnerships and similar funds are valued based on appraisals of underlying properties held and conducted by third party appraisers retained by the general partner or investment manager. General partners of oil and gas partnerships also use third party appraisers to value properties. 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, 2016 and 2015.

The University's investments in investment funds are subject to the terms of the respective funds' agreements, private placement memoranda, and other governing agreements of such funds. These terms are typical for hedge fund and private equity arrangements. The University's investments are also subject to management and performance fees as specified in such funds' agreements. Additionally, such funds in which the University invests may restrict both the transferability of the University's interest and the University's ability to withdraw. In light of such restrictions imposed, an investment in these funds is illiquid and subject to liquidity risk.

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. Realized gains and losses are determined by the specific identification method for investments in investment funds and average

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

cost for investments in securities. Additionally, gains and losses from realized and unrealized changes in the fair value of investments are reported in the consolidated statements of activities, as increases or decreases in unrestricted net assets, if there are no donor restrictions, or in temporarily restricted net assets, until amounts have been appropriated and the donor-imposed time restrictions have elapsed.

#### (f) Fair Value Measurements

Fair value measurements reflected in the consolidated financial statements conceptually represent the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between 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.

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.

The majority of the University's investments are held through limited partnerships and commingled funds, for which fair value is estimated using the NAVs reported by the investment managers as a practical expedient. Such investments have not been categorized within the fair value hierarchy.

#### (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 revenues are 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.

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

## (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 consists primarily of shares of common stock of The Coca-Cola Company. The carrying value of Emory's interest is adjusted annually for changes in fair value. The fair value of these perpetual funds is recorded in the consolidated statements of financial position on August 31, 2016 and 2015 at \$1,170.3 million and \$1,071.5 million, respectively.

### (i) Property and Equipment

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; moveable equipment – 3 to 20 years; fixed equipment – 3 to 30 years; software and enterprise systems – 5 to 10 years; leasehold improvements – term of the lease; and library books – 10 years. Certain assets totaling \$93.1 million and \$90.0 million, such as art, museum assets and rare books, are included in property and equipment on August 31, 2016 and August 31, 2015, respectively, but are not depreciated.

### (j) Tuition and Fees

Tuition and fee revenues are recognized in the fiscal year during which the academic services are rendered. Student tuition and fees received in advance of services to be rendered are reported as deferred revenue. Student aid provided by the University for tuition and fees is reflected as a reduction of gross tuition and fee revenue.

#### (k) Contributions Revenue

Contributions, including unconditional promises to give, are recognized as revenues in the period received. Contributions restricted for capital projects, endowment funds, and contributions under split-interest agreements or perpetual funds held by others are reported as nonoperating revenue. All other contributions are recorded as operating revenues. Unconditional promises to give, with payments due in future periods, are recorded as increases in temporarily or permanently restricted assets at the estimated present value of future cash flows, net of an allowance for uncollectible pledges.

Donor-restricted contributions are reported as temporarily restricted or permanently restricted revenue that increases those net asset classes. Expirations of temporary 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 temporarily restricted net assets to unrestricted net assets. If the donor stipulation for a temporarily restricted contribution is met in the year of the gift, the contribution is reflected in the unrestricted net asset class. Temporary 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 conditions on which they depend are met.

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

#### (1) Grants and Contracts Revenue and Indirect Cost Recoveries

Indirect cost recoveries and grants and contracts revenue are reported at the estimated net realizable amounts due from sponsoring agencies. These grants and contract awards generally specify the purpose for which the funds are to be used. Revenues from sponsored grants and contracts are recognized when allowable expenditures are incurred under such agreements. These revenues, primarily from the federal government, are recorded as unrestricted support. Amounts recorded in grants and contracts receivable are for grant expenditures incurred in advance of the receipt of funds.

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

#### (m) 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 revenues 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.

## (n) Auxiliary Enterprises and Independent Operations

Auxiliary enterprises include residence halls, food service, bookstore and parking operations which provide services to students, faculty and staff. Fee charges are directly related to the costs of services provided. Independent operations include an externally managed conference center, hotel, and a fitness center. Fee charges are based on market rates for the services provided.

#### (o) 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. As of August 31, 2016 and 2015, there were no material uncertain tax positions.

#### (p) 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. Changes in the fair value of these instruments are recognized as nonoperating investment gains or losses in the consolidated statements of activities.

The University will from time to time utilize interest rate swap agreements to hedge interest rate market exposure of variable rate debt. The University uses the accrual method to account for the interest rate swap agreements in connection with the underlying bonds. The difference between amounts paid and received under such agreements is reported in interest expense in the consolidated statements of

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

activities. Changes in the fair value of these swap agreements are recognized as nonoperating changes in net assets in the consolidated statements of activities.

#### (q) Pension and Postretirement Benefits

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 unrestricted net assets.

#### (r) New Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (ASU 2014-09), which requires an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity also should disclose sufficient quantitative and qualitative information to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The new standard is effective for the University for fiscal years beginning after December 31, 2018 (as amended in August 2015 by ASU No. 2015-14, Deferral of Effective Date). The University has not yet completed its assessment of the impact of the new guidance on its consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-03: Simplifying the Presentation of Debt Issuance Costs, which requires debt issuance costs to be presented in the balance sheet as a direct reduction from the carrying value of the associated debt liability, consistent with the presentation of a debt discount. It is effective for all business entities for fiscal years beginning after December 15, 2015. In fiscal year 2016, the University elected to early adopt the provision of ASU 2015-03 and applied retrospective application to all periods presented in the consolidated financial statements (note 11). Accordingly, prepaid expenses, deferred charges and other assets were reduced \$7.8 million and \$8.4 million on August 31, 2016 and 2015, respectively. Bonds, notes and mortgages payable were reduced by the same amounts on August 31, 2016 and 2015.

In January 2016, the FASB issued ASU No. 2016-01, *Recognition and Measurement of Financial Assets and Liabilities* (ASU 2016-01). ASU 2016-01 addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. The ASU is effective for not-for-profit entities for fiscal years beginning after December 15, 2018, with early adoption restricted to certain provisions and within certain time periods. Under the ASU, not-for-profit entities are no longer required to disclose fair value information concerning financial instruments measured at amortized cost such as long-term debt. This provision of ASU 2016-01 may be early adopted for financial statements, which have not yet been issued or made available for issuance. The University implemented the aforementioned provision during fiscal 2016. The University has not yet determined the impact of the new standard on its current policies.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (Topic 842) (ASU 2016-02). The amendments in ASU 2016-02 create FASB ASC Topic 842, Leases, and supersede the requirements in ASC Topic 840, *Leases*. ASU 2016-02 requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under ASC Topic 840. Under the guidance of

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

ASU 2016-02, a lessee should recognize in the balance sheet a liability to make lease payments (lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. The accounting applied by a lessor under ASU 2016-02 is largely unchanged from that applied under ASC Topic 840. The ASU is effective for all business entities for fiscal years beginning after December 15, 2019. The University has not yet determined the impact of the new standard on its current policies for lessee accounting.

In August 2016, the FASB issued ASU No. 2016-14, *Presentation of Financial Statements of Non-for-Profit Entities* (ASU 2016-14). ASU 2016-14 (1) reduces the number of net asset classes presented from three to two; (2) requires the presentation of expenses by functional and natural classification in one location; and (3) requires quantitative and qualitative disclosures about liquidity and availability of financial assets. The ASU is effective for annual financial statements issued for fiscal years beginning after December 15, 2017. The University has not yet determined the impact of the new standard on its current policies.

### (s) 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, revenues, 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 uncollectible accounts and contractual adjustments, reserves for employee healthcare and workers' compensation claims, accrued professional and general liability costs, estimated third-party settlements, and actuarially determined benefit liabilities related to the University's pension and other postretirement benefit plans. Depreciation expense is based on the estimated useful lives of the related assets. The carrying value of contributions to be received after one year is estimated by discounting the expected future cash flows at a risk-free rate which could have been obtained at the date of the gift.

#### (t) 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. Written conflict of interest policies for the University require, 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. Each board member is required to certify compliance with the conflict of interest policy on an annual basis and indicate whether the University does business with an entity in which that member (or an immediate family member) has a material financial interest or is employed or serves as a director or officer. When such relationships exist, measures are taken to mitigate any actual or perceived conflict, including requiring that such transactions be conducted at arm's length, for good and sufficient consideration, based on

## Notes to Consolidated Financial Statements August 31, 2016 and 2015

terms that are fair and reasonable to the University, and in accordance with applicable conflict of interest laws.

### (3) Contributions Receivable

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

	 2016	2015
Unconditional promises expected to be collected in:		
Less than one year	\$ 58,900	50,523
One year to five years	42,473	49,677
Over five years	 9,610	350
Gross contributions receivable	110,983	100,550
Less:		
Allowance for uncollectible amounts	(3,101)	(2,961)
Discount to present value	 (8,208)	(4,865)
Contributions receivable, net	\$ 99,674	92,724

At August 31, 2016 and 2015, the five largest outstanding donor pledge balances represented 50.0% and 63.7%, respectively, of Emory's gross contributions receivable. Contributions receivable are discounted at rates ranging from 1.79% to 9.25%.

As of August 31, 2016, the University had received bequest intentions of approximately \$40.3 million. These intentions to give are not recognized as assets or revenues and, if received, will generally be restricted for purposes stipulated by the donor.

#### (4) Business and Credit Concentrations

Emory Healthcare grants credit to patients, substantially all of whom reside in the southeastern United States. 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 programs, plans, or policies (e.g., Medicare, Medicaid, Blue Cross, and other preferred provider arrangements and commercial insurance policies). The composition of net receivables from patients and third-party payors follows:

	2016	2015
Managed care and other third-party payors	53%	58%
Medicare	37	31
Patients	5	7
Medicaid	5	4
	100%	100%

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

#### (5) Net Patient Service Revenue

Emory Healthcare has agreements with governmental and other third-party payors that provide for reimbursement to Emory Healthcare at amounts different from established rates. Contractual adjustments under third-party reimbursement programs represent the difference between Emory Healthcare's billings at established rates for services and amounts reimbursed by third-party payors. A summary of the basis of reimbursement with major third-party payors follows:

- Medicare Substantially all acute care and professional services rendered to Medicare program
  beneficiaries are paid at prospectively determined rates. These rates vary according to patient
  classification systems that are based on clinical, diagnostic, and other factors. Revenue from the
  Medicare program accounted for approximately 41% of Emory Healthcare's net patient service
  revenue for both years ended August 31, 2016 and 2015.
- Medicaid Inpatient and professional services rendered to Medicaid program beneficiaries are paid at prospectively determined rates. Outpatient services are generally paid based upon cost reimbursement methodologies. Emory Healthcare's cost reports have been audited and substantially settled for all fiscal years through August 31, 2013. Revenue from the Medicaid program accounted for approximately 4% and 5% of Emory Healthcare's net patient service revenue for each of the years ended August 31, 2016 and 2015, respectively.

Emory Healthcare has also entered into other reimbursement arrangements providing for payment methodologies which include prospectively determined rates per discharge, discounts from established charges, and prospectively determined per diem rates.

2016

2015

The composition of net patient service revenue (excluding charity care) follows (in thousands):

	_	2016	2015
Gross patient service revenue	\$	8,343,096	7,637,741
Less provisions for contractual and other adjustments		(5,224,114)	(4,741,905)
Less provisions for uncollectible accounts		(183,518)	(189,154)
Net patient service revenue	\$ _	2,935,464	2,706,682

Emory Healthcare recognizes patient service revenue associated with services provided to patients with third-party payor coverage on the basis of contractual rates for the services rendered. For uninsured patients who do not qualify for financial assistance in accordance with Emory Healthcare's established charity/indigent care policy, Emory Healthcare recognizes revenue on the basis of its discounted rates for services provided. On the basis of historical experience, a significant portion of Emory Healthcare's uninsured patients are unable or unwilling to pay for the services provided. Thus, Emory Healthcare records a significant provision for uncollectible accounts related to uninsured patients in the period the services are provided.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

Patient service revenue, net of contractual allowances and discounts (but before the provision for uncollectible accounts), recognized during the years ended August 31, 2016 and 2015 from these major payor sources is as follows (in thousands):

	_	2016	2015
Third-party payors	\$	2,988,727	2,766,246
Self-pay	_	130,255	129,590
Total	\$	3,118,982	2,895,836

The impact of the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act (collectively, the Health Care Acts) is complicated and difficult to predict, but Emory Healthcare anticipates its reimbursement in the future will be affected by major elements of the Health Care Acts. Emory Healthcare continues to monitor developments in healthcare reform and participates actively in contemplating and designing new programs that are encouraged and/or required by the Health Care Acts.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

## (6) Investments

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

		2016	2015
Short-term investments and cash equivalents (a)	\$	341,498	260,208
Investments in securities:		,	,
Global equity securities			
U.S. equity securities		361,078	422,283
Non-U.S. equity securities		173,445	191,480
Fixed income securities			
U.S. government securities		491,649	429,777
Domestic bonds and long-term notes (b)		122,384	158,758
International bonds and long-term notes (c)		21,485	42,297
Investments in private securities (d)		14,765	14,257
Commingled funds - equity (e)		656,602	677,404
Commingled funds - fixed income (e)		673,550	641,090
Investments in funds:			
Hedged strategies (f)		2,177,099	2,089,483
Private market investments (g)		1,083,857	1,205,804
Natural resources (h)		457,842	444,844
Real estate partnerships (i)		326,869	239,992
Derivatives <sup>(j)</sup>		192	10,278
Marketable real estate investments (k)		1,928	8,206
Oil and gas properties		680	2,255
Miscellaneous investments (1)		7	3,203
Total investments at fair value		6,904,930	6,841,619
Joint ventures (equity method)	_	12,309	564
Total investments	\$	6,917,239	6,842,183
	<del></del>		

<sup>(</sup>a) Includes short-term U.S. Treasury securities with maturities of less than one year, as well as funds that invest in these types of investments. At August 31, 2016 and 2015, \$25.3 million and \$31.4 million, respectively, was posted as collateral (primarily related to derivatives' trading agreements) and thus not readily available for use.

<sup>(</sup>b) Includes investments in non-government debt securities. Investments consist primarily of credit-oriented securities including U.S. investment-grade and below investment-grade debt securities. Other investments include mortgage-backed securities, asset-backed securities, repurchase agreements, senior loans, and bank loans.

<sup>(</sup>c) Includes fixed income investments in non-U.S. debt securities such as government bonds, corporate bonds, bank loans, and asset backed securities.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

- (d) Includes investments in private securities not held through a traditional fund or commingled vehicle.
- (e) Includes professionally managed pooled investment funds registered with the Securities and Exchange Commission or the Comptroller of the Currency (i.e., mutual funds and collective trusts).
- Includes investments in fund structures that pursue multiple strategies to diversify risks and reduce volatility. Fund managers have the ability to shift investments across a wide variety of sectors, geographies, and strategies and from a net long position to a net short position. Certain investments in hedged strategies may be subject to restrictions that limit the University's ability to withdraw capital until i) a certain "lock-up period" has expired or ii) until certain underlying investments designated as "illiquid" in "sidepockets" are sold. In addition, this class includes investments that may be subject to restrictions that limit the amount that the University is able to withdraw as of a given redemption date.
- (g) Includes illiquid investments in venture capital, growth equity, buyout, mezzanine, distressed debt and reinsurance held in commingled vehicles in which Emory is typically a limited partner or shareholder. The nature of the investments in this category is such that distributions are received through liquidation of the underlying assets of the funds. It is estimated that underlying assets of the funds will be liquated over the next 11 years.
- (h) Includes investments in timber, mining, energy, farmland, commodities and related services businesses held through liquid and illiquid fund structures. The nature of the investments in this category is largely such that distributions are received through liquidation of the underlying assets of the funds.
- (i) Includes illiquid investments in real estate assets, projects, or land held in commingled funds. The fair value of these investments is calculated from the net asset value of Emory's ownership interests in these funds. The nature of the investments in this category is such that distributions are received through liquidation of the underlying assets of the funds. It is estimated that the underlying assets of the funds will be liquidated over the next 10 years.
- (j) Includes investments in derivative instruments including both exchange traded and over the counter futures, forwards, swaps, options, rights and warrants valued at the fair market value of each underlying instrument.
- (k) Includes miscellaneous investments in real estate such as land gifts.
- Includes other investments in mutual funds not included in the endowment and other similar funds.

At August 31, 2016 and 2015, cash equivalents of \$341.5 million and \$260.2 million, respectively, are included in investments and are restricted for use by endowments and special projects.

The University's investment policies allow certain fund managers to use foreign exchange contracts, currency hedges, and other derivative transactions in order to reduce the volatility and manage market risk involved in its investment portfolio. These financial instruments are included in investments at fair value in the accompanying consolidated statements of financial position with the related gain or loss recognized as investment income and gains (losses) in excess of spending distributions for current operations in the accompanying consolidated statements of activities.

The University may hold investments denominated in currencies other than the U.S. dollar. Thus, there is exposure to currency risk because the value of the investments denominated in other currencies may fluctuate

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

due to changes in currency exchange rates, and this can have an effect on the reported value of these investments.

The value of securities held by the University may decline in response to certain economic events, including those events impacting entities whose securities are owned and included in the investment portfolio. Those events impacting valuation may include (but are not limited to) economic changes, market fluctuations, regulatory changes, global and political instability, and currency, interest rate, and commodity price fluctuations. The University attempts to manage this risk through diversification, ongoing due diligence of fund managers, and monitoring of economic conditions.

As of August 31, 2016, the related unfunded commitments of the University's alternative investments and limitations and restrictions on the University's ability to redeem or sell are summarized as follows (in thousands):

		Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period
Hedged strategies	\$	42,000	30 days - over 2 years	3 - 306 days
Private market investments		802,662	not eligible	not eligible
Real estate partnerships		246,326	not eligible	not eligible
Natural resources	_	194,793	30 - 90 days and not eligible	30 - 90 days and not eligible
	\$	1,285,781		

Over the next five years, most of the unfunded commitments are expected to be called by the general partners. Although the University is obligated to fund these commitments, many of these agreements allow resale. Funds to meet these commitments will be required over future years and are expected to be generated from existing endowment assets.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

Investment return as reflected in the accompanying consolidated statements of activities for August 31 is as follows (in thousands):

		2016	2015
Investment income, net Realized and unrealized gains (losses), net	\$	70,273 121,778	57,484 (156,145)
Total investment return (loss)	_	192,051	(98,661)
Operating Endowment spending distribution Other investment income designated for current operations Total operating return	_	172,261 57,499 229,760	165,880 41,266 207,146
Nonoperating Investment return less than spending distribution for current operations		(37,709)	(305,807)
Total investment return (loss)	\$	192,051	(98,661)

In addition to a core internal group of investment professionals dedicated to the management of Emory's investments, the University also employs external investment managers. External management fees paid directly (i.e., segregated investment account fees, custody fees, internal staff expenses and consulting reviews) totaled \$23.2 million and \$28.7 million for fiscal 2016 and 2015, respectively. Fees and expenses paid to investment managers related to investments in funds which are not segregated from earnings are recorded on the accrual basis and are netted against either the investment income or net asset values of the funds themselves.

#### (7) Endowment Net Assets

The University's Endowment (Endowment) consists of over 1,800 individual funds established for a variety of purposes including both donor-restricted endowment funds and 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 permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

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 not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditures by the University in a manner consistent with the standard of prudence prescribed by the Act. In accordance with the Act, 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, and deposits held in custody and miscellaneous investments. Approximately 68% of the investments described in note 6 are classified as endowed net assets. Endowment funds are categorized in the following net asset classes as of August 31 (in thousands):

		2016			2015			
	_	Donor- Restricted	Board- Designated	Total	Donor- Restricted	Board- Designated	Total	
Unrestricted Temporarily restricted Permanently restricted	\$	(19,893) 2,467,363 837,814	1,398,999 — —	1,379,106 2,467,363 837,814	(12,561) 2,557,777 806,288	1,416,626 — —	1,404,065 2,557,777 806,288	
Total endowment funds	\$	3,285,284	1,398,999	4,684,283	3,351,504	1,416,626	4,768,130	

## Notes to Consolidated Financial Statements August 31, 2016 and 2015

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

		Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Balance as of August 31, 2014 Investment return:	\$	1,454,803	2,727,955	731,633	4,914,391
Investment income		14,058	18,936	_	32,994
Realized and unrealized loss	_	(11,833)	(63,020)		(74,853)
Total investment return	-	2,225	(44,084)		(41,859)
Cash contributions Additions of institutional funds for		675	9	71,312	71,996
quasi endowments Withdrawal of board-designated		51,864	_	_	51,864
funds for strategic initiatives		(15,366)	_		(15,366)
Appropriations for expenditure		(79,259)	(113,936)	_	(193,195)
Appropriations for capital purposes		(6,086)	(13,615)	_	(19,701)
Other		(4,791)	1,448	3,343	
Balance as of August 31, 2015 Investment return:	\$	1,404,065	2,557,777	806,288	4,768,130
Investment income		10,122	29,302	_	39,424
Realized and unrealized gain	_	23,200	24,351		47,551
Total investment return	-	33,322	53,653		86,975
Cash contributions Additions of institutional funds for		369	2	29,701	30,072
quasi endowments Withdrawal of board-designated		28,423	_	_	28,423
funds for strategic initiatives		(3,666)	_	_	(3,666)
Appropriations for expenditure		(74,791)	(130,002)	_	(204,793)
Appropriations for capital purposes		(7,096)	(13,762)		(20,858)
Other		(1,520)	(305)	1,825	
Balance as of August 31, 2016	\$	1,379,106	2,467,363	837,814	4,684,283

### (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. Deficiencies of this nature that are reported in unrestricted net assets were \$19.9 million and \$12.6 million as of August 31, 2016 and 2015, respectively. Subsequent gains that restore the fair value of the assets of the endowment fund to book value will be classified as an increase in unrestricted net assets.

## (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 while seeking to

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

maintain the purchasing power of the endowment assets. Under this policy, as approved by the Board of Trustees, the endowment assets are invested in a manner to attain a total return of at least 8% (including inflation) over the long term. Over shorter time periods, the endowment assets performance will be measured versus a policy benchmark. The policy benchmark represents the weighted average of benchmark returns to each asset class in the policy asset allocation. The performance objective is to outperform the policy benchmark by at least 50 basis points net of fees, on average. It is not expected that the performance target will be met for every three-year period.

### (d) Strategies Employed for Achieving Objectives

To satisfy its long-term rate-of-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 global equities, fixed income, marketable alternatives, and private investments to achieve its long-term return objectives within prudent risk constraints. 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.

## (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 income in 2016 and 2015 was based on 4.75% of the average fair value of the endowment over the previous 12 months ending on December 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.

### (8) Derivative Instruments and Hedging Activities

#### Investments

The University has executed derivative financial instruments in the normal course of its business. Investment strategies employed by Emory and investment managers retained by Emory may incorporate the use of various derivative financial instruments with valuation risk. Emory uses these instruments for a number of investment purposes, including hedging or altering exposure to certain asset classes and cost-effectively adding exposures to portions of the portfolio. Futures, options and other derivative instruments are used to adjust elements of investment exposures to various securities, markets and currencies without actually taking a position in the underlying asset.

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. The purchase and sale of exchange traded derivatives require collateral deposits with a

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

Futures Commission Merchant (FCM). In the event of an FCM's insolvency, recovery may be limited to Emory's pro rata share of segregated customer funds available. It is possible that the recovery amount could be less than the total of cash and other equity deposited. Management does not consider the underlying counterparty risk from these arrangements to have a material impact on the financial position of the University.

Emory's net investment related derivative exposures, categorized by primary underlying risk, as of August 31, 2016 (in thousands):

	<u>-</u>	Gross Notional Amount <sup>(1)</sup>	Derivative Assets (2)	Derivative Liabilities <sup>(2)</sup>	Gains (Losses) (3)
Interest-rate contracts	\$	45,753	88	(112)	3,734
Foreign exchange contracts		26,920	64	(254)	(2,301)
Equity contracts		119,444	559	(106)	(5,664)
Credit contracts	_	890		(47)	39
Total	\$_	193,007	711	(519)	(4,192)

Emory's net investment related derivative exposures, categorized by primary underlying risk, as of August 31, 2015 (in thousands):

	_	Gross Notional Amount (1)	Derivative Assets (2)	Derivative Liabilities <sup>(2)</sup>	Gains (Losses) (3)
Interest-rate contracts Foreign exchange contracts Equity contracts Credit contracts	\$	138,589 424,491 643,643 39,057	109 17,208 3,380 526	(313) (1,825) (8,469) (338)	4,930 34,161 785 (75)
Total	\$	1,245,780	21,223	(10,945)	39,801

- (1) The notional amount is representative of the absolute value of the open contracts on August 31, 2016 and 2015.
- (2) Derivative assets less derivative liabilities for investment-related activities are presented as net in Note 6.
- (3) Gains (losses) on derivatives are included in the Statements of Activities in "investment return (less than) in excess of spending distribution for current operations" in "non-operating activities".

## Notes to Consolidated Financial Statements August 31, 2016 and 2015

Emory's investment related derivative assets and liabilities at August 31, 2016, by counterparty, are as follows (in thousands):

	 Assets	Liabilities	Cash Collateral Held (Pledged)
Counterparty A	\$ 565	(116)	(25,103)
Counterparty B	50	(237)	_
Counterparty C	50	_	_
Counterparty D	36	(121)	(82)
Counterparty E	7	(6)	_
All other	 3	(39)	(120)
Total	\$ 711	(519)	(25,305)

Emory's investment related derivative assets and liabilities at August 31, 2015, by counterparty, are as follows (in thousands):

	Assets	Liabilities	Cash Collateral Held (Pledged)
Counterparty A \$	16,409	(335)	_
Counterparty B	3,377	(4,550)	_
Counterparty C	353	(347)	(360)
Counterparty D	318	(593)	(1,528)
All other	766	(5,120)	(29,489)
Total \$	21,223	(10,945)	(31,377)

### **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 University 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 derivatives in net liability positions. At August 31, 2016, the University's long term debt ratings exceeded these benchmarks.

At August 31, 2016, Emory had nine interest rate swap agreements expiring on various dates ranging from November 15, 2028 through December 1, 2042. These agreements require Emory to pay fixed interest rates to the counterparties varying from 3.328% to 4.388% in exchange for variable rate payments from the counterparties based on a percentage of the three month London Interbank Offered Rate (LIBOR).

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

Net settlement transactions related to the agreements described above resulted in interest expense totaling \$19.6 million and \$20.9 million during 2016 and 2015, 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 \$268.7 million and \$176.8 million on August 31, 2016 and 2015, respectively, for which Emory University had a requirement to post collateral in the amount of \$74.3 million and \$6.7 million for 2016 and 2015, respectively. During 2015, Emory replaced a swap counterparty in an interest rate exchange agreement to another counterparty to maintain a diversified portfolio. 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 derivatives as of August 31 (in thousands):

Interest	Rate Swaps		201	16	2015	
Inception	Maturity		Liability Fair Value	Unrealized Loss	Liability Fair Value	Unrealized Loss
August 4, 2005	September 1, 2035	\$	(43,993)	(15,305)	(28,688)	(4,566)
August 25, 2005	September 1, 2035		(14,770)	(5,194)	(9,576)	(1,521)
April 19, 2007	November 15, 2028		(2,074)	(279)	(1,795)	(30)
December 1, 2007	September 1, 2035		(31,546)	(9,930)	(21,616)	(2,780)
May 1, 2008	September 1, 2038		(36,600)	(11,854)	(24,746)	(3,294)
December 1, 2008	December 1, 2042		(49,014)	(18,919)	(30,095)	(5,232)
December 1, 2009	September 1, 2035		(31,974)	(9,961)	(22,013)	(2,781)
June 23, 2015	September 1, 2035		(43,994)	(15,305)	(28,689)	(4,574)
June 23, 2015	September 1, 2035	_	(14,770)	(5,197)	(9,573)	(1,518)
	Total	\$	(268,735)	(91,944)	(176,791)	(26,296)

Emory is exposed to financial loss in the event of nonperformance by 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 on Emory's consolidated statement of financial position. Emory management, with consultation from third party financial advisors, 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. Emory has additional counterparty arrangements managed by funds in which Emory invests, which are included in the general investment and fund manager monitoring activities for the funds.

## Notes to Consolidated Financial Statements August 31, 2016 and 2015

Emory's debt-related derivative liabilities at August 31, 2016, by counterparty, are as follows (in thousands):

	_	Liabilities	Cash Collateral Held (Pledged)
Counterparty A	\$	(31,546)	
Counterparty B		(49,014)	(7,500)
Counterparty C		(58,763)	(17,392)
Counterparty D		(68,574)	(28,800)
Counterparty E		(58,764)	(20,580)
All other	_	(2,074)	
Total	\$	(268,735)	(74,272)

Emory's debt-related derivative liabilities at August 31, 2015, by counterparty, are as follows (in thousands):

	_	Liabilities	Cash Collateral Held (Pledged)
Counterparty A	\$	(21,616)	
Counterparty B		(30,095)	_
Counterparty C		(38,265)	_
Counterparty D		(46,759)	(6,700)
Counterparty E		(38,262)	_
All other		(1,794)	
Total	\$	(176,791)	(6,700)

## (9) Fair Values of Assets and Liabilities

The carrying values for cash and cash equivalents, patient receivables, short term receivables, and short term payables approximate fair value because of the terms and relative short maturity of these financial instruments. Current year additions to contributions receivable and annuity and other split interest obligations carrying amounts approximate fair value because these instruments are recorded at estimated net present value and are categorized as Level 3 assets. Long term investments and funds held in trust for others are reflected in the accompanying consolidated financial statements at fair value. It is not practicable to determine the fair value of loans receivable, comprised primarily of federally sponsored student loans, and government advances for federal loan programs due to significant government restrictions as to marketability, interest rates, and repayment terms of these loans.

During fiscal 2016, management reevaluated its investments in structures with characteristics similar to a mutual fund as to whether they have a readily determinable fair value. Based on that re-evaluation, certain accounting policy and NAV disclosures have been corrected. Also, certain investments previously accounted for as NAV as a practical expedient and excluded from the fair value hierarchy in 2015 have been included as Level 2 investments.

## Notes to Consolidated Financial Statements August 31, 2016 and 2015

The following table summarizes the valuation of the University's assets and liabilities according to the fair value hierarchy levels as of August 31, 2016 (in thousands):

		Fair value hierarchy				
	Total fair value	Investments measured at NAV (3)	Level 1	Level 2	Level 3	
Financial assets:						
Short-term investments and cash						
equivalents	\$ 341,498	_	340,194	1,304	_	
Investments in securities:						
Global equity securities						
U.S. equity securities	361,078	_	360,766	309	3	
Non-U.S. equity securities	173,445	_	167,103	5,835	507	
Fixed income securities:						
U.S. government securities	491,649	_	163	491,486	_	
Domestic bonds and long-						
term notes	122,384	_	1,626	119,646	1,112	
International bonds and long-						
term notes	21,485	_	39	21,446	_	
Investments in private securities	14,765	_	_	_	14,765	
Commingled funds - equity	656,602	319,668	78,092	258,842	_	
Commingled funds - fixed income	673,550	_	452,715	220,835	_	
Investments in funds:			_	_	_	
Hedged strategies	2,177,099	2,177,099	_	_	_	
Private market investments	1,083,857	1,083,199	_	_	658	
Natural resources	457,842	457,842	_	_	_	
Real estate partnerships	326,869	326,869	_	_	_	
Derivatives	192	_	266	(74)	_	
Marketable real estate investments	1,928	_	254	1,674	_	
Oil and gas properties	680	_	_	_	680	
Miscellaneous investments	7		7			
Total investments (1)	6,904,930	4,364,677	1,401,225	1,121,303	17,725	
Interest in perpetual funds held						
by others (2)	1,170,348				1,170,348	
Total assets at fair value	\$8,075,278	4,364,677	1,401,225	1,121,303	1,188,073	
Financial liabilities:						
Derivative instruments -						
interest rate swaps	(268,735)	_	_	(268,735)	_	
Funds held in trust for others	(665,215)			(665,215)		
Total liabilities at fair value	\$ (933,950)			(933,950)		

<sup>(1)</sup> Certain investments in joint ventures carried under the equity method of accounting are not reported at fair value and thus not included in the table above (see note 6).

<sup>(2)</sup> Primarily invested in The Coca Cola Company.

<sup>(3)</sup> Certain investments that are measured at fair value using the net asset value 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 statement of financial position.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

The following table summarizes the valuation of the University's assets and liabilities according to the fair value hierarchy levels as of August 31, 2015 (in thousands):

	Fair value hierarchy					
	To	otal fair value	Investments measured at NAV <sup>(3)</sup>	Level 1	Level 2	Level 3
Financial assets:		varue		Leveri	<u> Lever 2</u>	Level 3
Short-term investments and cash						
equivalents	\$	260,208	_	251,535	8,673	_
Investments in securities:		,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,	
Global equity securities						
U.S. equity securities		422,283	_	421,786	494	3
Non-U.S. equity securities		191,480	_	185,342	6,138	_
Fixed income securities:						
U.S. government securities		429,777	_	166	429,611	_
Domestic bonds and long-						
term notes		158,758	_	1,716	156,642	400
International bonds and long-						
term notes		42,297	_	35	41,477	785
Investments in private securities		14,257	_	_	_	14,257
Commingled funds - equity		677,404	336,186	43,664	297,554	_
Commingled funds - fixed income		641,090	_	431,223	209,867	_
Investments in funds:						
Hedged strategies	2	,089,483	2,089,483	_	_	_
Private market investments	1	,205,804	1,205,125	_	_	679
Natural resources		444,844	444,844	_	_	_
Real estate partnerships		239,992	239,992	_	_	_
Derivatives		10,278	_	11,389	(1,111)	_
Marketable real estate investments		8,206	_	234	7,972	_
Oil and gas properties		2,255	_	_	_	2,255
Miscellaneous investments		3,203		3,203		
Total investments (1)	6	,841,619	4,315,630	1,350,293	1,157,317	18,379
Interest in perpetual funds held						
by others (2)	1	,071,531				1,071,531
Total assets at fair value	\$7	,913,150	4,315,630	1,350,293	1,157,317	1,089,910
Financial liabilities:						
Derivative instruments -						
interest rate swaps		(176,791)	_	_	(176,791)	_
Funds held in trust for others		(645,996)			(645,996)	
Total liabilities at fair value	\$	(822,787)			(822,787)	

<sup>(1)</sup> Certain investments in joint ventures carried under the equity method of accounting are not reported at fair value and thus not included in the table above (see note 6).

<sup>(2)</sup> Primarily invested in The Coca Cola Company.

<sup>(3)</sup> Certain investments that are measured at fair value using the net asset value 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 statement of financial position.

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

Investments made directly by the University whose values are based on quoted market prices in active markets, and are therefore classified within Level 1, include actively traded common and preferred stock, U.S. government fixed income instruments and non-U.S. government fixed income instruments. Level 1 investments may also include commingled funds such as listed mutual funds, futures contracts, and exchange traded funds (ETFs).

Investments that trade in markets that are considered to be active, but are based on dealer quotations or alternative pricing sources supported by observable inputs or investments that trade in markets that are not considered to be active, but are valued based on quoted market prices, dealer quotations or alternative pricing sources supported by observable inputs are classified within Level 2. Alternative pricing sources include quotations from market participants and pricing models which are based on accepted industry modeling techniques. These investments include U.S. investment-grade and below investment-grade debt securities, international corporate bonds, mortgage-backed securities, asset-backed securities, money market funds, senior loans and bank loans, most derivative contracts other than futures, and commingled structures with quoted market prices.

Investments that do not trade in active markets and for which values are instead derived from significant unobservable inputs are classified within Level 3. However, as of August 31, 2016 and August 31, 2015, approximately \$4.4 billion and \$4.3 billion, respectively, of the University's investments are held through limited partnerships and commingled vehicles for which fair value is estimated using NAVs reported by the fund managers as a practical expedient, and are not categorized in the fair value hierarchy.

Typically, such funds are structured as limited partnership or limited liability vehicles. Funds with hedged strategies generally offer redemption terms and often hold marketable securities in addition to certain illiquid investments. The determination of NAV by managers of private market, real estate and natural resources funds, which generally do not have redemption terms, requires the use of significant unobservable inputs because the underlying investments trade infrequently or not at all. Such investments may include, for example, private placements, distressed securities, and properties and other real interests. Inputs used by the fund managers may include the original transaction price, recent transactions in the same or similar market, completed or pending third party transactions in the underlying investment or comparable issuers, and subsequent rounds of financing. When observable prices are not available these investments are valued using one or more valuation techniques described below.

- Market Approach: This approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.
- Income Approach: This approach determines a valuation by discounting future cash flows.
- Cost Approach: This approach is based on the principle of substitution and the concept that a market participant would not pay more than the amount that would currently be required to replace the asset.

Due to inherent uncertainty of fair value, such estimates of fair value may differ from values that would have been applied had a readily available market existed and those differences could be material. Although a secondary market exists for these investments, the market is not active and individual transactions are typically not observable. When transactions do occur in this limited secondary market, they may occur at discounts to the reported net asset value. It is therefore reasonably possible that if the University were to sell

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

these investments in the secondary market, a buyer may require a discount to the reported net asset value, and that discount could be significant.

The categorization or omission of an investment within the hierarchy does not necessarily correspond to the perceived risk of that investment. The funds and the University use inputs in applying various valuation techniques that are assumptions which market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, operating statistics, specific and broad credit data, liquidity statistics, recent transactions, earnings forecasts, future cash flows, market multiples, discount rates and other factors.

The following tables summarize the University's Level 3 reconciliation as of August 31, 2016 and 2015 (in thousands):

	_	Balance as of August 31, 2015	Net gains (losses)	Purchases	Sales	Transfer in (out) of Level 3	Balance as of August 31, 2016
Investments in U.S. equity securities	\$	3	_	_	_	_	3
Non-U.S. equity securities		_	(24)	531	_	_	507
Domestic bonds & long-term notes		400	(6)	_	(8)	726	1,112
International bonds & long terms notes		785	(287)	74	(572)	_	_
Investments in private securities		14,257	_	508	_	_	14,765
Investment in funds:							
Private market investments		679	(61)	40	_	_	658
Oil and gas properties	_	2,255	(1,575)				680
Total investments		18,379	(1,953)	1,153	(580)	726	17,725
Interest in perpetual funds held by others	_	1,071,531	98,817				1,170,348
Total assets	\$	1,089,910	96,864	1,153	(580)	726	1,188,073

	_	Balance as of August 31, 2014	Net gains (losses)	Purchases	Sales	Transfer in (out) of Level 3	Balance as of August 31, 2015
Investments in U.S. equity securities	\$	3	_	_	_	_	3
Domestic bonds & long-term notes		_	2	400	(2)	_	400
International bonds & long terms notes		585	(183)	390	(7)	_	785
Investments in private securities		6,000	257	8,000	_	_	14,257
Investment in funds:							
Private market investments		759	(228)	185	(37)	_	679
Real estate partnerships		195	4	_	(199)	_	_
Oil and gas properties	_	2,195		60			2,255
Total investments		9,737	(148)	9,035	(245)	_	18,379
Interest in perpetual funds held by others	_	1,130,063	(58,532)			_	1,071,531
Total assets	\$	1,139,800	(58,680)	9,035	(245)		1,089,910

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

## (10) Property and Equipment

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

_	2016	2015
\$	201,898	174,774
	3,164,393	3,006,988
	2,171,703	2,066,387
	392,350	382,075
	265,145	229,659
	6,195,489	5,859,883
_	(3,185,583)	(2,976,471)
\$ _	3,009,906	2,883,412
	_	\$ 201,898 3,164,393 2,171,703 392,350 265,145 6,195,489 (3,185,583)

Property and equipment is 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 2016 and 2015.

The University has identified asset retirement obligations primarily from commitments to remove asbestos and lead paint in University 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, 2016 and 2015 is \$59.9 million and \$57.6 million, respectively, and is included in accounts payable and accrued liabilities in the accompanying consolidated statements of financial position.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

# (11) Long-Term Debt

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

	Average	Final		Outstanding	g principal
	interest rate	maturity		2016	2015
Tax-exempt fixed-rate revenue bonds:					
2013 Series A	4.95%	October 1, 2043	\$	195,735	201,075
2011 Series A (1)	4.95	September 1, 2041		213,650	213,650
2009 Series B (2)	4.79	September 1, 2035		205,290	209,795
2009 Series C	4.93	September 1, 2039		96,505	97,915
2008 Series C	4.96	September 1, 2038		122,460	122,460
2005 Series A	4.96	September 1, 2025		33,835	49,470
Total tax-exempt fixed-rate	revenue bonds			867,475	894,365
Tax-exempt variable-rate revenue bonds:					
2013 Series B (3)	0.73	October 1, 2039		135,100	135,100
2013 Series C (3)	0.83	October 1, 2039		57,865	57,865
2007 Series A	1.13	November 15, 2028		9,800	9,830
2005 Series B	0.19	September 1, 2035		250,000	250,000
2005 Series C	0.19	September 1, 2036		124,150	124,150
Total tax-exempt variable-ra	te revenue bonds			576,915	576,945
Taxable fixed-rate revenue bonds:					
2009 Series A	5.63	September 1, 2019		250,000	250,000
1994 Series C	8.00	October 1, 2024		5,515	5,915
Series 1991	8.85	April 1, 2022		306	851
Total taxable fixed-rate reve	nue bonds			255,821	256,766
Taxable variable-rate revenue bonds:					
1999 Series B	0.32	November 1, 2029		9,535	9,955
1995 Series B	0.32	November 1, 2025		2,280	3,990
1994 Series B	0.42	October 1, 2024		8,690	9,355
Total taxable variable-rate re	evenue bonds			20,505	23,300
Commercial paper:					
2010 Program 1 - Tax-exempt	0.24	August 1, 2050		2,834	2,834
2008 Program 1 - Taxable	0.41	April 1, 2047		112,278	123,900
Total commercial paper				115,112	126,734
Other long term debt (4)	Various			630	597
Unamortized bond premiums				36,310	39,070
Chamoraidea cona premiamo			_	20,210	25,070
Unamortized bond discounts				(2,647)	(2,969)
Bond issuance cost				(7,791)	(8,431)
Total bonds, notes and mort	gages payable		\$	1,862,330	1,906,377

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

- (1) Included in the 2011 Series Bonds is a 5 year maturity of \$92.2 million due on September 1, 2016 at an average interest rate of 4.88%.
- (2) Included in the 2009 Series Bonds is a medium-term maturity of \$43.0 million due on September 1, 2019 at an average interest rate of 4.68%.
- (3) Series 2013B and 2013C bonds are floating rate notes and interest rates are based on a spread to one month LIBOR and SIFMA, respectively.
- (4) Included in other long term debt are the St. Joseph's capital leases.

The University incurred interest expense of \$78.5 million and \$79.5 million in 2016 and 2015, respectively, net of capitalized interest of \$0.7 million and \$1.0 million in 2016 and 2015. During 2016, the average interest rate on University tax exempt and taxable variable rate demand bonds (VRDB) was 0.19% and 0.32%, respectively. Related indices for this period were 0.19% for tax exempt debt (The Securities Industry and Financial Markets Association Index – SIFMA) and 0.38% for taxable debt (London Interbank Offered Rate – LIBOR).

At August 31, 2016 the aggregate annual maturities of bonds, notes and mortgages payable for the next five years and thereafter are as follows (in thousands):

Payable in fiscal year:		
2017	\$	113,628
2018		22,362
2019		22,133
2020		302,693
2021		16,194
Thereafter		1,359,448
		1,836,458
Unamortized net premium		33,663
Unamortized net bond issuance cost	_	(7,791)
	\$	1,862,330

In 2010, the University established a \$400 million tax exempt Commercial Paper program. The primary purpose of the program is to meet interim financing needs related to capital projects. As of August 31, 2016 and 2015, the University had outstanding balances of \$2.8 million under this program.

In 2008, the University established a \$100.0 million taxable Commercial Paper program. In 2014, the University increased the program to \$150.0 million. As of August 31, 2016 and 2015, the University had an outstanding balance of \$112.3 million and \$123.9 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

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

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 2016 and 2015.

The University also has a \$75.0 million line of credit and the Emory Clinic has a \$15.0 million line of credit at August 31, 2016. There were no balances outstanding as of August 31, 2016. There were no draws on either line of credit in 2016 and 2015.

The University has two letters of credit with a commercial bank totaling \$1.7 million. There were no draws against these letters of credit as of August 31, 2016 and 2015.

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 issue costs, and various other administrative requirements. At August 31, 2016 and 2015, the University was in compliance with these covenants.

## (12) Temporarily and Permanently Restricted Net Assets

Temporarily restricted net assets consist of the following as of August 31 (in thousands):

	 2016	2015
Appreciation on endowments restricted until appropriated	\$ 2,342,332	2,432,747
Term endowments	125,031	125,030
Contributions receivable, time and purpose restricted	67,983	74,787
Restricted for capital projects and other donor purposes	60,230	168,970
Annuity and life income agreements	 7,238	5,842
	\$ 2,602,814	2,807,376

Permanently restricted net assets include endowment funds subject to UPMIFA (note 7) as well as perpetual trusts and endowments held by others. Permanently restricted net assets as of August 31 are comprised of (in thousands):

	_	2016	2015
Donor-restricted endowments	\$	837,814	806,288
Interests in perpetual funds held by others		1,170,348	1,071,531
Contributions receivable, restricted for endowment		31,691	17,937
Annuity and life income agreements		2,019	1,874
Split interest trusts	_	3,235	3,547
	\$	2,045,107	1,901,177

Generally, the donors of these restricted gifts permit the University to use all or part of the income earned and net appreciation on related investments for general or specific purposes, such as scholarships, faculty salaries or other operational and administrative support.

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

# (13) Retirement and Deferred Compensation Plans

The University has a defined contribution plan under Internal Revenue Code (IRC) Section 403(b) covering certain employees and teaching staff. 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 by Emory Healthcare and its employees. The benefits are vested only to the extent of the annuities purchased. The Emory Clinic (TEC) sponsors The Emory Clinic, Inc. Retirement Savings Plan (the Plan), covering all its employees, except those considered leased employees or those covered under collective bargaining agreements, as defined. The 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 Plan provides for contributions at an annual determined percentage of compensation and employees cliff vest in employer contributions after five years of service. Retirement expense totaled \$129.8 million and \$118.9 million during 2016 and 2015, respectively, and is included in operating expense in the accompanying consolidated statements of activities.

The University sponsors an IRC 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 point of termination of employment from the University. As of August 31, 2016 and 2015, respectively, the University held other assets of \$98.9 million and \$86.0 million under the 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 \$96.0 million and \$83.1 million are classified as Level 1 as of August 31, 2016 and 2015, respectively, and \$2.9 million are classified as Level 2 as of both August 31, 2016 and 2015. Associated liabilities for the obligations of \$98.9 million and \$86.0 million as of August 31, 2016 and 2015, respectively, are included in accrued liabilities for benefit obligations and professional liabilities.

## (14) Pension Plan

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 JOC assumed certain defined benefit pension liabilities covering certain employees of the entities contributed to the JOC by SJHS (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 2015, subject to certain terms and conditions.

At the time of the formation of the JOC and assumption of control over the JOC by Emory Healthcare, Emory Healthcare recognized as part of the business combination a liability representing the unfunded status of the SJHS Pension Plan, in accordance with FASB ASC 805-20, *Business Combinations – Identifiable Assets, Liabilities, and Any Noncontrolling Interest.* The SJHS Pension Plan is accounted for by Emory Healthcare as a multiple-employer plan in accordance with FASB ASC 715-30, *Defined Benefit Plans – Pension.* 

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

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

	201	16	2015		
	Emory Healthcare	SJHS Pension Plan	Emory Healthcare	SJHS Pension Plan	
Projected benefit obligation, beginning of year \$	286,388	140,067	286,612	140,614	
Interest cost	13,221	6,358	12,291	5,947	
Actuarial loss (gain)	31,502	18,401	3,273	(2,357)	
Benefits paid	(6,534)	(4,433)	(15,788)	(4,137)	
Projected benefit obligation, end of year \$	324,577	160,393	286,388	140,067	

Given the fiscal 2012 curtailment of the plans, the accumulated benefit obligations at August 31, 2016 and 2015 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 follow (in thousands):

		201	16	2015		
		Emory Healthcare	SJHS Pension Plan	Emory Healthcare	SJHS Pension Plan	
Fair value of plan assets, beginning of year Actual return on plan assets Employer contributions Benefits paid	\$	192,506 21,514 5,695 (6,534)	88,931 8,908 5,690 (4,433)	215,453 (9,782) 2,623 (15,788)	93,874 (3,718) 2,912 (4,137)	
Fair value of plan assets, end of year  Funded status - accrued pension cost recognized in the consolidated	\$ _	213,181	99,096	192,506	88,931	
statements of financial position	\$	(111,396)	61,297	(93,882)	(51,136)	

The components of net periodic pension cost as of August 31 follow (in thousands):

	201	16	2015		
	Emory Healthcare	SJHS Pension Plan	Emory Healthcare	SJHS Pension Plan	
Interest cost Expected return on plan assets Amortization of prior service cost Recognized actuarial loss	\$ 13,221 (15,657) 2,503 6,270	6,358 (6,254) (438) 1,756	12,291 (15,349) — 6,881	5,947 (6,484) (438) 1,592	
Net periodic pension cost	\$ 6,337	1,422	3,823	617	

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

The amounts accumulated in unrestricted net assets for net unrecognized actuarial loss totaled \$101.8 million and \$84.9 million as of August 31, 2016 and 2015, respectively, for Emory Healthcare and \$67.7 million and \$53.2 million as of August 31, 2016 and 2015, respectively, for SJHS Pension Plan.

Emory Healthcare's net loss of \$2.6 million and SJHS Pension Plan's net loss of \$1.8 million are expected to be amortized from unrestricted net assets into net periodic pension cost in fiscal 2017.

Weighted average assumptions used to determine benefit obligations in the accompanying consolidated statements of financial position for 2016 and 2015 follow:

_	201	16	2015		
	Emory Healthcare	SJHS Pension Plan	Emory Healthcare	SJHS Pension Plan	
Discount rate	3.83%	3.83%	4.67%	4.62%	
Expected long-term rate of return on plan assets	8.00	7.00	8.00	7.50	

Weighted average assumptions used to determine net periodic pension cost for 2016 and 2015 follow:

	201	16	2015		
	Emory Healthcare	SJHS Pension Plan	Emory Healthcare	SJHS Pension Plan	
Discount rate	4.67%	4.62%	4.33%	4.30%	
Expected return on plan assets	8.00	7.00	8.00	7.50	

## Emory Healthcare Plan Assets

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.

During fiscal 2016, management reevaluated its investments in structures with characteristics similar to a mutual fund as to whether they have a readily determinable fair value. Based on that re-evaluation, certain accounting policy and NAV disclosures have been corrected. Also, certain investments previously accounted for as NAV as a practical expedient and excluded from the fair value hierarchy in 2015 have been included as Level 2 investments.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

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

			201	16		
	Total		Fair value	hierarchy	Target	Total asset
	fair value	NAV	Level 1	Level 2	allocation	allocation
Investments:						
Short-term investments and						
cash equivalents \$	384	_	(267)	651	%	%
Commingled funds - equity	148,103	_	_	148,103	70	70
Commingled funds - fixed income	64,694			64,694	30	30
Total investments \$	213,181		(267)	213,448	100%	100%
			201	15		
	Total		Fair value	hierarchy	Target	Total asset
	fair value	NAV	Level 1	Level 2	allocation	allocation
Investments:						
Short-term investments and						
cash equivalents \$	(220)	_	(267)	47	%	%
Commingled funds - equity	135,078	_	_	135,078	70	70
Commingled funds - fixed income	57,648			57,648	30	30

## 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 SJHS Pension 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 SJHS Pension 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.

During fiscal 2016, management reevaluated its investments in structures with characteristics similar to a mutual fund as to whether they have a readily determinable fair value. Based on that re-evaluation, certain accounting policy and NAV disclosures have been corrected. Also, certain investments previously accounted for as NAV as a practical expedient and excluded from the fair value hierarchy in 2015 have been included as Level 2 investments.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

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

				201	10		
	_	Total		Fair value	hierarchy	Target	Total asset
		fair value	NAV	Level 1	Level 2	allocation	allocation
Investments:	_						
Short-term investments and							
cash equivalents	\$	4,523	_	1,850	2,673	%	4%
Commingled funds - equity		48,830	_	16,790	32,040	50	49
Commingled funds - fixed income		32,315	_	_	32,315	40	33
Managed funds	_	13,428			13,428	10	14
Total investments	\$_	99,096		18,640	80,456	100%	100%
	_			201	15		
	_	Tr. 4 . 1					
		Total		Fair value	hierarchy	Target	Total asset
		fair value	NAV	Fair value Level 1	hierarchy Level 2	Target allocation	Total asset allocation
Investments:	-		NAV			_	
Investments: Short-term investments and	-		NAV			_	
	\$		NAV			_	
Short-term investments and	\$	fair value	NAV	Level 1		allocation	allocation
Short-term investments and cash equivalents	\$	fair value 1,531		1,531	Level 2	allocation —%	allocation 2%
Short-term investments and cash equivalents Commingled funds - equity	\$	1,531 44,072		1,531	Level 2  26,194	allocation  -% 50	2% 50

## Cash Flows

Emory Healthcare does not expect to contribute to the Emory Healthcare Pension Plan in fiscal 2017 and expects to contribute \$6.3 million to the SJHS Pension Plan in fiscal 2017.

## **Expected Future Benefit Payments**

Emory Healthcare annual future benefit payments, excluding lump sum settlements, are expected to range from \$7.8 million to \$12.7 million, for the next five years. SJHS Pension Plan annual future benefit payments, excluding lump sum settlements, are expected to range from \$5.3 million to \$6.7 million, for the next five years.

## Other Items

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

## (15) Postretirement Healthcare and Life Insurance Benefits

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.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

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

		2016			2015
	_	Emory University	Emory Healthcare	Total	Total
APBO, beginning of year	\$	85,339	45,955	131,294	130,297
Service cost		1,416	568	1,984	2,209
Interest cost		3,912	2,106	6,018	5,542
Actuarial loss (gain)		15,642	11,035	26,677	(2,152)
Benefits paid	_	(3,125)	(1,732)	(4,857)	(4,602)
APBO, end of year	\$_	103,184	57,932	161,116	131,294

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):

			2016		2015
		Emory University	Emory Healthcare	Total	Total
Fair value of plan assets, beginning of year Actual return on plan assets Benefits paid by Emory	\$	58,681 2,235 —	19,911 1,321 (1,732)	78,592 3,556 (1,732)	81,989 (1,915) (1,482)
Fair value of plan assets, end of year	\$ _	60,916	19,500	80,416	78,592
Funded status - accrued postretirement benefit cost recognized in the consolidated statements of financial position	\$_	(42,268)	(38,432)	(80,700)	(52,702)

Actuarial assumptions used to determine the values of the APBO and the benefit costs for years ended August 31, 2016 and 2015 included a discount rate of 3.85% and 4.67%, 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, 2016 and 2015. During fiscal year 2014, the University's Health Plan Steering Committee approved a change in the postretirement benefits plan whereby it converted to a Medicare exchange model. The model uses a concierge service to assist participants with plan selection and includes a Health Reimbursement Account (HRA) of \$100 per month for each participant to help pay for the coverage. It also provides coverage of drug costs for participants in a Part D drug plan who have catastrophic, as defined, expenses. The effective date for this change was September 1, 2014.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

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

			2016		2015
		Emory University	Emory Healthcare	Total	Total
Service cost of benefits earned	\$	1,416	568	1,984	2,209
Interest cost on APBO		3,912	2,106	6,018	5,542
Expected return on plan assets		(4,569)	(1,524)	(6,093)	(6,375)
Recognized net actuarial loss	_	2,231	1,547	3,778	3,426
Net periodic postretirement					
benefit cost	\$_	2,990	2,697	5,687	4,802

The amounts accumulated in unrestricted net assets follow (in thousands):

	_		2016		2015
	_	Emory University	Emory Healthcare	Total	Total
Net unrecognized actuarial loss Prior service cost	\$	52,064 (206)	27,639 324	79,703 118	53,520 190
Total	=	51,858	27,963	79,821	53,710

In fiscal 2017, net unrecognized actuarial losses of \$3.4 million for Emory University and \$2.6 million for Emory Healthcare are expected to be amortized from unrestricted net assets into net periodic postretirement benefit cost.

#### Plan Assets

The Investment Committee of the Emory University 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.

During fiscal 2016, management reevaluated its investments in structures with characteristics similar to a mutual fund as to whether they have a readily determinable fair value. Based on that re-evaluation, certain accounting policy and NAV disclosures have been corrected. Also, certain investments previously accounted for as NAV as a practical expedient and excluded from the fair value hierarchy in 2015 have been included as Level 2 investments.

# Notes to Consolidated Financial Statements August 31, 2016 and 2015

The following tables summarize the University's VEBA Trust assets as of August 31 (in thousands):

			20	16		
	Total		Fair value	hierarchy	Target	Total asset
	fair value	NAV	Level 1	Level 2	allocation	allocation
Investments:						
Commingled funds - equity	45,717	13,059	12,071	20,587	75%	75%
Commingled funds - fixed income	15,199		8,731	6,468	25	25
Total investments \$	60,916	13,059	20,802	27,055	100%	100%
			201	15		
•	Total		Fair value	hierarchy	Target	Total asset
	fair value	NAV	Level 1	Level 2	allocation	allocation
Investments:						
Commingled funds - equity	44,138	13,099	17,258	13,781	75%	75%
Commingled funds - fixed income	14,543		8,334	6,209	25	25
Total investments \$	58,681	13,099	25,592	19,990	100%	100%

The following tables summarize Emory Healthcare's VEBA Trust assets as of August 31 (in thousands):

			201	16		
	Total		Fair value	hierarchy	Target	Total asset
	fair value	NAV	Level 1	Level 2	allocation	allocation
Investments:						
Commingled funds - equity \$	14,653	_	4,031	10,622	75%	75%
Commingled funds - fixed income	4,847		2,990	1,857	25	25
Total investments \$	19,500		7,021	12,479	100%	100%
	Total		Fair value	hierarchy	Target	Total asset
	fair value	NAV	Level 1	Level 2	allocation	allocation
Investments:						
Commingled funds - equity \$	14,796		7,103	7,693	75%	74%
Commingled funds - fixed income	5,115		3,331	1,784	25	26
Total investments \$	19,911		10,434	9,477	100%	100%

# Cash Flows

Emory Healthcare plans to fund future retiree claims from VEBA Trust assets.

Notes to Consolidated Financial Statements August 31, 2016 and 2015

## **Expected Future Benefit Payments**

Annual future benefit payments are expected to range from \$3.4 million to \$4.2 million for Emory University and from \$2.0 million to \$2.4 million for Emory Healthcare, for the next five years.

## (16) 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. Because such operating companies do not pursue collection of amounts determined to qualify as charity care, 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 \$72.8 million and \$66.5 million for the years ended August 31, 2016 and 2015, 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.

# (17) Functional Expenses

The Consolidated Statements of Activities include the following functional expenses for the years ended August 31 (in thousands):

	2016	2015
Instruction \$	448,333	403,378
Research	443,787	420,834
Public service	96,409	89,810
Academic support	155,049	152,928
Student services	88,081	83,202
Institutional support	217,710	201,662
Scholarships and fellowships	18,764	16,055
Medical services	214,817	231,519
Healthcare services	2,919,448	2,687,532
Auxiliary enterprises	43,100	45,113
Independent operations	21,872	20,800
Total operating expenses \$	4,667,370	4,352,833

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, conducted the second half of calendar year 2014, and debt financing records. Total amounts allocated in 2016 and 2015 were \$182.4 million and \$183.4 million, respectively. Fundraising costs were approximately \$30.9 million and \$27.3 million in 2016 and 2015, respectively.

Notes to Consolidated Financial Statements
August 31, 2016 and 2015

## (18) Medical Professional and General Liability Insurance Coverage

CCIC, Emory Healthcare's wholly owned off-shore 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, 2016 and 2015, the University has recorded an accrual for estimated losses associated with all retained CCIC risks of approximately \$131.0 million (discounted at 2%) and \$124.9 million (discounted at 2%), 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 \$125.0 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 management believes adequate provision has been made for the related risk.

## (19) Related-Party Transactions

The Carter Center, Inc. (CCI) is a nonprofit organization founded by former United States President Jimmy Carter which sponsors various domestic and international programs. The board of trustees of CCI is comprised of 22 members, including the University President and 9 other members appointed by the University's board of trustees. The University's board of trustees has the authority to approve amendments to CCI's articles of incorporation and bylaws and to approve the annual and capital budgets of CCI. The University provides minor administrative support to CCI and has an economic interest in CCI but does not exercise control over the organization.

Funds held in trust for others include \$628.8 million and \$609.9 million representing CCI's investment in the University's long-term investment portfolio of August 31, 2016 and 2015, respectively.

## (20) Commitments and Contingencies

The University is in the process of constructing, renovating and equipping certain facilities for which the outstanding commitments at August 31, 2016 totaled \$34.6 million.

Expenditures related to federal and state grants and contracts are subject to adjustment based upon review by the granting agencies. Amounts of expenditures that granting agencies might disallow cannot be determined at this time. These amounts affect government grants and contract revenue as well as facilities and administrative cost recovery. The University would not expect these costs to influence the consolidated financial position significantly.

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.

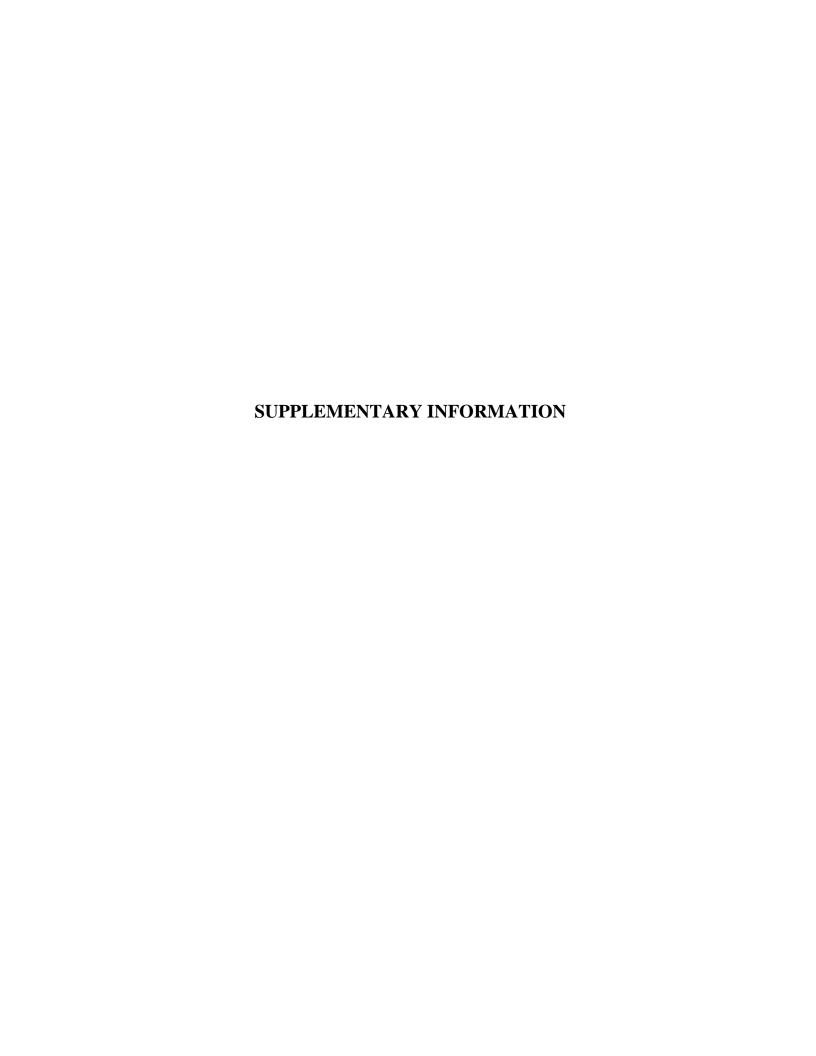
Notes to Consolidated Financial Statements
August 31, 2016 and 2015

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, if a final judgment were entered in any action in excess of its insurance coverage; the University would be liable for the excess. 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.

## (21) Subsequent Events

Subsequent to the balance sheet date, in September 2016, the University issued 2016A Series Bonds to finance the remaining costs to acquire, construct and install an existing capital project. In addition, the University issued 2016B Series Bonds to refund its 2005A Series bonds, a portion of its 2008C Series bonds, and 2010 Tax Exempt Commercial Paper program. Proceeds from the 2016A Series Bonds and 2016B Series Bonds totaled \$401.1 million.

Emory has evaluated subsequent events after the statement of position date of August 31, 2016 through December 20, 2016, the date the consolidated financial statements were issued. No additional matters were identified for recognition or disclosure.



## Schedule 1

# EMORY UNIVERSITY (excluding Emory Healthcare) STATEMENTS OF FINANCIAL POSITION - SUPPLEMENTARY INFORMATION

August 31, 2016 and 2015

(Dollars in thousands)

	August 31, 2016		August 31, 2015	
ASSETS:				
Cash and cash equivalents	\$	186,065	\$	401,168
Student accounts receivable, net		47,972		46,715
Loans receivable, net		26,672		28,411
Contributions receivable, net		99,674		92,724
Other receivables, net		125,790		156,462
Prepaid expenses, deferred charges and other assets		275,214		191,893
Investments		6,594,513		6,534,779
Interests in perpetual funds held by others		1,170,348		1,071,531
Property and equipment, net		1,962,513		1,920,761
Due from affiliates		388,647		316,747
Total assets	\$	10,877,408	\$	10,761,191
LIABILITIES AND NET ASSETS:				
Accounts payable and accrued liabilities	\$	185,932	\$	179,447
Deferred tuition and other revenue		466,869		438,434
Interest payable		28,182		28,828
Liability for derivative instruments		266,661		174,996
Bonds, notes and mortgages payable		1,854,126		1,898,357
Accrued liabilities for benefit obligations and professional liabilities		145,907		122,271
Funds held in trust for others		665,215		645,996
Annuities payable		15,579		17,073
Government advances for federal loan programs		18,724		17,834
Total liabilities		3,647,195		3,523,236
Unrestricted net assets		2,643,649		2,682,463
Temporarily restricted net assets		2,545,560		2,657,818
Permanently restricted net assets		2,041,004		1,897,674
Total net assets		7,230,213		7,237,955
Total liabilities and net assets	\$	10,877,408	\$	10,761,191

See accompanying independent auditors' report.

# **EMORY UNIVERSITY (excluding Emory Healthcare)**

## STATEMENT OF ACTIVITIES - SUPPLEMENTARY INFORMATION

 $Year\ ended\ August\ 31,\ 2016\ (with\ summarized\ financial\ information\ for\ the\ year\ ended\ 2015)$ 

(Dollars in thousands)	Unrestricted	Temporarily Restricted	Permanently Restricted	Total August 31, 2016	Total August 31, 2015
OPERATING REVENUES:					
Tuition and fees	\$ 640,025	-	-	\$ 640,025	\$ 617,826
Less: Scholarship allowances	(232,208)	_		(232,208)	(221,694)
Net tuition and fees	407,817	-	-	407,817	396,132
Endowment spending distribution	172,261	-	-	172,261	165,880
Distributions from perpetual funds	33,199	-	-	33,199	32,490
Other investment income designated for current operations	55,120	-	-	55,120	39,882
Gifts and contributions	32,042	-	-	32,042	36,945
Grants and contracts	400,030	-	-	400,030	372,791
Indirect cost recoveries	122,148	-	-	122,148	113,945
Medical services	273,896	-	-	273,896	267,327
Sales and services of auxiliary enterprises	72,688	-	-	72,688	71,743
Independent operations	23,440	-	-	23,440	22,006
Other revenue	52,632	-	-	52,632	85,130
Net assets released from restrictions	39,469	(8,074)	-	31,395	6,341
Total operating revenues	1,684,742	(8,074)	-	1,676,668	1,610,612
OPERATING EXPENSES:					
Salaries and fringe benefits	1,242,738	-	-	1,242,738	1,184,140
Student financial aid	14,774	-	-	14,774	11,699
Other operating expenses	303,725	-	-	303,725	286,667
Interest on indebtedness	56,933	-	-	56,933	58,321
Depreciation	129,752	-	-	129,752	124,474
Total operating expenses	1,747,922	-	-	1,747,922	1,665,301
NET OPERATING REVENUES/(EXPENSES):	(63,180)	(8,074)	-	(71,254)	(54,689)
NONOPERATING ACTIVITIES:					
Investment return (less than) in excess of spending distribution					
for current operations	37,330	(89,420)	926	(51,164)	(301,974)
Change in undistributed income from perpetual funds held by others	-	-	98,817	98,817	(58,532)
Gifts and contributions	(368)	41,016	43,650	84,298	60,121
Loss on disposal of property and equipment	(6,932)	-	-	(6,932)	(4,485)
Change in fair value of derivative instruments	(91,666)	-	-	(91,666)	(26,265)
Pension and postretirement benefit plans	(12,517)			(12,517)	3,237
Other nonoperating items, net	10,788	(173)	(63)	10,552	(135,871)
Net assets released from restrictions	24,212	(55,607)		(31,395)	(6,341)
Total nonoperating activities	(39,153)	(104,184)	143,330	(7)	(470,110)
Net transfers from affiliates	63,519	-	-	63,519	54,615
CHANGE IN NET ASSETS	(38,814)	(112,258)	143,330	(7,742)	(470,184)
BEGINNING NET ASSETS	2,682,463	2,657,818	1,897,674	7,237,955	7,708,139
ENDING NET ASSETS	\$ 2,643,649	\$ 2,545,560	\$ 2,041,004	\$ 7,230,213	\$ 7,237,955

See accompanying independent auditors' report.

# EMORY UNIVERSITY (excluding Emory Healthcare) STATEMENTS OF CASH FLOWS - SUPPLEMENTARY INFORMATION

Years Ended August 31, 2016 and 2015

(Dollars in thousands)

CACH ELONG EDOM OBED ATIMO A CONVITUE		<u>2016</u>		<u>2015</u>
CASH FLOWS FROM OPERATING ACTIVITIES:	\$	(7,742)	\$	(470,184)
Change in net assets	Ф	(7,742)	Ф	(470,164)
Adjustments to reconcile change in net assets to net cash				
provided by operating activities:				105.405
Noncash equity transfer to affiliate		(20,002)		137,425
Gifts and contributions for endowment and capital projects		(29,902)		3,794
Net realized gain on sale of investments		(86,234)		(280,859)
Net unrealized (gains) loss on investments		(25,905)		434,871
Loss on disposal of property and equipment		6,932		4,485
Interests in perpetual funds held by others		(98,817)		58,532
Depreciation and amortization		129,752		123,817
Accretion/amortization of bond discounts/premiums and issuance costs		(1,980)		(2,060)
Change in fair value of derivative instruments		91,665		26,265
Gifts of securities and other assets		-		(7,910)
Decrease (increase) in:		20.415		(556)
Accounts and other receivables, net		29,415		(556)
Contributions receivable for operations		10,600		(10,068)
Prepaid expenses, deferred charges and other assets		(15,749)		19,347
(Decrease) increase in:				
Accounts payable, accrued liabilities and interest payable		(9,231)		(2,837)
Accrued liabilities for benefit obligations and professional liabilities		23,636		(22,842)
Deferred tuition and other revenue		28,435		15,654
Net cash provided by operating activities		44,875	_	26,874
CASH FLOWS FROM INVESTING ACTIVITIES:				
Disbursements of loans to students		(3,226)		(4,863)
Repayment of loans from students		4,965		4,919
Proceeds from sales and maturities of investments		8,866,599		22,441,599
Purchases of investments		(8,814,194)		(22,424,678)
Purchases of property, plant and equipment		(163,366)		(118,652)
Increase in funds held in trust for others		19,219		2,094
Increase in investments held for affiliate		601		2,094
			_	
Net cash used in investing activities	-	(89,402)		(99,581)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Gifts and contributions for endowment and capital projects		12,352		49,218
Principal repayments of bonds and mortgages payable		(42,251)		(37,725)
Disbursements to affiliate for capital projects		(92,915)		-
Decrease in affiliate debt, net		20,414		35,832
Required posting of collateral for debt related derivatives		(67,572)		(6,700)
Decrease in annuities payable		(1,494)		(748)
Increase in government advances for federal loan programs		890		32
Net cash (used in) provided by financing activities		(170,576)		39,909
Net decrease in cash and cash equivalents		(215,103)		(32,798)
Cash and cash equivalents at beginning of year		401,168		433,966
Cash and cash equivalents at end of year	\$	186,065	\$	401,168
Supplemental disclosure:			=	
Cash paid for interest	\$	60,244	\$	61,600
	Ψ		Ψ	
Accounts payable attributable to property, plant and equipment purchases		15,070		15,223
Income taxes paid, net		1,760		368
Pledge payments received in form of securities and immediately sold		33,756		28,000

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Secret Start Sta	Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Seminary Agrollines Research adjacence		Tivatu number		вавлестрина	espenditures
Transcript   Processing   Pro					
15. Superment of Agriculturar (Agriculturar (Agricultura	Pass-through University of Minnesota	H004403736	10.215 \$		
Agricultur and Fold Recent Institute (APIE) Bridge (APIE) Agricultur and Fold Recent Institute (APIE) Bridge (APIE) Brid					8,842
Assimation and Food Excessed Nationary (AMP) Prost-Original Prost of Security (1972) Prost-Original Prost (1972) Texa (CTIA No. 1910) T	Agriculture and Food Research Initiative (AFRI)			_	
Part   Carbon   Car	Agriculture and Food Research Initiative (AFRI)	2015-67017-23080	10.310	_	164,988
Teal CEIDA No. 19.31   1.00	Pass-through North Carolina A and T State University Pass-through University of Florida			_	
Sea Sea Cast Support   Sea Cas					
Section Sequent   Sequen	U.S. Department of Agriculture Total				429,374
Pare-looking Congres See Grant, Lowerstop of Georgia   Pare-looking See Grant, Lowerstop					
Table   Tabl	Pass-through Georgia Sea Grant, University of Georgia			_	
Facility Development and Ultriantone Research and Development Grants and Cooperative Agreements		KR/46-0/6/S001049	11.41/		
Total CTDA No. 11.47  Climate and Amophene Recearch  Total CTDA No. 11.41  1.5   150, 155  Total CTDA No. 11.41  1.5   150, 155  Total CTDA No. 11.41  1.5   150, 155  U.S. Deguatement of Commerce Total  1.5   150, 155  U.S. Deguatement of Commerce Total  1.5   150, 155  U.S. Deguatement of Commerce Total  1.5   150, 155  Total CTDA No. 11.40  1.5   150, 155  Total CTDA No. 12.51  Total CTDA No. 12.50  Milling Modesial Recearch and Development  Mill		NA15NMF4270347	11 427		
Tail CFDA No. 1.1.21  U. S. Department of Commerce Total  I. S. Department of Commerce Total  II S. De					
U.S. Department of Commerce Toal  U.S. Department of Commerce Toal  U.S. Department of Commerce  Basic and Applied Scientific Research  Basic and Applied Scientific Research  WINTAPPLI 1-1,6554  Pass-Brough Bown University  Toal CFDA No. 1230  Toal CFDA No. 1230  Toal CFDA No. 1230  Basic Scientific Research Combining Weepon of Mean Destruction  Basic Scientific Research Combining Weepon of Mean Destruction  Toal CFDA No. 1230  Toal CFDA No.	Climate and Atmospheric Research	NA13OAR4310059 - Amend	11.431		106,185
S. Degummen of Defense   Basic and Applied Scentific Research   N0014-13-1-0253   12,00   — 256,615   Basic and Applied Scentific Research   N0014-16-1-2254   12,00   — 27,70   — 27,70   — 27,	Total CFDA No. 11.431				106,185
Basic and Applied Scentrific Research   SN0014-15-1-2255   1.200   266,615   Basic and Applied Scentrific Research   SN0014-15-1-2256   1.200   3 9.944				53,476	301,677
Basic and Applied Scientific Research   Mo0014-16-1-276   12-00   - 13-59-55     Pass-through Stimutific Research   12-00   - 13-59-55     Pass-through Stul Marrow Donor Pengram   12-00   - 19-30-44     Pass-through Stul Marrow Donor Pengram   12-00   - 12-00-13     Pass-through Stul Marrow Donor Pengram   12-00   - 12-00-13     Pass-through Stul Marrow Donor Pengram   12-00   - 12-00     Pass-through Stul Marrow Donor Pengram   12-00   - 19-30-40     Pass-through Stul Marrow Donor Pengram   12-00   - 1		N00014-13-1-0253	12.300	_	256.615
Pass-frenciph Brown Infrarestry   200000922   12:00   - 3994.	Basic and Applied Scientific Research	N00014-16-1-2276	12.300	_	32,952
1,200,258   14,934   14,935   14,934   14,935   12,515   14,934   13,736	Pass-through Brown University	00000922	12.300	=	39,944
Baise Scientific Research - Combating Wappens of Mass Destruction   \$2500   \$231		AGREE #12693/1802/	12.300		
Basic Scientific Research - Combuting Wegions of Mass Destruction   19,000   12,51     30,200   12,51     30,200   12,51     30,200   12,51     10,300   12,51     12,500     12,		HDTR A1-15-C-0075	12 351		
Military Medical Research and Development   W81XWH1-11-0816   12-420   79   179	Basic Scientific Research – Combating Weapons of Mass Destruction				
Military Medical Research and Development   WRINWHI-13-14-0955   12-409   79   72-70   79-70				149,934	
Military Medical Research and Development         WRI XWH0610286         12.40         — 2.972           Military Medical Research and Development         WRI XWH071077         12.120         — 2.973           Military Medical Research and Development         WRI XWH12-16018         12.40         — 31.536           Military Medical Research and Development         WRI XWH12-16018         12.40         — 31.536           Military Medical Research and Development         WRI XWH12-16018         12.40         — 12.413           Military Medical Research and Development         WRI XWH13-1609         12.40         — 12.413           Military Medical Research and Development         WRI XWH13-1603         12.40         — 19.259           Military Medical Research and Development         WRI XWH13-1603         12.40         — 19.259           Military Medical Research and Development         WRI XWH13-1602         12.40         — 19.259           Military Medical Research and Development         WRI XWH13-1606         12.40         — 29.259           Military Medical Research and Development         WRI XWH13-1606         12.40         — 29.259           Military Medical Research and Development         WRI XWH13-1606         12.40         — 29.259           Military Medical Research and Development         WRI XWH13-1606         12.40	Military Medical Research and Development Military Medical Research and Development			179	
Milaty Medical Research and Development Milaty Medical Research Milaty Medical Research Milaty Medical Research Milaty Mila	Military Medical Research and Development	W81XWH0610286	12.420	=	2,972
Military Medical Research and Development   W81XWH-12-1-0436   12.420	Military Medical Research and Development	W81XWH-12-0255	12.420	_	247,022
Miltary Medical Research and Development Miltary Medical Research and Development WRIXWH-13-1-0334 12.420 — 50,007 Miltary Medical Research and Development WRIXWH-15-1-0312 12.420 — 100,640 Miltary Medical Research and Development WRIXWH-15-1-0112 12.420 73,509 170,000 Miltary Medical Research and Development WRIXWH-15-1-0154 12.420 73,509 170,000 Miltary Medical Research and Development WRIXWH-15-1-0154 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0154 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0154 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0154 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0365 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0365 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0365 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0365 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0365 12.420 — 605,224 Miltary Medical Research and Development WRIXWH-15-1-0365 12.420 — 605,224 Miltary Medical Research Polisoter Pass-through Inversity Grant State of Miltary Medical Research Polisoter Pass-through Inversity Grant Inversity Grant Inversity 13.420 — 205,237 Miltary Medical Research WRIXWH-15-1-0162 12.420 — 205,237 Miltary Medical Research Foundation 19.42145556 12.420 — 205,237 Miltary Medical Research Foundation 19.42145556 12.420 — 205,237 Miltary Medical Research Projects 19.430 — 60,600,000,000,000,000,000,000,000,000,	Military Medical Research and Development			_	
Military Medical Research and Development				_	
Military Medical Research and Development	Military Medical Research and Development	W81XWH-13-1-0334	12.420	_	56,907
Military Medical Research and Development   WSIXWH-15-1-0545   12.420	Military Medical Research and Development	W81XWH-15-1-0132	12.420		106,640
Military Medical Research and Development   WSIXWH-15-20045   12.420	Military Medical Research and Development	W81XWH-15-1-0545	12.420	/3,509	605,224
Pass-through Dama Farber Cancer Institute   3078403   12.420   — 6.560   Pass-through Geneva Foundation   12.420   — 6.560   Pass-through Institute for Neurodegenerative Disorder   PARS   12.420   — 6.563   Pass-through Neur Trust Institute   NTL-NTRR15-02   12.420   — 2.369.44   Pass-through Neur York University   10.00904 MI J0309357   12.420   — 16. Pass-through New York University   10.00904 MI J0309357   12.420   — 16. Pass-through New York University   12.420   — 16. Pass-through New York University   12.420   — 16. Pass-through New York University   12.420   — 15. Pass-through University of Cincinnation   0.00906 MI J0309357   12.420   — 2.877   12.420   — 17.615   Pass-through University of Cincinnation   0.00906 MI J0309357   12.420   — 2.877   12.420   — 17.615   Pass-through University of Cincinnation   0.00906 MI J0309357   12.420   — 2.877   12.620   — 17.615   Pass-through University of Cincinnation   0.00906 MI J0309357   12.420   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773   12.620   — 31.773				_	
Pass-through Institute for Neurodegenerative Disorder   Pass-through Natl Traumal Institute   NTI-NTIRE 15-02   12-420   — 23,653   Pass-through Natl Traumal Institute   NTI-NTIRE 15-02   12-420   — 106   Pass-through New York University   10-00904/M130039357   12-420   — 106   Pass-through New York University   13-A0-00-001212   12-420   — 106   Pass-through University of California San Francisco   8-8996   12-420   — 27,524   Pass-through University of California San Francisco   15-A0-00-001212   12-420   — 27,524   Pass-through University of Teas San Antonio   18942/1155536   12-420   — 27,524   Pass-through University of Teas San Antonio   18942/1155536   12-420   — 31,773   Pass-through Verearas Medical Research Foundation   08409004-315804   12-420   — 31,773   Pass-through Verearas Medical Research Foundation   08409004-315804   12-431   — 155,240   Pass-through Verearas Medical Research   W911NF-13-1-0100005   12-431   — 155,240   Pass-through Verearas Medical Research   W911NF-13-1-0182   12-431   — 155,240   Pass-through Verearas Verearas   W911NF-13-1-0182   12-431   — 10,220   Pass-through University of California Los Angeles   W911NF-14-1-0471   12-431   — 10,220   Pass-through University of California Los Angeles   W911NF-14-1-0471   12-431   — 10,220   Pass-through University of California Los Angeles   Pass-through Vergains Tech   Pass-through Vergains Tech   Pass-through Vergains Tech   Pass-through University of California Los Angeles   Pass-through University of California Los Angeles   Pass-through Vergains Tech   Pass-through Georgia Institute of Technology   Pass-through G	Pass-through Dana Farber Cancer Institute	3078403	12.420	_	14,653
Pass-through New York University	Pass-through Institute for Neurodegenerative Disorder	PARS	12.420	_	653
Pass-through University of California San Francisco   8599sc   12.420	Pass-through New York University	10-00904/M130039357	12.420	_	16
Pass-through Urierrsity of Texas San Antonio   159424/15556   1240   — 31,773   17510   1761				_	
Pass-through Veterans Medical Research Foundation   08409004-315804   12.420   - 31,773   7,688   2,284,398   7,068   2,284,398   7,068   2,284,398   7,068	Pass-through University of Cincinnati Pass-through University of Texas San Antonio				
Basic Scientific Research	Pass-through Veterans Medical Research Foundation				
Basic Scientific Research         W91INF-13-1-0182 brown brown basic Scientific Research         W91INF-14-1-0208 brown b					
Basic Scientific Research   W911NF-14-1-0471   12.431   — 19.196   Pass-through University of California Los Angeles   1000GSA786   12.431   — 162.007   Pass-through Virginia Tech   450378-19554   12.431   — 157.122   Total CFDA No. 12.431   — 672.767   157.122   Total CFDA No. 12.431   — 672.767   157.122   Total CFDA No. 12.431   — 672.767   157.122   Total CFDA No. 12.550   — 18.473   101.804   85.228   Total CFDA No. 12.630   101.804   85.228   Total CFDA No. 12.630   101.804   85.228   Uniformed Services University Medical Research Projects   3834189   12.750   — 17.815   Pass-through Geneva Foundation   5.1254-02   12.750   — 17.815   Pass-through Geneva Foundation   5.1263-01   12.750   — 12.134   Pass-through Geneva Foundation   5.1348-01/MOD1   12.750   — 44.374   Pass-through Henry M Jackson Foundation   47.399 PO 794803   12.750   — 24.97.12   Pass-through Henry M Jackson Foundation   47.399 PO 794803   12.750   — 24.97.12   Pass-through Henry M Jackson Foundation   24007/795400   12.750   — 44.374   Pass-through Henry M Jackson Foundation   24007/795400   12.750   — 45.5908   Total CFDA No. 12.750   — 45.5908   Total				_	
Pass-through University of California Los Angeles   1000GSA786   12.431   — 162,007   157,122   Total CFDA No. 12.431   — 1672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   157,122   — 672,767   158,473   157,125   — 18,473   158,673				_	
Total CFDA No. 12.431	Pass-through University of California Los Angeles	1000GSA786	12.431	_	162,007
The Language Flagship Grants to Institutions of Higher Education   Pass-through Georgia Institute of Technology   P6677-G1   12.550   — 18,473		4503/8-19554	12.431		
Pass-through Georgia Institute of Technology					072,707
Basic, Applied, and Advanced Research in Science and Engineering   FA9550-13-1-0002   12.630   101,804   85,228   Total CFDA No. 12.630   101,804   85,228   Uniformed Services University Medical Research Projects   2834189   12.750   - 1,125,240   27,00		P6677-G1	12.550		18,473
Total CFDA No. 12 630   101,804   85,228					
Uniformed Services University Medical Research Projects  Pass-through Duke University Pass-through Geneva Foundation S. 1254-02 Pass-through Geneva Foundation S. 1264-02 Pass-through Geneva Foundation S. 1263-01 12,750	, ,	FA9550-13-1-0002	12.630		
Pass-through Duke University   3834189   12,750				101,804	85,228
Pass-through Geneva Foundation	Pass-through Duke University			_	
Pass-through Henry M Jackson Foundation	Pass-through Geneva Foundation	S-1263-01	12.750		21,934
Pass-through Henry M Jackson Foundation         2407/795400         12,750         —         (244)           Pass-through Henry M Jackson Foundation         2490 – PO# 825668         12,750         539         92,411           Pass-through Henry M Jackson Foundation         2604         12,750         —         455,908           Total CFDA No. 12,750         539         2,007,150           Air Force Defense Research Sciences Program         8         12,800         —         (2,71)           Passed-through University Of Illinois         2012-03966-02(A0076)         12,800         —         62,470           Passed-through University Of Southern California         34438627         12,800         —         29,51					
Pass-through Henry M Jackson Foundation         2604         12.750         —         455,008           Total CFDA No. 12.750         539         2,007,150           Air Force Defense Research Sciences Program         8         8         12.800         —         (271)           Passed-through University Of Illinois         2012-03966-02(A0076)         12.800         —         62.470           Passed-through University Of U	Pass-through Henry M Jackson Foundation	2407/795400	12.750	520	(244)
Air Force Defense Research Sciences Program         R0668-G1 AMD 9         12.800         —         (271)           Passed-through University Of Illinois         2012-03966-02(A0076)         12.800         —         62.470           Passed-through University Of Southern California         3443627         12.800         —         2.951					
Passed-through Georgia Institute Of Technology         R0668-G1 AMD 9         12.800         —         (271)           Passed-through University Of Illinois         2012-03966-02(A0076)         12.800         —         62,470           Passed-through University Of Southern California         34438627         12.800         —         2,951	Total CFDA No. 12.750			539	2,007,150
Passed-through University Of Illinois         2012-03966-02(A0076)         12.800         —         62,470           Passed-through University Of Southern California         34438627         12.800         —         2,951		POSSE CLAMP O	12 000		(271)
	Passed-through University Of Illinois	2012-03966-02(A0076)	12.800	_	62,470
	Passed-through University Of Southern California Passed-through Yale University	34438627 C13L11587(L00124)	12.800 12.800		2,951 15
Total CFDA No. 12.800 65,165	Total CFDA No. 12.800				65,165

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Research and Technology Development Research and Technology Development Pass-through University of Pennsylvania	HR0011-16-2-0011 W31P4Q-14-1-0010 569456	12.910 \$ 12.910 12.910 12.910	2,026,751	115,881 2,940,172 238,763
Total CFDA No. 12.910	307.50	12.510	2,026,751	3,294,816
Contract:	W911NF-16-C-0008	12.RD	_	502,655
Contract Pass-through M D Anderson Cancer Center	W81XWH-12-1-0217 PO#20628-2000, 28321	12.RD 12.RD	_	(5,091) (10,223)
Pass-through University of Southern California Pass-through University of Southern California	57417972 PO# 57169635	12.RD 12.RD	_	4,250 390,177
Total CFDA No. 12.RD				881,768
U.S. Department of Defense Total			2,352,716	11,458,221
U.S. Department of State:  Academic Exchange Programs – Humphrey Fellowship Program: Pass-through Institute Of International Education Pass-through Institute Of International Education	066469933 2014-2015	19.010 19.010	=	29,812 214
Total CFDA No. 19.010	2011 2013		_	30,026
U.S. Department of State Total			_	30,026
National Aeronautics and Space Administration:	NNW11 4 1/2/C (000	12.001	44.024	157.024
Science Science	NNX11AI53G S08 NNX14AG01G	43.001 43.001	44,834 76,460	157,924 126,127
Science Science	NNX15AH74G-001 NNX16AE49A	43.001 43.001	_	117,017 11,682
Pass-through University Of Georgia Pass-through University Of Nebraska	RR185-437/4941956AM5 25-0514-0171-002	43.001 43.001	_	34,103 52,398
Total CFDA No. 43.001	23-0314-01/1-002	43.001	121,294	499,251
Aeronautics:		•	121,271	
Passed-through California Institute Of Technology Total CFDA No. 43.002	1363692	43.002		33,342 33,342
Exploration Exploration	NNX11AC30G (S18&S19) NNX12AC30G	43.003 43.003	23,665	741,820 (930)
Exploration	NNX15AD63G S03	43.003		222,875
Total CFDA No. 43.003			23,665	963,765
Space Operations Pass-through Center For The Advancement Of Science In Space, Inc.	GA-2014-126	43.007		41,070
Total CFDA No. 43.007  National Aeronautics and Space Administration Total		•	144,959	1,537,428
National Endowment for the Humanities:  Promotion of the Arts, Grants to Organizations and Individuals		•	144,939	1,337,426
Pass-through Arizona State University	16-998	45.024		1,560
Total CFDA No. 45.024	7			1,560
Promotion of the Humanities_Fellowships and Stipends Total CFDA No. 45.160	FA-55691-11	45.160		<u>17</u>
Promotion of the Humanities_Research Promotion of the Humanities Research	RQ-50566-11 RZ - 230579-15	45.161		12,173 6,727
Total CFDA No. 45.161			_	18,900
National Endowment for the Humanities Total				20,477
National Science Foundation: Engineering Grants	1609831	47.041	_	5,003
Engineering Grants	CBET 1546790 CBET0730312	47.041 47.041	_	113,711 490
Engineering Grants Engineering Grants	CBET-1150235	47.041	63,241	90,857
Engineering Grants Engineering Grants	CBET-1159434 CBET-1336401	47.041 47.041	_	(27) 53,078
Engineering Grants Engineering Grants	CBET-1512826 CMMI-1250235	47.041 47.041	_	139,596 207
Engineering Grants	ECCS 1503878	47.041	_	80,470
Engineering Grants Engineering Grants	ECCS1218419 ECCS-1305586	47.041 47.041	_	(3,581) 99,671
Engineering Grants Engineering Grants	EFRI-1137229 IIP-1619679	47.041 47.041	309,870	439,602 40,909
Pass-through Georgia Institute of Technology	RA414-S1	47.041		161
Total CFDA No. 47.041			373,111	1,060,147
Mathematical and Physical Sciences Mathematical and Physical Sciences	1557712 CHE 1362249	47.049 47.049	_	2,850 156,207
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1012620 CHE-1057350	47.049 47.049	=	(2,567) 1,101
Mathematical and Physical Sciences	CHE-1124862	47.049	_	12
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1145227 CHE-1150492	47.049 47.049	_	642 64,203
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1205646 CHE-1213246	47.049 47.049	2,658,935	4,377,226 68,831
Mathematical and Physical Sciences	CHE-1213904	47.049	_	3,736
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1265586 CHE-1309817	47.049 47.049	- - - - - -	205,208 150,434
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1352040 CHE-1362113	47.049 47.049	_	134,019 52,435
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1362281	47.049 47.049	_	181,469
Mathematical and Physical Sciences	CHE-1362502 CHE-1412580	47.049		119,238 123,710
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1455211 CHE-1463552-002	47.049 47.049	_	100,121 169,557
Mathematical and Physical Sciences	CHE-1465189	47.049	_	170,105
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1506405 CHE-1507932	47.049 47.049	_	147,560 146,623
Mathematical and Physical Sciences Mathematical and Physical Sciences	CHE-1531620 CHE1611102	47.049 47.049	_	539,406 11,189
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMA-112086 DMR0804174	47.049 47.049	_	(27) (506)
stantematical and I hysical selences	DIVINUOU41 /4	47.049	_	(300)

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

	Award number	Federal CFDA number or other I.D. number	Passed through to	Federal
Program title/federal grantor/pass-through entity  Mathematical and Physical Sciences	DMR0812204	47.049 \$	subrecipients	expenditures 331
Mathematical and Physical Sciences	DMR-1151646	47.049 \$	_	27,485
Mathematical and Physical Sciences	DMR-1207431-002	47.049	_	98,669
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMR-1409851 DMR-1455086	47.049 47.049	_	146,905 128,739
Mathematical and Physical Sciences	DMR-1504449	47.049	_	51,491
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMR-1506446 DMR-1534317	47.049 47.049	_	55,785 221,123
Mathematical and Physical Sciences	DMK-1334317 DMS 1157289	47.049	_	310
Mathematical and Physical Sciences	DMS 1522599	47.049	_	32,842
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMS-1201542 DMS-1208874	47.049 47.049	_	62,107 10,201
Mathematical and Physical Sciences	DMS-1250467-002	47.049	_	89
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMS-1301698 DMS-1301785	47.049 47.049	_	86,065 10,115
Mathematical and Physical Sciences	DMS-1401319	47.049	_	49,712
Mathematical and Physical Sciences	DMS-1412973	47.049		35,064
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMS-1418889 DMS-1419060	47.049 47.049	_	70,689 35,033
Mathematical and Physical Sciences	DMS-1463882	47.049	_	107,906
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMS-1522760 DMS1523466	47.049 47.049	_	155,572 27,878
Mathematical and Physical Sciences	DMS-1555048	47.049	_	44,766
Mathematical and Physical Sciences	DMS1557960	47.049	_	92,062
Mathematical and Physical Sciences Mathematical and Physical Sciences	DMS-1601306 PHY-1410978	47.049 47.049	_	73,651 58,633
Pass-through Georgia Institute Of Technology	RB011-G7	47.049	_	381,500
Total CFDA No. 47.049			2,658,935	8,987,505
Geosciences	1360330	47.050	91,909	116,556
Geosciences	AGS-1350021	47.050	91,909	65,688
Pass-through University of California Berkeley	00006232/OCE0622743	47.050		428
Total CFDA No. 47.050			91,909	182,672
Computer and Information Science and Engineering	CNS-1117763	47.070		(848)
Computer and Information Science and Engineering	CNS1553579-001	47.070	_	120
Pass-through Notre Dame University	CNS-1405912	47.070		36,191
Total CFDA No. 47.070				35,463
Biological Sciences	1146316005	47.074	_	141,490
Biological Sciences Biological Sciences	1354829 1359575	47.074 47.074	_	164,629 85,174
Biological Sciences	1456912	47.074	_	144,031
Biological Sciences	1457291	47.074	_	60,413
Biological Sciences Biological Sciences	1501928 1553344	47.074 47.074	_	15,493 46,265
Biological Sciences	DBI-1344208	47.074	_	41,725
Biological Sciences	DBI-1353939	47.074	_	141,739
Biological Sciences Biological Sciences	DEB-1257160 DEB-1601520	47.074 47.074	_	49,442 1,953
Biological Sciences	DEB1640698	47.074	_	37,619
Biological Sciences Biological Sciences	IOS-1149829 IOS-1208126	47.074 47.074	_	125,632 146,067
Biological Sciences	IOS-1208120 IOS-1354998	47.074	_	162,716
Biological Sciences	IOS-1557724	47.074	_	104,758
Biological Sciences Biological Sciences	MCB-1350829 MCB-1413062	47.074 47.074	_	236,217 206,795
Pass-through Ohio State University	60036543	47.074	_	15,353
Pass-through University Of California Riverside	S-000585	47.074	_	170,893
Pass-through University Of Pennsylvania	557585	47.074		58
Total CFDA No. 47.074				2,098,462
Social, Behavioral, and Economic Sciences	1125756 AMD 02	47.075	_	(2,619)
Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	1533260 1634001-001	47.075 47.075	89,999	107,362 252,615
Social, Behavioral, and Economic Sciences	BCS-1324188	47.075		369
Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	BCS-1354088 BCS-1357284	47.075 47.075	_	1,544 3,717
Social, Behavioral, and Economic Sciences	BCS-1413445	47.075	_	9,154
Social, Behavioral, and Economic Sciences	BCS-1430403	47.075	_	64,525
Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	BCS-1528091 BCS-1528939	47.075 47.075	_	78,660 23,770
Social, Behavioral, and Economic Sciences	SES0751340	47.075	_	144
Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	SES-1067899 SES-1125539	47.075 47.075	_	(47) 13,007
Social, Behavioral, and Economic Sciences	SES-1424016	47.075	_	17,640
Social, Behavioral, and Economic Sciences	SMA-1306132	47.075	_	400
Pass-through Columbia University Pass-through University of Michigan	SES-0951516 BCS0827313/300107122	47.075 47.075	_	4,571 (31)
	BC30827313/300107122	47.075	90,000	
Total CFDA No. 47.075			89,999	574,781
Education and Human Resources Education and Human Resources	DGE1444932 DUE-1068238	47.076 47.076	_	466,559 38,107
Pass-through Georgia Institute Of Technology	Postdoctoral Fellows	47.076	_	1,281
Pass-through Georgia Institute Of Technology	RG083-G1	47.076		19,295
Total CFDA No. 47.076			_	525,242
Office of Cyberinfrastructure	OCI-1124418	47.080		(73)
Total CFDA No. 47.080				(73)
National Science Foundation Total			3,213,954	13,464,199
U.S. Department of Veterans Affairs: Veterans State Hospital Care	508-13-3-3103-0185	64.016	_	3,347
	300 13-3-3103-0103	04.010		
Total CFDA No. 64.016				3,347
Contract: U.S. Dept Of Veteran Affairs	621D45004	64.RD	_	893
U.S. Dept Of Veteran Affairs U.S. Dept Of Veterans Affairs	508-D57120	64.RD	=	50,350
Total CFDA No. 64.RD				51,243
U.S. Department of Veterans Affairs Total				54,590
				5.,570

54

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
U.S. Environmental Protection Agency:				
Environmental Protection Consolidated Research Pass-through Georgia Institute Of Technology	RD557-G1	66.500	'	65,035
Total CFDA No. 66.500				65,035
Science to Achieve Results (STAR) Research Program Science to Achieve Results (STAR) Research Program	83479901 83586901	66.509 66.509	535,753	1,063,173 28,895
Science to Achieve Results (STAR) Research Program	83615301	66.509	=	109,370
Pass-through Harvard University Pass-through Rutgers University	112514-5080711 8195 Mod 1	66.509 66.509	_	41,057 123,647
Total CFDA No. 66.509			535,753	1,366,142
Office of Research and Development Consolidated Research/Training/Fellowships Pass-through Health Effects Institute	4942-RFA13-1/14-3	66.511	101,973	226,015
Total CFDA No. 66.511			101,973	226,015
U.S. Environmental Protection Agency Total			637,726	1,657,192
U.S. Department of Energy: Office of Science Financial Assistance Program	DE SC0016004	81.049		24,098
Office of Science Financial Assistance Program	DE-FG02-01ER15153	81.049	=	118,992
Office of Science Financial Assistance Program Office of Science Financial Assistance Program	DE-FG02-02ER15377 DE-FG02-07ER15906/ 9	81.049 81.049	_	115,287 338,067
Office of Science Financial Assistance Program Office of Science Financial Assistance Program	DE-FG02-97ER14782 DE-SC0008798-0005	81.049 81.049	10,565	32,430 196,277
Office of Science Financial Assistance Program	DE-SC0008798-003	81.049	=	30,992
Office of Science Financial Assistance Program  Total CFDA No. 81.049	DE-SC0010271-001	81.049	10,565	41,737 897,880
U.S. Department of Energy Total			10,565	897,880
U.S. Department of Education:				,
Overseas Programs – Doctoral Dissertation Research Abroad Overseas Programs – Doctoral Dissertation Research Abroad	P022A130041 P022A150016	84.022 84.022	=	(2,624) 49,865
Total CFDA No. 84.022	1022/1130010	01.022		47,241
Education Research, Development, and Dissemination	R305A160240	84.305		31,017
Total CFDA No. 84.305				31,017
Improving Teacher Quality State Grants Pass-through University of Georgia	RH216269/4688558	84.367	_	2,331
Total CFDA No. 84.367				2,331
U.S. Department of Education Total				80,589
U.S. Department of Health and Human Services: Global AIDS	21/2CDC001004 05C1	93.067		24 517
Global AIDS	3U2GPS001904-05S1 5 NU14GH001237-03-00	93.067	1,835,188	34,517 3,106,295
Global AIDS	5 NU2GGH001443-02-00	93.067	741,468	949,483
Total CFDA No. 93.067  Birth Defects and Development Disabilities – Prevention and Surveillance	5U50DD001027-03	93.073	2,576,656	4,090,295
Birth Defects and Development Disabilities – Prevention and Surveillance	5U50DD001027-03REVIS	93.073		(120)
Total CFDA No. 93.073				(504)
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01CA179422-03	93.077	589,666	810,883
Total CFDA No. 93.077  Blood Disorder Program: Prevention, Surveillance, and Research			589,666	810,883
Pass-through Hemophilia of Georgia	1NU27DD001155-01-00	93.080		40,000
Total CFDA No. 93.080				40,000
Prevention of Disease, Disability, and Death by Infectious Diseases	5NU38PS004646-03	93.084	531,711	1,476,799
Total CFDA No. 93.084  Food and Drug Administration Research	4R01FD003527-03	93.103	(30,305)	1,476,799 (63,450)
Food and Drug Administration_Research	4R01FD003527-03REV	93.103	49,230	107,731
Food and Drug Administration_Research Food and Drug Administration_Research	5R01FD003440-03S1 5R01FD004814-02	93.103 93.103	5,844	231,584 315,412
Pass-through Cincinnati Childrens Hospital Pass-through Duke University	133744 06/30/152034640	93.103 93.103	4,432	8,000 56,993
Pass-through Georgia Institute of Technology Pass-through Georgia Institute of Technology	RE159-G1	93.103	_	29,916
Pass-through Johns Hopkins University	RG219-G2 2001313857	93.103 93.103	_	146,531 1,399
Pass-through Seattle Children's Research Institute Pass-through Seattle Children's Research Institute	10974SUB 11389SUB	93.103 93.103	_	(190) 38,855
Pass-through Seattle Children's Research Institute	-17011277SUB / MOD 1	93.103		86,865
Total CFDA No. 93.103			29,201	959,646
Maternal and Child Health Federal Consolidated Programs Maternal and Child Health Federal Consolidated Programs	5 T03MC076511100 5 T76MC28446-02-00	93.110 93.110	67,922	25,948 324,346
Maternal and Child Health Federal Consolidated Programs Maternal and Child Health Federal Consolidated Programs	6 H46MC240900301 6 T03 MC07651-09-01	93.110 93.110	36,751	359,468 956
Pass-through American Thrombosis and Hemostasis Network	NHPCC-1-01	93.110		34,410
Total CFDA No. 93.110			104,673	745,128
Environmental Health Environmental Health	4P30RD019776-04 5 R21 ES022795-02REV	93.113 93.113	105,483 23,603	470,364 89,852
Environmental Health Environmental Health	5K01ES025445-02 5K22ES025418-02	93.113 93.113	· _	167,016 106,329
Environmental Health	5K99ES024570-02	93.113		97,676
Environmental Health Environmental Health	5P30ES019776-03REVIS 5P50ES026071-02	93.113 93.113	108,253	1,035,011 649,094
Environmental Health Environmental Health	5R01ES023839-02 5R01ES024790-02	93.113 93.113	_	436,522 691,154
Environmental Health	5R21ES023763-02	93.113	2,582	135,051
Environmental Health Environmental Health	5R21ES023927-02 5R21ES025632-02	93.113 93.113	_	38,666 205,966
Environmental Health Environmental Health	5T32ES012160-10 5T32ES012870-13	93.113 93.113	_	135,019 373,156
Environmental Health	5K01ES019877-05	93.113	_	67,008
Environmental Health Environmental Health	5P01ES011163-10 5R01ES012014-10	93.113 93.113	_	1,009 3,838

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,\ 2016$

Decayon title/federal granter/sees through outile	Award number	Federal CFDA number or other I.D. number	Passed through to	Federal
Program title/federal grantor/pass-through entity  Environmental Health	5R01ES023485-03	93.113 \$	subrecipients	expenditures 565,681
Environmental Health	5T32ES012870-10	93.113	_	435
Pass-through Harvard School Of Public Health Pass-through Oregon State University	112481-5047201 PO388A-A Am.3	93.113 93.113	_	11,318 14,353
Pass-through University Of California Berkeley	8345	93.113	_	14,744
Pass-through University Of California Davis Pass-through University Of California Irvine	201016645-01 2012-2844	93.113 93.113	_	7,778 21,223
Pass-through University Of California Los Angeles	1935 G TA389	93.113	_	55,009
Pass-through University Of North Carolina Chapel Hill	R01ES021777	93.113		19,568
Total CFDA No. 93.113			239,921	5,412,840
Biometry and Risk Estimation Health Risks from Environmental Exposures				
Pass-through Seattle Childrens Hospital	414470020101EU01MOD2	93.115		(16,317)
Total CFDA No. 93.115				(16,317)
Project Grants and Cooperative Agreements for Tuberculosis Control Programs		00.446		
Pass-through Georgia Dept of Public Health	4050004615151505	93.116		17,747
Total CFDA No. 93.116				17,747
Oral Diseases and Disorders Research Pass-through Johns Hopkins University	1R01DE026333-01 2002808810	93.121 93.121	_	30,511 32,407
Pass-through Johns Hopkins University	2002808810	93.121	_	23,361
Total CFDA No. 93.121				86,279
Grants to Increase Organ Donations	5R39OT269910300	93.134		239,592
	31(3)(3120))10300	75.154		
Total CFDA No. 93.134	ELIADDROLOGO CENTRA	00.105		239,592
Centers for Research and Demonstration for Health Promotion and Disease Prevention Pass-through Dartmouth College	5U48DP001909-05REVIS 1612R196	93.135 93.135	71	128,691 121,984
Pass-through Morehouse School of Medicine	002-EMORY-260056-02	93.135	_	121,984
Pass-through New York University Pass-through University Of Washington	PO# M150039217	93.135	_	11,805
	UWSC7246	93.135		54,872
Total CFDA No. 93.135			71	431,733
Injury Prevention and Control Research and State and Community Based Programs	5R49CE001494-05	93.136		276,166
Total CFDA No. 93.136				276,166
Community Programs to Improve Minority Health Grant Program				
Pass-through Amer College of Rheumatology Pass-through Amer College of Rheumatology	MP-CPI-15-001	93.137	_	9,198
	1CPIMP141065-01-00	93.137		64,292
Total CFDA No. 93.137				73,490
NIEHS Superfund Hazardous Substances Basic Research and Education Pass-through Michigan Sgtate University	RC105856Emory	93.143	_	62,122
	Re103630Emory	93.143		
Total CFDA No. 93.143				62,122
AIDS Education and Training Centers AIDS Education and Training Centers	5H4AHA00067-09-00 6 H4HA00067-13-09	93.145 93.145	241,758	173 51,756
Total CFDA No. 93.145	011111100007 13 07	,,,,,,	241,758	51,929
			241,/38	51,929
Health Program for Toxic Substances and Disease Registry Pass-through Amer Academy of Pediatrics	771102-EUSM	93.161	_	19,322
Pass-through Assoc. of Occupational and Env Clinics	1U61TS000118	93.161		(17,999)
Total CFDA No. 93.161				1,323
Human Genome Research	5R01HG007508-03	93.172	140,530	321,577
Pass-through Brigham And Womens Hospital	109737	93.172	7,	91,795
Pass-through University of Iowa Pass-through University Of North Carolina	PO# 1001531479 5033705	93.172 93.172	=	29,233 34,189
	3033703	93.172	140.520	
Total CFDA No. 93.172			140,530	476,794
Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	5R01DC005213-11 5R33DC010476-05	93.173 93.173	_	13,133 9,831
Research Related to Deafness and Communication Disorders	1F31DC015395-01	93.173	_	30,102
Research Related to Deafness and Communication Disorders	1R01DC014496-01A1REV	93.173	_	227,779
Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	1R03DC015302-01 5F32DC012702-03	93.173 93.173	_	4,705 33,098
Research Related to Deafness and Communication Disorders	5R01DC006483-10	93.173	_	243,152
Research Related to Deafness and Communication Disorders Pass-through University of Memphis	5R01DC008343-10 5-40456	93.173 93.173	48,113	263,491 27,134
Pass-through Vanderbilt University	VUMC33635	93.173	_	163
Total CFDA No. 93.173			48,113	852,588
Nursing Workforce Diversity	5D19HP269730300	93.178	40,113	299,005
2	3D19HP269/30300	93.1/8		
Total CFDA No. 93.178				299,005
Disabilities Prevention Pass-through Georgia State University	SP00011716-01 AMEN 1	93.184		6,023
	31 00011/10-01 AMEN 1	93.164		
Total CFDA No. 93.184				6,023
Immunization Research, Demonstration, Public Information and Education_Training and Clinical Skills Improvement Projects	5U01IP000413-04 REV	93.185	2,495	21,009
	300111 000413-04 KEV	93.163		
Total CFDA No. 93.185			2,495	21,009
Telehealth Programs Pass-through University of Arizona	297824	93.211	_	49,180
Total CFDA No. 93.211	27/024	93.211		
				49,180
	5R01AT007052-04	93.213 93.213	216,994	373,332 (33,458)
Research and Training in Complementary and Alternative Medicine			_	(33,458)
Research and Training in Complementary and Alternative Medicine	5R21AT004208-03 5R21AT007090-02	93.213		
Research and Training in Complementary and Alternative Medicine Research and Training in Complementary and Alternative Medicine Research and Training in Complementary and Alternative Medicine	5R21AT007090-02 5R01AT004698-03REVIS	93.213 93.213		426
Research and Training in Complementary and Alternative Medicine Research and Training in Complementary and Alternative Medicine Research and Training in Complementary and Alternative Medicine Research and Training in Comp	5R21AT007090-02		225,808	546,626
Research and Training in Complementary and Alternative Medicine Research and Training in Complementary and Alternative Medicine Research and Training in Complementary and Alternative Medicine	5R21AT007090-02 5R01AT004698-03REVIS	93.213	225,808 442,802	
Research and Training in Complementary and Alternative Medicine Total CFDA No. 93.213 Research on Healthcare Costs, Quality and Outcomes	5R21AT007090-02 5R01AT004698-03REVIS 5UG3AT008857-02	93.213 93.213		546,626 947,698
Research and Training in Complementary and Alternative Medicine Total CFDA No. 93.213  Research on Healthcare Costs, Quality and Outcomes Pass-through Agency for Healthcare Res and Quality	SR21AT007090-02 SR01AT004089-03REVIS 5UG3AT008857-02 IR01HS024530-01	93.213 93.213		546,626 947,698 128,283
Research and Training in Complementary and Alternative Medicine Total CFDA No. 93.213 Research on Healthcare Costs, Quality and Outcomes Pass-through Agency for Healthcare Res and Quality Pass-through Agency for Healthcare Res and Quality Pass-through Agency for Healthcare Res and Quality	SR21AT007090-02 5R01AT004698-03REVIS 5UG3AT008857-02 IR01HS024530-01 1R03HS023403-01REVIS 1R03HS024613-01	93.213 93.213		546,626 947,698
Research and Training in Complementary and Alternative Medicine Total CFDA No. 93.213 Research on Healthcare Costs, Quality and Outcomes Pass-through Agency for Healthcare Res and Quality Pass-through Agency for Healthcare Res and Quality	SR21AT007090-02 5R01AT004698-03REVIS 5UG3AT008857-02 1R01HS024530-01 1R03HS023403-01REVIS	93.213 93.213 93.226 93.226		546,626 947,698 128,283 40,818

56

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,\ 2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Pass-through Agency for Healthcare Res and Quality	1R36HS024845-01	93.226 \$		378
Pass-through Agency for Healthcare Res and Quality Pass-through Agency for Healthcare Res and Quality	4R24HS022059-03 5R00HS022431-05	93.226 93.226	=	(54,176) 175,996
Pass-through Agency for Healthcare Res and Quality	5R21HS021797-02REVIS	93.226	_	366
Pass-through Agency for Healthcare Res and Quality Pass-through Agency for Healthcare Res and Quality	5U18HS01588202 R03HS021789-02	93.226 93.226	=	(573) 826
Pass-through Cincinnati Childrens Hospital Pass-through Georgia State University	PO #: 3100441394 SP00011579-02	93.226 93.226	_	6,006 5,611
Pass-through Northwestern University	026275 EU	93.226	_	2,758
Pass-through Vanderbilt University	VUMC 57339	93.226		13,707
Total CFDA No. 93.226	1R01MH108826-01	02.242		352,493
Mental Health Research Grants Mental Health Research Grants	1R01MH108826-01 1R21MH106716-01	93.242 93.242	_	2,652 142,177
Mental Health Research Grants Mental Health Research Grants	3R01MH102690-03S1 3U01MH081988-05S2	93.242 93.242	29,978	826,589 (9,267)
Mental Health Research Grants	4R01MH095503-05	93.242	284,101	415,825
Mental Health Research Grants Mental Health Research Grants	5F32MH093023-03 5P50MH077928-05	93.242 93.242	_	1,663 (127,235)
Mental Health Research Grants	5R01MH06776905	93.242	_	3,727
Mental Health Research Grants Mental Health Research Grants	5R01MH06925405 5R01MH06985204	93.242 93.242	_	(15) 8,580
Mental Health Research Grants Mental Health Research Grants	5R01MH070437-10REVIS 5R01MH070880-05	93.242 93.242	_	199,997 (796)
Mental Health Research Grants	5R01MH07290805	93.242	=	3,490
Mental Health Research Grants Mental Health Research Grants	5R01MH072908-10 5R01MH077776-05	93.242 93.242	_	98,257 (13)
Mental Health Research Grants	5R01MH078100-05	93.242	_	133
Mental Health Research Grants Mental Health Research Grants	5R01MH080007-05 5R01MH080129-05REVIS	93.242 93.242	8,820	9,559 421
Mental Health Research Grants Mental Health Research Grants	5R01MH080330-05REV 5R01MH080880-05	93.242 93.242	_	71,666
Mental Health Research Grants Mental Health Research Grants	5R01MH080880-05 5R01MH081011-03	93.242	_	(32,989) (74,014)
Mental Health Research Grants Mental Health Research Grants	5R01MH081148-05 5R01MH082833-04 REV	93.242 93.242	79,323	131,788 26,395
Mental Health Research Grants	5R01MH090584-05	93.242	105,247	471,777
Mental Health Research Grants Mental Health Research Grants	5R01MH092284-05 5R01MH099211-03	93.242 93.242	11,153 46,975	391,850 293,727
Mental Health Research Grants	5R01MH100122-03	93.242		248,224
Mental Health Research Grants Mental Health Research Grants	5R01MH100318-02REVIS 5R01MH100467-03	93.242 93.242	82,392	260,961 476,043
Mental Health Research Grants	5R21MH084722-02	93.242	_	2,677
Mental Health Research Grants Mental Health Research Grants	5R21MH103187-02 5U01MH06680704	93.242 93.242	30,712	111,561 (116,311)
Mental Health Research Grants	5U19MH069056-10REVIS 1F31MH107343-01	93.242	_	(9,340)
Mental Health Research Grants Mental Health Research Grants	1F31MH109208-01A1	93.242 93.242	=	43,120 4,693
Mental Health Research Grants Mental Health Research Grants	1K01MH107320-01A1 1K01MH108741-01A1	93.242 93.242	_	57,146 4,217
Mental Health Research Grants	1K18MH105098-01	93.242	_	6,859
Mental Health Research Grants Mental Health Research Grants	1R01MH107033-01A1 1R01MH108605-01A1	93.242 93.242	=	62,382 6,329
Mental Health Research Grants	1R01MH109026-01A1	93.242 93.242	_	1,076
Mental Health Research Grants Mental Health Research Grants	1R01MH110364-01A1 1R21MH105811-01A1	93.242	_	39,965 112,052
Mental Health Research Grants Mental Health Research Grants	1R21MH106902-01A1 1R21MH108873-01	93.242 93.242	_	187,886 13,416
Mental Health Research Grants	1R21MH108928-01	93.242	_	139,355
Mental Health Research Grants Mental Health Research Grants	2R01MH072908-11A1 2R56MH071537-11A1	93.242 93.242	8,233	462,001 146,543
Mental Health Research Grants Mental Health Research Grants	3P50MH100029-05S1 3R01MH094757-04S1	93.242 93.242	_	287,151 511,268
Mental Health Research Grants	3R01MH105561-03S1	93.242	63,739	380,564
Mental Health Research Grants Mental Health Research Grants	3R01MH107305-02S2 4K01MH095823-05	93.242 93.242	_	274,457 37,373
Mental Health Research Grants	4K23MH095679-04	93.242	_	44,436
Mental Health Research Grants Mental Health Research Grants	4P50MH100023-04 4R01MH079448-07	93.242 93.242	_	773,827 50,766
Mental Health Research Grants Mental Health Research Grants	4R01MH094757-05 4R01MH096983-05	93.242 93.242	_	219,381 62,590
Mental Health Research Grants	4R01MH099211-04	93.242	10,124	203,587
Mental Health Research Grants Mental Health Research Grants	4R01MH100122-04 4R01MH100390-04	93.242 93.242	_	321,887 19,182
Mental Health Research Grants	4R01MH100467-04	93.242	5,683	111,879
Mental Health Research Grants Mental Health Research Grants	4R01MH100999-04 4R01MH101477-04	93.242 93.242	_	296,750 93,288
Mental Health Research Grants Mental Health Research Grants	4U01MH101720-04 5 F3 MH105238-02	93.242 93.242	_	22,199 36,628
Mental Health Research Grants	5 R01 MH104534-02	93.242	=	788,044
Mental Health Research Grants Mental Health Research Grants	5F31MH102165-02 5F31MH102911-02 REVI	93.242 93.242	_	(980) 13,861
Mental Health Research Grants	5F31MH102956-02	93.242	_	41,113
Mental Health Research Grants Mental Health Research Grants	5F31MH105237-03 5F31MH106298-03	93.242 93.242	= =	40,370 43,456
Mental Health Research Grants Mental Health Research Grants	5F32MH101976-03 5F32MH102890-02	93.242 93.242	_	40,727 46,208
Mental Health Research Grants	5K08MH105754-2	93.242	=	135,030
Mental Health Research Grants Mental Health Research Grants	5K23MH095679-03 5K23MH096042-04	93.242 93.242	=	146,418 113,120
Mental Health Research Grants	5K23MH101380-03	93.242	_	122,232
Mental Health Research Grants Mental Health Research Grants	5K24MH075867-08 5P50MH100023-03S1	93.242 93.242	268,039	84,787 1,486,964
Mental Health Research Grants	5P50MH100029-04REVIS	93.242	853,261	1,443,116
Mental Health Research Grants Mental Health Research Grants	5R00MH102355-04 5R01MH058846-16REVIS	93.242 93.242	_	168,976 171,224
Mental Health Research Grants Mental Health Research Grants	5R01MH069852-10 5R01MH071537-10REVIS	93.242 93.242	_	85,854 (112)
Mental Health Research Grants	5R01MH073719-07	93.242	=	539,228
Mental Health Research Grants Mental Health Research Grants	5R01MH079448-06 REVI 5R01MH083727-05	93.242 93.242	_	348,353 (100)
Mental Health Research Grants	5R01MH087604-05	93.242		38,791
Mental Health Research Grants Mental Health Research Grants	5R01MH095503-04REVIS 5R01MH096764-04 revi	93.242 93.242	1,014,941	135,320 (443)
		,		()

57

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

		Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity	Award number	I.D. number	subrecipients	expenditures
Mental Health Research Grants Mental Health Research Grants	5R01MH096983-04 5R01MH099021-04	93.242 \$ 93.242	544,768	283,171 832,221
Mental Health Research Grants	5R01MH100390-02REVIS	93.242	290,316	383,117
Mental Health Research Grants Mental Health Research Grants	5R01MH100917-03 5R01MH100999-03S1	93.242 93.242	_	1,024,535 543,503
Mental Health Research Grants	5R01MH101477-03	93.242	_	383,208
Mental Health Research Grants Mental Health Research Grants	5R01MH104632-02 5R03MH100273-02	93.242 93.242	_	396,447 2,667
Mental Health Research Grants	5R21 MH097187-02 REV	93.242	=	200
Mental Health Research Grants	5R21MH100670-02REV	93.242	_	57,791
Mental Health Research Grants Mental Health Research Grants	5R21MH102191-02 5R21MH102677-02S1	93.242 93.242	80,649	3,120 207,616
Mental Health Research Grants	5R21MH105353-02	93.242	84,440	199,018
Mental Health Research Grants Mental Health Research Grants	5R21MH105816-02 5R21MH105897-02Revis	93.242 93.242	11,770	214,547 266,209
Mental Health Research Grants	5R21MH106904-02	93.242	_	203,815
Mental Health Research Grants Mental Health Research Grants	5R25MH101079-03 5R34MH097790-03	93.242 93.242	_	113,462 201,571
Mental Health Research Grants	5R34MH106368-02	93.242	_	175,986
Mental Health Research Grants	5U01MH081988-08	93.242		513,577
Mental Health Research Grants Pass-through Boston Children's Hospital	5U01MH101720-03 RSTFD00001137206	93.242 93.242	820,765	2,220,853 100,416
Pass-through Boston College	51007481-01	93.242	_	23,281
Pass-through Bowdoin College Pass-through Case Western Reserve University	2011_003 RES509294	93.242 93.242	_	144,788
Pass-through Case Western Reserve University	RES509294 RES509490 Am 1	93.242	_	170,158 202,993
Pass-through Cincinnati Childrens Hospital	134471	93.242	_	59,301
Pass-through Columbia University Pass-through Columbia University	1(GG009422) 4(GG010260)	93.242 93.242	_	19,110 37,800
Pass-through Dartmouth College	1404R95 Am 2	93.242	_	22,049
Pass-through Feinstein Institute for Medical Research	500673EU	93.242	_	4,012
Pass-through Feinstein Institute for Medical Research Pass-through Florida State University	507010EU Am 1 R01764	93.242 93.242	_	16,681 (9,737)
Pass-through Florida State University	R01789 AMEND 1	93.242	_	106,574
Pass-through Georgia Institute of Technology Pass-through Georgia State University	RF655-G1 SP00011261-01	93.242 93.242	_	89,574 32,271
Pass-through Georgia State University	SP00011261-02 Am 3	93.242	=	13,476
Pass-through Mount Sinai School Of Medicine	0255-6211-4609 AM2	93.242	_	24,316
Pass-through Palo Alto Institute for Research and Education Pass-through Public Health Foundation Enterprises	CLO0001-04 349.0101	93.242 93.242	_	44,272 23,674
Pass-through Rhode Island Hospital	701-1963/AMND 1	93.242	_	33,070
Pass-through Rhode Island Hospital Pass-through State University of New York	7011464MOD/5R01MH063 1129280-72487	93.242 93.242		8,339 202,797
Pass-through University of Alabama Birmingham	000506211-004	93.242	_	43,710
Pass-through University of Arkansas	50613 2015-3229	93.242 93.242	_	1,400 19,308
Pass-through University of California Irvine Pass-through University of California Los Angeles	2013-3229 2000 G RJ488	93.242	201,310	335,742
Pass-through University of Iowa	10014699	93.242		46,735
Pass-through University of Miami Pass-through University of Minnesota	663542 Am 2 A00285201	93.242 93.242	_	18,120 (2,881)
Pass-through University of Pittsburgh	0032045 (126571-1)	93.242	_	45,942
Pass-through University of South Carolina Pass-through University of South Carolina	14-2468/PO 51906 15-2800	93.242 93.242	_	279,918 95,982
Pass-through University of South Florida	6144-1113-00-A	93.242	_	41,143
Pass-through University of Washington	UWSC7311	93.242	_	19,983
Pass-through University of Wisconsin-Madison Pass-through University of Wisconsin-Madison	337K481 409K065	93.242 93.242	_	46,500 14,573
Total CFDA No. 93.242			4,936,739	25,497,593
Substance Abuse and Mental Health Services_Projects of Regional and National Significance:			1,750,757	20,177,075
Pass-through Childrens Healthcare of Atlanta	1U79SM061214-01	93.243	_	39,510
Pass-through Highland Rivers Community Service Board	1H79SM061070-01	93.243	_	47,747
Pass-through Mercer University	420642-EU-02	93.243		9,072
Total CFDA No. 93.243				96,329
Public Health Training Centers Grant Program	5 UB6HP27875-03-00	93.249	433,453	1,109,781
Total CFDA No. 93.249			433,453	1,109,781
Geriatric Academic Career Awards	6 K01HP205090501	93.250		5,411
Total CFDA No. 93.250			_	5,411
Family Planning Personnel Training	6FPTPA0400120301	93.260		(444,512)
Total CFDA No. 93.260				(444,512)
Occupational Safety and Health Program	5R01OH010745-02	93.262	162,817	350,544
Occupational Safety and Health Program	5R01OH10657-03	93.262	201,955	596,606
Occupational Safety and Health Program	5T03OH008609-10	93.262	_	59,026
Occupational Safety and Health Program	5T03OH008609-12	93.262		20,782
Total CFDA No. 93.262			364,772	1,026,958
Rapid Expansion of Antiretroviral Therapy Programs for HIV-Infected Persons in Selected: Countries in Africa and the Caribbean Under the President's Emergency Plan for AIDS Relief Pass-through Addis Ababa University	T84HA21124-05-00	93.266	_	16,581
Total CFDA No. 93.266				16,581
Complex Humanitarian Emergency and War-Related Injury Public Health Activities	5T01GH001185-04	93.269		122,743
	31010H001183-04	93.209		
Total CFDA No. 93.269				122,743
Adult Viral Hepatitis Prevention and Control	1U51PS003909-01S1	93.270		169,487
Total CFDA No. 93,270				169,487
Alcohol Research Programs	4K08AA021404-05	93.273	_	16,550
Alcohol Research Programs Alcohol Research Programs	5F32AA022058-03 5K08AA021404-04	93.273 93.273	_	4,681 176,439
Alcohol Research Programs	5K99A021803-02	93.273	_	33,538
Alcohol Research Programs Alcohol Research Programs	5R01AA017627-05 5R01AA021411-03	93.273	_	144,388
Alcohol Research Programs	5R01AA021411-03 5R01AA01437305	93.273 93.273	_	13,564 1,504
Alcohol Research Programs	5R01AA018096-05	93.273	114,543	192,050
Alcohol Research Programs Alcohol Research Programs	5R33AA019582-05 1F31AA024960-01	93.273 93.273	_	948 7,924
Alcohol Research Programs	1R01AA023826-01A1	93.273	=	126,383

58

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

		Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity  Alcohol Research Programs	Award number 4R00AA021803-03	I.D. number 93.273 \$	subrecipients	expenditures 172,179
Alcohol Research Programs	5K05AA021143-04	93.273	=	192,304
Alcohol Research Programs Alcohol Research Programs	7R01AA020695-06 7R01AA022601-05	93.273 93.273	238,662	579,825 489,741
Pass-through Childrens Hospital of Los Angeles	P2013-0010/AMD #5	93.273	_	47,781
Pass-through Pacific Institute For Res And Evaluation Pass-through San Diego State University Research Fdtn	P60AA006282 53311M P1650 7802212	93.273 93.273	_	50,206 101,771
Pass-through University of California Los Angeles	2000 G RN421	93.273	_	80,857
Pass-through University of California San Diego Pass-through University of California San Diego	PO# 10313752-005 PO# S9000068	93.273 93.273	_	30,377 57,537
Total CFDA No. 93.273			353,205	2,520,547
Drug Abuse and Addiction Research Programs	5R03CA183016-02	93.279	34,163	59,893
Drug Abuse and Addiction Research Programs	5K24AI114444-03	93.279	7.	133,168
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	3R01DA016434-10S1REV 4R01DA035101-04	93.279 93.279	94,459	61,489 233,565
Drug Abuse and Addiction Research Programs	5R01DA01251410	93.279 93.279	´—	580
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5R01DA012514-15 5R01DA016434-07	93.279	=	196,250 12,515
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5R01DA025494-05 5R01DA027535-05	93.279 93.279	_	(1,332) 23,765
Drug Abuse and Addiction Research Programs	5R01DA029513-04	93.279	_	106,133
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5R01DA038453-02 5R03DA036737-02	93.279 93.279	26,731	330,287 85,447
Drug Abuse and Addiction Research Programs	5T32DA015040-10 REV	93.279	_	(4)
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	1K99DA039991-01A1 1R03DA042358-01	93.279 93.279	_	55,390 8,144
Drug Abuse and Addiction Research Programs	1R21DA040788-01A1	93.279	_	21,405
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	1R21DA042727-01 3R90DA033462-05S1	93.279 93.279	=	1,193 168,024
Drug Abuse and Addiction Research Programs	3U01DA036233-03S1	93.279	242,659	755,073
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	4K05DA031246-05 4U01DA036233-04	93.279 93.279	1,508	30,108 92,277
Drug Abuse and Addiction Research Programs	5 R01 DA035101-03	93.279	205,132	297,480
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5F31DA036316-03 5F31DA036348-02	93.279 93.279	_	58,193 34,926
Drug Abuse and Addiction Research Programs	5F31DA037652-02	93.279	_	31,827
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5K05DA031246-04 5R01DA030996-05 REV	93.279 93.279	=	90,073 287,712
Drug Abuse and Addiction Research Programs	5R01DA037568-03	93.279 93.279	542,902	744,140
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5R01DA038196-03 5R01DA038588-03	93.279	_	653,682 795,276
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5R03DA039797-02 5R21DA033478-02REVIS	93.279 93.279	16,425	81,244 21,094
Drug Abuse and Addiction Research Programs	5R21DA034808-02 REV	93.279	=	96,053
Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	5R34DA035728-03 5R37DA010344-19	93.279 93.279	(1,138)	207,134 384,475
Drug Abuse and Addiction Research Programs	5T90DA032466-05REVIS	93.279	_	182,952
Pass-through Beth Israel Deaconess Medical Center Pass-through Boston Medical Center	1R01DA0356707-01 0356301/Amend No.1	93.279 93.279	_	(707) 201,365
Pass-through Columbia University	1(GG008261-04)	93.279	_	350,551
Pass-through Mount Sinai School of Medicine Pass-through Northwestern University	2R01DA003574-31A1 60032445 EU	93.279 93.279	_	26,517 49,608
Pass-through Northwestern University	60035189 EU	93.279	=	14,252
Pass-through St Lukes Roosevelt Institute for Health Pass-through University of Cincinnai	0255-0781-4609 009981-002	93.279 93.279	_	43,803 50,000
Pass-through University of Georgia	RR376-006/4785656	93.279	_	8,297
Pass-through University of Georgia Pass-through University of Georgia	RR376-419/4945356 RR540-160/4941946	93.279 93.279	_	23,987 50,149
Pass-through University of Miami	3003539487/665615	93.279 93.279	_	43,086
Pass-through University of Michigan	3003998630	93.279	1,162,841	15,558
Total CFDA No. 93.279	5V24MH07(055.05	02.201	1,102,841	7,216,097
Mental Health Research Career/Scientist Development Awards Mental Health Research Career/Scientist Development Awards	5K24MH076955-05 5K01MH095823-04	93.281 93.281	_	218 126,163
Mental Health Research Career/Scientist Development Awards Mental Health Research Career/Scientist Development Awards	5K23MH091254-05 5K24MH076955-07	93.281 93.281	_	7,835
Total CFDA No. 93.281	3K24MH0/0933-0/	93.261		5,688 139,904
Mental Health National Research Service Awards for Research Training	5F31MH097331-03	93.282		5,911
Mental Health National Research Service Awards for Research Training	5F32MH090700-03	93.282	_	97
Mental Health National Research Service Awards for Research Training Mental Health National Research Service Awards for Research Training	5T32MH06754702 5F30MH095491-04	93.282 93.282	=	(3,111) (6,897)
Pass-through University of California Los Angeles	2000-S-RJ108	93.282		(27,942)
Total CFDA No. 93,282				(31,942)
Centers for Disease Control and Prevention_Investigations and Technical Assistance Centers for Disease Control and Prevention_Investigations and Technical Assistance	200-2016-M-89045 3U38TP42309504W1	93.283 93.283	_	58,867 (99,823)
Centers for Disease Control and Prevention_Investigations and Technical Assistance	5U01DP005119-03REVIS	93.283	=	768,321
Centers for Disease Control and Prevention Investigations and Technical Assistance Pass-through American Thrombosis and Hemostasis Network	7U01DD00003904 ATHN2015002-HTC6-3Ex	93.283 93.283	=	(86,507)
Pass-through Atlanta Research And Education Fdtn	2016 GA EIP	93.283	=	3,128 464,876
Pass-through Atlanta Research And Education Fdtn Pass-through Atlanta Research And Education Fdtn	40500-036-16130867 AREF M14051	93.283 93.283	_	235,330 11,711
Pass-through Atlanta Research And Education Fdtn	AREF MOU M16005	93.283	=	101,735
Pass-through Atlanta Research And Education Fdtn Pass-through Georgia Dept of Public Health	M15007 40500-036-14100293	93.283 93.283	_	309 (8,462)
Pass-through Georgia Dept of Public Health	40500-036-16161891	93.283	_	7,600
Pass-through Georgia Dept of Public Health Pass-through Natl Fragile X Foundation	40500-036-17161799 Longitudinal Data Co	93.283 93.283	_	667,569 17,692
Total CFDA No. 93.283	Longitudinal Data Co	75.205		2,142,346
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R01EB004987-09	93.286	109,731	303,940
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R01EB020008-02	93.286	191,042	584,059
Discovery and Applied Research for Technological Innovations to Improve Human Health Discovery and Applied Research for Technological Innovations to Improve Human Health	5R03EB018918-02 5R21EB016662-02	93.286 93.286	35,529	42,908 51,272
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R21EB019068-02	93.286	135,533	201,137
Discovery and Applied Research for Technological Innovations to Improve Human Health Pass-through Georgia Institute of Technology	5R01EB014266-04 RA746-G1	93.286 93.286	19,880	93,039 (1,875)
Pass-through Georgia Institute of Technology	RB224-G1	93.286	_	100,514
Pass-through Georgia Institute of Technology Pass-through Georgia Institute of Technology	RB224-G2 RB224-S4	93.286 93.286	=	3,035 366,314
Pass-through Georgia Institute of Technology	RF188-G1	93.286	_	169

59

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,\ 2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Pass-through Georgia Institute of Technology	RF636-G2	93.286 \$		32,820
Pass-through Georgia Institute of Technology Pass-through Georgia Institute of Technology	RF773-G1 RF990-G1	93.286 93.286	_	27,209 3,131
Pass-through Georgia State University	SP000I3490	93.286	_	19,354
Pass-through University of California San Francisco	Subaward 8354sc	93.286	401.715	125,231
Total CFDA No. 93,286	11/01A/D010C11 01	02 207	491,715	1,952,257
Minority Health and Health Disparities Research Minority Health and Health Disparities Research	1U01MD010611-01 5 R01 MD009064-03	93.307 93.307	_	99,360 463,761
Minority Health and Health Disparities Research Minority Health and Health Disparities Research	5R01 MD010241-03 5R01MD009746-02 REVI	93.307 93.307	122,854	257,318 598,080
Minority Health and Health Disparities Research	5R01MD010290-02 REVI	93.307	40,928	429,402
Minority Health and Health Disparities Research Minority Health and Health Disparities Research	5R24MD008077-03REVIS 5R01MD008966-03	93.307 93.307	175	90,127 424,069
Pass-through Morehouse School of Medicine	TCCPP005	93.307	_	7,036
Pass-through University of Pennsylvania Pass-through University of Texas Houston	569793 0008663BK	93.307 93.307	_	3,354 3,803
Total CFDA No. 93.307	000003212	75.507	163,957	2,376,310
Trans-NIH Research Support	5R21CA185932-02	93.310	50,760	130,537
Trans-NIH Research Support	1DP2AI112242-01	93.310	_	648,628
Trans-NIH Research Support Trans-NIH Research Support	5DP5OD019892-03 1U2CES026560-01	93.310 93.310	=	459,102 1,516,972
Trans-NIH Research Support	5U01GM116254-02	93.310	166,374	502,275
Trans-NIH Research Support Trans-NIH Research Support	5DP5OD012198-04REV 5DP7OD018424-03REVIS	93.310 93.310	30,571	(51,356) 400,055
Trans-NIH Research Support Pass-through Broad Institute	5R01CA163256-05 -5505230726	93.310 93.310	266,352	925,386 8,332
Pass-through George Washington University	15-M31	93.310	=	23,287
Pass-through Pennsylvania State University Pass-through University of Texas Health Sciences Ctr	5114-EU-NIBIB-9785 159763/159042	93.310 93.310	_	82,813 49,899
Pass-through University of Michigan	3000691492-RPT	93.310	=	689
Pass-through University of Michigan Pass-through University of North Carolina Chapel Hill	3003774756 5-33722	93.310 93.310	_	42,515 16,592
Pass-through Xavier University of Louisiana	OSP-15-21173-01G	93.310		6,619
Total CFDA No. 93.310			514,057	4,762,345
Mobilization For Health: National Prevention Partnership Awards				
Pass-through Center for Black Women's Wellness	PAWOS000020-01-00	93.311		67,341
Total CFDA No. 93.311	SWI OTROOP ASS CORES IN	02.250		67,341
National Center for Advancing Translational Sciences National Center for Advancing Translational Sciences	5KL2TR000455-08REVIS 5TL1TR000456-09	93.350 93.350	142,413 60,902	578,045 228,858
National Center for Advancing Translational Sciences National Center for Advancing Translational Sciences	5UL1TR000454-10 4TL1TR000456-10	93.350 93.350	1,692,512	4,527,323 6,312
National Center for Advancing Translational Sciences	4UL1TR000454-10	93.350	_	6,321
National Center for Advancing Translational Sciences	5U54TR001456-08	93.350	136,729	505,108
Total CFDA No. 93.350			2,032,556	5,851,967
Research Infrastructure Programs Research Infrastructure Programs	1S10OD010757-01 1G20OD020272-01	93.351 93.351	_	732 500,000
Research Infrastructure Programs	1R24OD020174-01A1	93.351	_	24,704
Research Infrastructure Programs Research Infrastructure Programs	1R25OD020234-01A1 1S10OD021748-01	93.351 93.351	_	1,618 572,550
Research Infrastructure Programs	2R24OD010947-14	93.351	_	217,005
Research Infrastructure Programs Research Infrastructure Programs	3P1OD011132-56S1 4R24OD010445-04	93.351 93.351	_	2,808,559 90,156
Research Infrastructure Programs Research Infrastructure Programs	4U24OD011023-14 5R21OD020182-02	93.351 93.351	_	161,813 154,588
Research Infrastructure Programs	5R24OD010445-03	93.351	270,911	471,508
Research Infrastructure Programs Research Infrastructure Programs	5R24OD010930-11REVIS 5U24OD011023-13	93.351 93.351	_	594,412 1,201,328
Pass-through University of Nebraska	07/334-5150-2058-001	93.351		93,431
Total CFDA No. 93.351			270,911	6,892,404
Construction Support	1C06OD018248-01Revis	93.352		73,774
Total CFDA No. 93.352				73,774
Advanced Nursing Education Traineeships	A10HP27184-0200	93.358		357,742
Total CFDA No. 93.358				357,742
Nurse Education, Practice and Retention Grants	6 UD7HP250460301	93.359	_	(22,926)
Nurse Education, Practice and Retention Grants Nurse Education, Practice and Retention Grants	6 UDYHP26046-02-01 6UD7HP26046-02-02	93.359 93.359	=	(2,519) 702,345
Total CFDA No. 93.359				676,900
Nursing Research	5F31NR01020202	93.361		(967)
Nursing Research Nursing Research	5F32NR01045102 5R00NR014587-04	93.361 93.361	_	137 271,862
Nursing Research	5R01NR012021-05	93.361		241,870
Nursing Research Nursing Research	5R01NR014054-4REV 5T32NR012715-04	93.361 93.361		558,311 279,982
Nursing Research	1F31NR015010-02	93.361	_	25,943
Nursing Research Nursing Research	1F31NR015722-01A1 1F31NR015975-01A1	93.361 93.361	_	9,740 4,221
Nursing Research	1R01NR015783-01A1	93.361 93.361	=	42,880
Nursing Research Nursing Research	3P30NR014134-04S1 3R01NR014800-03S1	93.361	_	429,328 563,090
Nursing Research Nursing Research	4F31NR014611-03 4P30NR014134-05	93.361 93.361	_	250 57,571
Nursing Research	4R01NR013700-04	93.361	=	72,051
Nursing Research Nursing Research	4R01NR014054-05 4R01NR014800-04	93.361 93.361	_ _ _ _ _	98,934 65,430
Nursing Research	5 K99 NR014587-02	93.361	=	(46)
Nursing Research Nursing Research	5F31NR014611-02REVIS 5F31NR015180-02REVIS	93.361 93.361	_	8,322 34,061
Nursing Research	5F31NR015400-02	93.361	_	39,662
Nursing Research Nursing Research	5K01NR014673-03 5K01NR015733-02	93.361 93.361	=	83,586 73,029
Nursing Research	5R01NR013700-03	93.361	174,283	443,736
Nursing Research Nursing Research	5R01NR014886-02 5R01NR014973-02	93.361 93.361	_	266,926 351,149
				•

60

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Summing Surveys   Summing Surveys   Summing Surveys	Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Section   Sect					
Peachange   Telestromes   11668	Nursing Research	5R21NR014544-02	93.361	_	97,660
Past Directory   Value   Val				=	
Table				_	
Name   Compress   Process   Proces	-	M13/11/01 (/11004/)	75.501	174 283	
Samural Camer in Research Economics   \$0.500   \$0.300		5P51OD011132-55REV	93 389		
Care Circum Any Provision Research	National Center for Research Resources	8R01OD011094-04	93.389	_	21,427
Camer Cuman al Prevention Research		5P51RR000165-50	93.389		
Camer Cause and Prevention Research   #800CA (1808-5-44)   9.309   - 97.54		4D01CA077227 15	02.202		
Camer Came and Prevention Research   \$800 CANSISON-DEELY   \$9.30   — \$8.50				_	
Camer Came and Provention Research   \$800CAM97327-14   \$9.355				_	
Camer Clause of Prevention Research   \$3816.AM\$5518.11   \$3.93     \$1.66.88     \$1.77.21     \$	Cancer Cause and Prevention Research	5R01CA077337-14	93.393	_	176,765
Conce Clause and Prevention Research				_	
Camer Clause and Prevention Research	Cancer Cause and Prevention Research	5R01CA179424-03	93.393		276,903
Camer Classe and Prevention Research				13,154	
Camer Clane and Prevention Research	Cancer Cause and Prevention Research	R03 CA184578-02	93.393		38,275
Camer Clause and Prevention Research   \$801CASS-101   9.325   - 1.200   Camer Clause and Prevention Research   9.301   9.305   - 1.200   Camer Clause and Prevention Research   9.301   1.200   1.20	Cancer Cause and Prevention Research				
Camer Cause and Provention Research   \$880(CA880353-10   9.358   3   9.257   1.057				_	
Cancer Came and Prevention Research	Cancer Cause and Prevention Research	5R01CA086335-10	93.393	=	2,320
Cancer Came and Prevention Research   \$801CA14081-508 ERV   \$9.391   \$1.000   \$2.000   \$3.0				_	
Commercane and Prevention Research	Cancer Cause and Prevention Research	5R01CA140515-05 REV	93.393	_	(24,900)
Camer Came and Prevention Research				_	
Pass-drough Boston University   \$450001959 Am. 2   33.93   -   7.117   7.158	Cancer Cause and Prevention Research	5U01CA154282-05	93.393	289,030	1,224,415
Paschrough Darmouth College   \$332801CA09828-66   \$3339	Cancer Cause and Prevention Research Pass-through Boston University	N01PC35135N, Mod.22 4500001596 Am. 2		_	
Pass-through Cargia State Livicensity   11476-569041   3.93   3.93   21,523   1476-569041   3.93   3.93   21,523   1476-569041   3.93   3.93   21,523   1476-569041   3.93   3.93   21,523   1476-569041   3.93	Pass-through Dartmouth College	533/2R01CA098286-06	93.393	_	13,062
Pass-through Enrivared University   1149/26-9809413   9.393   1.5254   1.				_	
Pass-through Mayor Clinic   Pass-through University of Clinic Pass Pass-through University of Nach Care Pass-through University of Southern California   Pass-through University of Sout	Pass-through Harvard University	114926-5060413	93.393	_	21,524
Pass-through NRG Oncology Foundation, Inc.   0003-NRG-115   33.391     33.121     Pass-through Turnerity Need of Medicine   R21CA172206   33.392     24.815     Pass-through Linversity of California San Francisco   9.778C       Pass-through Linversity of California San Francisco   9.778C       Pass-through Linversity of Michigan   0.2002387224ANND18   33.391     78.314     Pass-through Linversity of Michigan   0.2002387224ANND18   33.391     12.816     Pass-through Linversity of Minercola California San Francisco   0.2002387224ANND18   33.391     12.816     Pass-through Linversity of North Carolina Chapel Hill   0.5.35800   0.39.391     (2.0002387224ANND18   0.39.391     (2.0002387224ANND18   0.39.391     (2.0002387224ANND18   0.39.391     (2.000238724ANND18   0.39.391	Pass-through Mayo Clinic			_	
Pass-through Inversity of Carliams San Francisco   Pass-through Linversity of Carliams San Francisco   Pass-through Linversity of Minnesota   Pass-through Linversity of Minnesota   Pass-through Linversity of Minnesota   Pass-through Linversity of North Carolina Chapel Hill   \$0,303529 An 2	Pass-through NRG Oncology Foundation, Inc.	0003-NRG-15		_	33,121
Pass-drough University of Miscigual (Diversity of North Carolina Chapel Hill (Diversity of North C			93.393	_	
Pass-through University of Númerous   93.393				_	
Pass-brough University of North Carolina Chaplel Hill	Pass-through University of Minnesota	N003436201	93.393	_	23,805
Pass-through University of North Carolina Charplet Hill   5-33330   33-333   24.270   Pass-through University of Southern California   5.4216   53.333   24.270   Pass-through University of Southern California   5.4216   53.333   2.20270   Pass-through University of Southern California   5.4216   57.333   2.20270   Pass-through University of Southern California   5.4216   57.333   2.20270				_	
Pass-through University of Southern California   \$7925363   \$93.993   \$\$7.086   \$7025363   \$93.993   \$\$\$7.086   \$\$\$7825405   \$\$\$7.086   \$\$\$\$7825405   \$\$\$\$7.086   \$\$\$\$\$\$7.086   \$\$\$\$\$7.086   \$\$\$\$\$\$7.086   \$\$\$\$\$7.086   \$\$\$\$\$\$\$7.086   \$\$\$\$\$\$\$7.086   \$\$\$\$\$\$\$\$7.086   \$\$\$\$\$\$\$\$7.086   \$	Pass-through University of North Carolina Chapel Hill	5-33530	93.393	_	100,689
Pass-frough Wake Forest University				_	
Cancer Detection and Diagnosis Research   1821CA202584-6-1   93.394   - 208.570   Cancer Detection and Diagnosis Research   1821CA205658-01   93.394   - 32.561   Cancer Detection and Diagnosis Research   1101CA207821-01   93.394   - 114,605   Cancer Detection and Diagnosis Research   2001CA113913-11   93.394   - 141,605   Cancer Detection and Diagnosis Research   4801CA15073-60   93.394   - 20,411   Cancer Detection and Diagnosis Research   4801CA165073-60   93.394   - 20,411   Cancer Detection and Diagnosis Research   4801CA165073-60   93.394   - 20,411   Cancer Detection and Diagnosis Research   4801CA165073-64   93.394   - 20,411   Cancer Detection and Diagnosis Research   4801CA1665073-64   93.394   - 20,7103   Cancer Detection and Diagnosis Research   4801CA1665073-64   93.394   - 20,7103   Cancer Detection and Diagnosis Research   4801CA1665073-64   93.394   - 20,7103   Cancer Detection and Diagnosis Research   4801CA176659-04   93.394   - 20,7103   Cancer Detection and Diagnosis Research   4801CA166073-704   93.394   - 20,7103   Cancer Detection and Diagnosis Research   4801CA176059-04   93.394   - 20,7103   Cancer Detection and Diagnosis Research   4801CA166073-704   93.394   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   93.594   - 20,7103   -					
Cancer Detection and Diagnosis Research   IR21CA206508-01   93,394     32,561   Cancer Detection and Diagnosis Research   2010CA115313-11   93,394     11,405   Cancer Detection and Diagnosis Research   3010CA115313-11   93,394     141,605   Cancer Detection and Diagnosis Research   4010CA19731-12   93,394     29,410   Cancer Detection and Diagnosis Research   4010CA17531   93,394     29,410   Cancer Detection and Diagnosis Research   4010CA168913-05   93,394     29,410   Cancer Detection and Diagnosis Research   4010CA168913-05   93,394     29,410   Cancer Detection and Diagnosis Research   4010CA168914-05   93,394     21,911   Cancer Detection and Diagnosis Research   4010CA168914-05   93,394     22,701   Cancer Detection and Diagnosis Research   4010CA16891-05   93,394     42,514   Cancer Detection and Diagnosis Research   4010CA17207-04   93,394     42,514   Cancer Detection and Diagnosis Research   5010CA16891-05   93,394     43,514   Cancer Detection and Diagnosis Research   5010CA16891-04   93,394     33,357   Cancer Detection and Diagnosis Research   5010CA16984-05   93,394     33,357   Cancer Detection and Diagnosis Research   5010CA16984-05   93,394     10,258   Cancer Detection and Diagnosis Research   5010CA16984-05   93,394     10,258   Cancer Detection and Diagnosis Research   5010CA1698-03   93,394   62,257   37,386   Cancer Detection and Diagnosis Research   5010CA1698-03   93,394   62,257   37,386   Cancer Detection and Diagnosis Research   5210CA1983-03   93,394   62,257   37,386   Cancer Detection and Diagnosis Research   5210CA1983-04   93,394   63,257   37,386   Cancer Detection and Diagnosis Research   5210CA1983-04   93,394   63,257   37,386   Cancer Detection and Diagnosis Research   5210CA1983-04   93,394   63,257   37,386   Cancer Detection and Diagnosis Research   5210CA1983-04   93,394   63,257   37,386   Cancer Detection and Diagnosis Research   5210CA1983-04   93,394   93,394   93,394   93,394   Cancer Detection and D	Total CFDA No. 93.393			521,677	4,916,443
Cancer Detection and Diagnosis Research   1001CA207821-01   33,394   — 13,949   Cancer Detection and Diagnosis Research   2010CA113913-11   33,394   — 564,642   Cancer Detection and Diagnosis Research   4801CA16918-05   33,394   — 26,4161   Cancer Detection and Diagnosis Research   4801CA16918-05   33,394   — 67,193   Cancer Detection and Diagnosis Research   4801CA16918-05   33,394   — 67,193   Cancer Detection and Diagnosis Research   4801CA16918-05   33,394   — 67,193   Cancer Detection and Diagnosis Research   4801CA16918-05   33,394   — 67,193   Cancer Detection and Diagnosis Research   4101CA16849-05   33,394   — 26,7045   Cancer Detection and Diagnosis Research   4101CA16849-05   33,394   — 26,7045   Cancer Detection and Diagnosis Research   4101CA17027-04   33,394   — 33,572   Cancer Detection and Diagnosis Research   5101CA168930-04   93,394   — 33,572   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 33,572   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 33,572   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 33,572   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 32,574   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 32,574   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 32,574   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 32,674   Cancer Detection and Diagnosis Research   5801CA16934-05 Rev   93,394   — 32,674   Cancer Detection and Diagnosis Research   5801CA16934-02   93,394   68,257   37,386   Cancer Detection and Diagnosis Research   5801CA16934-02   93,394   68,257   37,386   Cancer Detection and Diagnosis Research   5801CA16934-02   93,394   68,257   37,386   Cancer Detection and Diagnosis Research   5801CA16934-02   93,394   68,257   37,394   68,257   37,394   68,257   37,394   68,257   37,394   68,257   37,394   68,257   37,394   68,257   37,394   68,257   37,394   68,257   37,394   68,257   37,394				_	
Camer Detection and Diagnosis Research	Cancer Detection and Diagnosis Research	1U01CA207821-01	93.394	=	13,949
Cancer Detection and Diagnosis Research				_	
Cancer Detection and Diagnosis Research	Cancer Detection and Diagnosis Research	4R01CA156775-06	93.394		29,411
Cancer Detection and Diagnosis Research   4R01(CA176659-04   93.394   87.56   191.104   201.105   201.10				_	
Cancer Detection and Diagnosis Research	Cancer Detection and Diagnosis Research	4R01CA176659-04	93.394	88,756	191,104
Cancer Detection and Diagnosis Research   \$101 CA 168930-04   93.394   34.333   36.659				_	
Cancer Detection and Diagnosis Research   SROICAIG9746-04 REVI   93.394   (1.150)   (1.283)   (2.000 Cancer Detection and Diagnosis Research   SROICAIG9937-03   93.394   — 202.049   (2.000 Cancer Detection and Diagnosis Research   SROICAIG9937-03   93.394   — 202.049   (2.000 Cancer Detection and Diagnosis Research   SROICAIT6689-03   93.394   — 104.230   (2.000 Cancer Detection and Diagnosis Research   SR21CAI176684-02   93.394   — 104.230   (2.000 Cancer Detection and Diagnosis Research   SR21CAI18660-02   93.394   — 107.7665   (2.000 Cancer Detection and Diagnosis Research   SR21CAI186169-02   93.394   65.307   228.994   (2.000 Cancer Detection and Diagnosis Research   SR32CAI186169-02   93.394   65.307   228.994   (2.000 Cancer Detection and Diagnosis Research   SR32CAI1861873-02   93.394   11.404   307.302   (2.000 Cancer Detection and Diagnosis Research   SUOICAI13913-10REV   93.394   11.404   307.302   (2.000 Cancer Detection and Diagnosis Research   SUOICAI1391802-05   93.394   11.404   307.302   (2.000 Cancer Detection and Diagnosis Research   SUOICAI13918-046   93.394   178.051   680.533   (2.000 Cancer Detection and Diagnosis Research   SUOICAI13913-006   93.394   178.051   680.533   (2.000 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   178.051   680.533   (2.000 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   29.605   340.836   (2.000 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   29.605   340.836   (2.000 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   29.605   340.836   (2.000 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   29.605   340.836   (2.000 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   29.605   340.836   20.600 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   29.605   340.836   20.600 Cancer Detection and Diagnosis Research   SUOICAI1302-06   93.394   29.605   340.836   20.600 Cancer Detection and Diagnosis Research   30.000 Cancer Detection and		5 U01 CA 168930-04		34,333	36,659
Cancer Detection and Diagnosis Research   \$801CA 169188-04   \$93.394   — 2020,490		ED CALCULATION OF DEPART	00.004	(1,150)	
Cancer Detection and Diagnosis Research		5R01CA169188-04			386,741
Cancer Detection and Diagnosis Research         \$R21CA182661-02         93.394         —         127,665           Cancer Detection and Diagnosis Research         \$R32CA161873-02         93.394         7,037         10,742           Cancer Detection and Diagnosis Research         \$R33CA161873-02         93.394         17,037         10,742           Cancer Detection and Diagnosis Research         \$U01CA11802-05         93.394         11,404         307,302           Cancer Detection and Diagnosis Research         \$U01CA17802-03         8FWI         93.394         178,051         680,533           Cancer Detection and Diagnosis Research         \$U01CA17802-07         93.394         74,051         680,533           Cancer Detection and Diagnosis Research         \$U01CA17802-07         93.394         74,051         680,533           Cancer Detection and Diagnosis Research         \$R01CA121320-06         93.394         —         261,068           Cancer Detection and Diagnosis Research         \$R01CA151810-05 REVI         93.394         —         261,068           Cancer Detection and Diagnosis Research         \$U01CA15810-05 REVI         93.394         —         726,437           Cancer Detection and Diagnosis Research         \$U01CA15810-05 REVI         93.394         —         726,437           Pass-through Beth	Cancer Detection and Diagnosis Research	5R01CA176659-03		68,257	
Cancer Detection and Diagnosis Research         \$821CA186169-02         93.394         65,307         228,994           Cancer Detection and Diagnosis Research         \$833CA161873-02         93.394         11,404         307,302           Cancer Detection and Diagnosis Research         \$1001CA115802-05         93.394         11,404         307,302           Cancer Detection and Diagnosis Research         \$1001CA172027-03 REVI         93.394         178,051         680,533           Cancer Detection and Diagnosis Research         \$1001CA172027-03 REVI         93.394         544,064         839,212           Cancer Detection and Diagnosis Research         \$101CA163180-06         93.394         24,064         839,212           Cancer Detection and Diagnosis Research         \$101CA1520-06         93.394         24,064         839,212           Cancer Detection and Diagnosis Research         \$101CA163180-06         93.394         24,065         340,836           Cancer Detection and Diagnosis Research         \$101CA1631810-05 REVI         93.394         24,065         340,836           Cancer Detection and Diagnosis Research         \$101CA1631810-05 REVI         93.394         24,065         340,836           Cancer Detection and Diagnosis Research         \$101CA1631810-05 REVI         93.394         24,065         340,836	Cancer Detection and Diagnosis Research	5R21CA176684-02 5R21CA182661-02		_	
Cancer Detection and Diagnosis Research   \$101CA113913-10REV   \$9.3.94   \$11,404   \$307,302   \$201CA151802-05   \$9.3.94   \$11,404   \$307,302   \$201CA151802-05   \$9.3.94   \$11,405   \$80.533   \$201CA151802-05   \$9.3.94   \$17,8051   \$680.533   \$201CA151802-02   \$9.3.94   \$17,8051   \$680.533   \$201CA15180308   \$8.854004   \$18,051   \$680.533   \$201CA151810-05   \$9.3.94   \$20.505   \$3.94   \$20.505   \$201CA151810-05   \$9.3.94   \$20.505   \$3.94   \$20.505   \$3.94   \$20.505   \$3.94   \$20.505   \$3.94   \$20.505   \$30.505   \$20.505   \$30.505	Cancer Detection and Diagnosis Research	5R21CA186169-02	93.394		228,994
Cancer Detection and Diagnosis Research   \$101CA151802-05   \$93.394   109.258   97.793   \$102.258   \$10.					
Cancer Detection and Diagnosis Research   \$124CA194362-02   93.394   \$44,064   839,212	Cancer Detection and Diagnosis Research	5U01CA151802-05	93.394	109,258	97,793
Cancer Detection and Diagnosis Research   \$501CA121320-06   93.394   29.605   340,848	Cancer Detection and Diagnosis Research				
Cancer Detection and Diagnosis Research         \$U01CA15810-05 REVI         93.394         2,089         116,539           Cancer Detection and Diagnosis Research         5U01CA168449-04         93.394         —         726,437           Pass-through Beth Israel Deaconness Medical Center         1028380         93.394         —         78,510           Pass-through Dartmouth College         R219         93.394         —         78,510           Pass-through Dartmouth College         R219         93.394         —         23,004           Pass-through State University         2001355031         93.394         —         23,004           Pass-through State University of New York Stony Brook         72432-1127175-2         93.394         —         87,694           Pass-through University of New York Stony Brook         72432-1127175-2         93.394         —         161,078           Pass-through University of Texas Health Sciences Ctr         158165         93.394         —         11,078           Pass-through Van Andel Institute         EMORY-BH-10-40234-1         93.394         —         11,037           Pass-through Washington University         WU-15-76 P0#2922479Y         93.394         —         11,037           Total CFDA No. 93.394         —         WU-15-76 P0#2922479Y         93.394 <td>Cancer Detection and Diagnosis Research</td> <td>5R01CA121320-06</td> <td>93.394</td> <td></td> <td>261,068</td>	Cancer Detection and Diagnosis Research	5R01CA121320-06	93.394		261,068
Cancer Detection and Diagnosis Research   \$101CA168449-04   93.394   — 726,437     Pass-through Beth Israel Deaconness Medical Center   1028789   93.394   — 78.510     Pass-through Beth Israel Deaconness Medical Center   1028789   93.394   — 78.510     Pass-through Dartmouth College   R219   93.394   — 145,548     Pass-through Institute University   2001355031   93.394   — 145,548     Pass-through State University of New York Stony Brook   72432-1127175-2   93.394   — 87.694     Pass-through Univ of Arkansas for Medical Services   POG160101436   93.394   — 161,078     Pass-through Univ of Texas Health Sciences Ctr   188165   93.394   — 12,94     Pass-through Van Andel Institute   EMORY-BH-10-40234-1   93.394   — 11,037     Pass-through Van Andel Institute   V1377-S2-1   93.394   — 11,037     Pass-through Washington University   WU-15-76 PO#2922479Y   93.394   — 11,037     Total CFDA No. 93.394   — 96.20     Total CFDA No. 93.394   — 11,037     Cancer Treatment Research   1801CA102763-01A1   93.395   5.065   188,000     Cancer Treatment Research   1801CA202763-01A1   93.395   — 228,898     Cancer Treatment Research   2801CA136334-406   93.395   — 228,798     Cancer Treatment Research   2801CA136334-406   93.395   — 280.600   — 280.600   — 280.600   — 280.	Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research				
Pass-through Dartmouth College   R219   93.394   — 78,510	Cancer Detection and Diagnosis Research	5U01CA168449-04	93.394	,—	726,437
Pass-through Dartmouth College	Pass-through Beth Israel Deaconness Medical Center Pass-through Beth Israel Deaconness Medical Center			_	
Pass-through State University of New York Stony Brook         72432-1127175-2         93.394         —         87.694           Pass-through Univ of Arkansas for Medical Services         PO:G160101436         93.394         —         161,078           Pass-through Univ of Texas Health Sciences Ctr         188165         93.394         —         12,294           Pass-through Van Andel Institute         EMORY-BH-1 0-40234-1         93.394         —         54,448           Pass-through Van Andel Institute         V1377-S2-1         93.394         —         11,037           Pass-through Washington University         WU-15-76 PO#2922479Y         93.394         —         962           Total CFDA No. 93.394         —         962           Cancer Treatment Research         1R01CA194027-01A1         93.395         —         283,898           Cancer Treatment Research         1R01CA202763-01A1         93.395         50,065         188,000           Cancer Treatment Research         2R01CA136334-06         93.395         —         228,797	Pass-through Dartmouth College	R219	93.394	_	145,548
Pass-through Univ of Arkansas for Medical Services   PO-G160101436   93.394   — 161.078	Pass-through State University of New York Stony Brook	72432-1127175-2	93.394	=	87,694
Pass-through Van Andel Institute         EMORY-BH-I 0-40234-1         93.394         —         54,448           Pass-through Van Andel Institute         V 1377-S2-1         93.394         —         11,037           Pass-through Washington University         WU-15-76 PO#2922479Y         93.394         —         962           Total CFDA No. 93.394         —         1,137,011         7,555,439           Cancer Treatment Research         1R01CA194027-01A1         93.395         —         283,898           Cancer Treatment Research         1R01CA202763-01A1         93.395         50,065         188,000           Cancer Treatment Research         2R01CA13634-06         93.395         —         228,798				_	
Pass-through Van Andel Institute         V1377-S2-1         93.394         —         11,037           Pass-through Washington University         WU-15-76 P0#2922479Y         93.394         —         95.23           Total CFDA No. 93.394         —         1,137,011         7,555,439           Cancer Treatment Research         1R01CA194027-01A1         93.395         5.065         188,000           Cancer Treatment Research         1R01CA1267363-406         93.395         —         228,798           Cancer Treatment Research         22R,701CA13633-406         93.395         —         228,798	Pass-through Van Andel Institute	EMORY-BH-1 0-40234-1	93.394	=	54,448
Total CFDA No. 93.394         I,137,011         7,555,439           Cancer Treatment Research         1R01CA194027-01A1         93.395         50,065         188,000           Cancer Treatment Research         1R01CA202763-01A1         93.395         50,065         188,000           Cancer Treatment Research         2R01CA136334-06         93.395         —         228,789	Pass-through Van Andel Institute			_	
Cancer Treatment Research         1R01CA194027-01A1         93.395         —         283,898           Cancer Treatment Research         1R01CA202763-01A1         93.395         50,665         188,000           Cancer Treatment Research         2R01CA136334-06         93.395         —         228,798		w 0-13-/0 FO#27224/71	93.394	1 127 011	
Cancer Treatment Research         1R01CA202763-01A1         93.395         50,065         188,000           Cancer Treatment Research         2R01CA136534-06         93.395         —         228,797		1R01CA 194027 01 A 1	02 205	1,137,011	
	Cancer Treatment Research	1R01CA202763-01A1	93.395	50,065	188,000
Admin Description (Control of the Control of the Co	Cancer Treatment Research Cancer Treatment Research	2R01CA136534-06 3R01CA157754-05S1 S2	93.395 93.395	_	228,797 104,572

61

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Cancer Treatment Research	4R01CA160522-05	93.395 \$		128,438
Cancer Treatment Research	4R01CA165306-05	93.395 93.395	9,198	130,204
Cancer Treatment Research Cancer Treatment Research	5 R01 CA176001-03 5R01CA118450-10	93.395	_	399,559 214,662
Cancer Treatment Research	5R01CA157754-04rev.	93.395	_	223,564
Cancer Treatment Research Cancer Treatment Research	5R01CA160522-02 Revi 5R01CA165306-04	93.395 93.395	4,769	135,452 134,254
Cancer Treatment Research	5R01CA180805-03	93.395	169,546	548,349
Cancer Treatment Research Cancer Treatment Research	5R01CA186129-03 5R01CA186918-02	93.395 93.395	_	348,032 432,567
Cancer Treatment Research	5R01CA180518-02 5R01CA188523-03	93.395	_	185,188
Cancer Treatment Research	5R01CA193828-02	93.395	_	272,217
Cancer Treatment Research Cancer Treatment Research	5R21CA185882-02REVIS 5U10CA180864-03	93.395 93.395	_	136,057 593,580
Cancer Treatment Research	5U10CA180950-03	93.395	267,999	347,612
Cancer Treatment Research Cancer Treatment Research	3P01CA116676-05S2 5R01CA143107-06	93.395 93.395	_	(82) 183,091
Cancer Treatment Research	5R01CA154129-05	93.395	_	501,954
Pass-through Albert Einstein College of Medicine	310635	93.395	_	16,439
Pass-through Brigham and Womens Hospital Pass-through Childrens Healthcare of Atlanta	CALGB140503/U10CA760 U01CA180886	93.395 93.395	_	8,594 13,495
Pass-through Childrens Healthcare of Atlanta	U01CA180886	93.395		12,706
Pass-through Childrens Hospital of Los Angeles Pass-through Childrens Hospital of Philadelphia	2012-01 950080216-XX	93.395 93.395	1,846	2,359 5,250
Pass-through Ecog-Acrin Medical Research Foundation	1UG1CA189828-01-EMRY	93.395	_	30,607
Pass-through Ecog-Acrin Medical Research Foundation	U10CA180820-01-EMRY1	93.395	_	17,432
Pass-through Fred Hutchinson Cancer Research Center Pass-through Fred Hutchinson Cancer Research Center	824190 CITN 49	93.395 93.395	_	(14) 1,284
Pass-through Frontier Science And Technology Res Fdtn	E3612ECOG23	93.395	_	20
Pass-through Frontier Science And Technology Res Fdtn Pass-through Frontier Science And Technology Res Fdtn	ECOG 1505 ECOG MASTER AGREEMEN	93.395 93.395	_	128 16
Pass-through Frontier Science And Technology Res Fdtn	PSAWCIEM00	93.395	=	113
Pass-through Georgia State University	SP00011812-01	93.395	_	245,451
Pass-through Medical College of Wisconsin Pass-through NRG Oncology Foundation, Inc.	PO# 1541088 5U10CA180868-03	93.395 93.395	_	5,851 95,759
Pass-through NRG Oncology Foundation, Inc.	Emory/Bruner-NCOR-02	93.395	_	152,776
Pass-through NRG Oncology Foundation, Inc. Pass-through NRG Oncology Foundation, Inc.	EMORY/LIPSCOMB-NCORP U10CA180868	93.395 93.395	_	29,200 48,499
Pass-through Roswell Park Cancer Institute	NIH-NCI	93.395	_	71
Pass-through University of Arizona	225828	93.395	_	73,154
Pass-through University of California Los Angeles Pass-through University of Minnesota	1568 G TA558 PO02139202	93.395 93.395	_	28,865 17,383
Total CFDA No. 93.395			503,423	6,525,403
Cancer Biology Research	1R01CA192844-01A1 re	93.396		214,814
Cancer Biology Research	1R01CA201340-01	93.396	_	192,864
Cancer Biology Research Cancer Biology Research	1R21CA201744-01 3R01CA163722-03S1	93.396 93.396	_	104,735 155,945
Cancer Biology Research	3R01CA163722-04S2	93.396	_	158,301
Cancer Biology Research	4R01CA123490-09 4R01CA171189-04	93.396 93.396	_	72,626 161,049
Cancer Biology Research Cancer Biology Research	4R01CA171189-04 4R01CA172392-04	93.396	_	179,201
Cancer Biology Research	5R01CA140515-07	93.396	_	356,447
Cancer Biology Research Cancer Biology Research	5R01CA171189-03 5R01CA172392-03	93.396 93.396	_	209,764 249,108
Cancer Biology Research	5R01CA174786-03	93.396	2,822	271,459
Cancer Biology Research Cancer Biology Research	5R01CA175316-03 5R01CA183594-03	93.396 93.396	2,805	306,822 359,590
Cancer Biology Research	5R21CA181754-02	93.396	2,803	119,221
Cancer Biology Research	5U01CA160882-05	93.396	196,378	652,200
Cancer Biology Research Cancer Biology Research	5P01CA09891205 5R01CA123368-10	93.396 93.396	_	71 163,094
Cancer Biology Research	5R01CA123490-08	93.396	_	224,640
Cancer Biology Research Cancer Biology Research	5R01CA140571-05 5R01CA142858-05	93.396 93.396	_	171,341 162,858
Pass-through Fred Hutchinson Cancer Research Center	0000839448	93.396	=	37,128
Pass-through University Of Arizona	293328	93.396	_	43,042
Pass-through University Of Medicine And Dentistry Of New Jersey	8086	93.396	202.005	(3,225)
Total CFDA No. 93.396			202,005	4,563,095
Cancer Centers Support Grants Cancer Centers Support Grants	3P30CA138292-08S1 5P30CA138292-07S1	93.397 93.397	_	780,245 998,870
Pass-through Johns Hopkins University	2001785619 Am 3	93.397	_	9,011
Pass-through University of California San Francisco	9015sc	93.397		76,042
Total CFDA No. 93.397				1,864,168
Cancer Research Manpower	1F31CA210601-01	93.398	_	3,339
Cancer Research Manpower Cancer Research Manpower	1F32CA199834-01A1 1K99CA197804-01A1REV	93.398 93.398	_	17,416 53,308
Cancer Research Manpower	4F31CA180319-03	93.398	_	16,496
Cancer Research Manpower Cancer Research Manpower	5 F32CA189633-02 5F31CA180319-02	93.398 93.398	_	24,352 17,242
Cancer Research Manpower	5F31CA180517-02 5F31CA180511-03	93.398	_	53,671
Cancer Research Manpower	5F31CA183365-03	93.398	_	56,637
Cancer Research Manpower Cancer Research Manpower	5F31CA186511-03 5F31CA186676-03	93.398 93.398	_	38,844 41,863
Cancer Research Manpower	5F31CA189672-03	93.398	_	41,555
Cancer Research Manpower	5F31CA189772-02 Revi	93.398	_	42,898
Cancer Research Manpower Cancer Research Manpower	5F31CA196181-02 5F31CA200383-02	93.398 93.398	_	40,931 43,720
Cancer Research Manpower	5F32CA168112-02	93.398	_	75
Cancer Research Manpower Cancer Research Manpower	5K23CA164015-05 5K25CA181503-03	93.398 93.398	_	158,674 115,503
Cancer Research Manpower Cancer Research Manpower	5K25CA181303-03 5T32CA160040	93.398	=	142,446
Cancer Research Manpower	5F30CA177156-03	93.398	_	31,790
Pass-through Health Research Roswell Park	116-01	93.398		32,896
Total CFDA No. 93.398				973,656
Cancer Control	5P50CA128301-05REVIS	93.399		7,216
Total CFDA No. 93.399				7,216

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,\ 2016$

Program title/federal grantor/pass-through entity	Arroad number	Federal CFDA number or other I.D. number	Passed through to	Federal
NON-ACA/PPHF – Building Capacity of the Public Health System to Improve Population Health	Award number	1.D. number	subrecipients	expenditures
through National Nonprofit Organizations Pass-through Assoc State Territorial Health Official	63-10722REQUISITION	93.424 \$		2,697
Total CFDA No. 93.424	03-10/22REQUISITION	95.424 3		2,697
ACL National Institute on Disability, Independent Living, and Rehabilitation Research				
Pass-through Georgia Institute Of Technology	RF543-G1	93.433		4,895
Total CFDA No. 93.433				4,895
Refugee and Entrant Assistance_Wilson/Fish Program Pass-through Georgia State University	SP00010891-02	93.583		22,424
Total CFDA No. 93,583				22,424
Health Care Innovation Awards	1C1CMS331041-03-01	93.610	22,167	51,396
Total CFDA No. 93.610			22,167	51,396
Children's Justice Grants to States Pass-through Georgia Department of Human Resources	42700-040-0000009916	93.643	_	512
Pass-through Georgia Department of Human Services	42700-040-0000029413	93.643		23,094
Total CFDA No. 93.643				23,606
Social Services Block Grant Pass-through Georgia Department of Human Services	42700-373-0000034541	93.667	_	76
Total CFDA No. 93.667	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			76
Trans-NIH Recovery Act Research Support	3U19AI057266-06S2	93.701		(349)
Trans-NIH Recovery Act Research Support Trans-NIH Recovery Act Research Support	3UL1RR025008-03S2 5RC2CA149086-02	93.701 93.701	=	1,507 (4,622)
Trans-NIH Recovery Act Research Support	7R21NS059649-03REVIS	93.701	_	(8,090)
Pass-through Duke University Pass-through University of Tennessee Memphis	CARRANET_REGISTRY519 5R21AI084710-02	93.701 93.701	=	3,866 (13,895)
Total CFDA No. 93.701				(21,583)
Prevention Public Health Fund: Viral Hepatitis Prevention		93.736		(169,487)
Total CFDA No. 93.736				(169,487)
Medical Assistance Program Pass-through Georgia Department of Behavioral Health	44100-906-0000062709	93.778		420,844
Pass-through Georgia Department of Behavioral Health	44100-907-0000056259	93.778	=	41,319
Pass-through University Of South Florida Pass-through University Of South Florida	5820-1161-00-U 5820-1257-00A	93.778 93.778	_	4,543 129,053
Total CFDA No. 93.778				595,759
Health Careers Opportunity Program	5 D18HP29034-02-00	93.822		555,077
Total CFDA No. 93.822				555,077
Ebola Support: Transmission and Prevention Control, Public Health Preparednesas, Vaccine Development	1U54CK000453-01REV	93.823	148,982	371,898
Pass-through Harvard Pilgrim Health Care Institute  Total CFDA No. 93.823	3U54CK000172-05S2	93.823	148,982	92,555 464,453
National Ebola Training and Education Center			140,702	404,433
Pass-through Asst Secty for Prepar. & Response Barda	5U3REP150549-02	93.825	1,248,628	1,980,992
Total CFDA No. 93.825			1,248,628	1,980,992
Cardiovascular Diseases Research Cardiovascular Diseases Research	1F32HL126321-01A1REV 1K23HL127251-01A1REV	93.837 93.837	=	55,623 65,441
Cardiovascular Diseases Research Cardiovascular Diseases Research	1K23HL128795-01A1REV	93.837	_	64,627
Cardiovascular Diseases Research	1P20HL113451-05 1R01HL127236-01A1	93.837 93.837	=	261,671 183,587
Cardiovascular Diseases Research Cardiovascular Diseases Research	1R01HL127726-01A1 1R01HL129511-01A1	93.837 93.837	=	329,080 19,362
Cardiovascular Diseases Research Cardiovascular Diseases Research	1R01HL130471-01 1R01HL130915-01	93.837 93.837	1,943	148,666 43,125
Cardiovascular Diseases Research	1R56HL124380-01	93.837	20,230	127,383
Cardiovascular Diseases Research Cardiovascular Diseases Research	1R56HL125062-01 1R56HL126558-01	93.837 93.837	400	86,887 57,950
Cardiovascular Diseases Research Cardiovascular Diseases Research	1T32HL130025-01A1 3P01HL095070-07S1	93.837 93.837	24,706	8,180 1,983,539
Cardiovascular Diseases Research	4R01HL109413-04	93.837	24,700	315,351
Cardiovascular Diseases Research Cardiovascular Diseases Research	4R01HL113167-04 4R01HL119798-04	93.837 93.837	=	275,069 68,262
Cardiovascular Diseases Research Cardiovascular Diseases Research	4U01HL105561-05 4U10HL110302-05REVIS	93.837 93.837	105,170	265,184 222,869
Cardiovascular Diseases Research	4U54HL112309-05	93.837	29,897	688,172
Cardiovascular Diseases Research Cardiovascular Diseases Research	5F30HL110447-04REVIS 5F30HL118954-03	93.837 93.837	=	40,473 42,966
Cardiovascular Diseases Research Cardiovascular Diseases Research	5F30HL122065-03 5F32HL124974-02	93.837 93.837	=	44,914 56,877
Cardiovascular Diseases Research	5K08HL119592-03REVIS	93.837	_	88,652
Cardiovascular Diseases Research Cardiovascular Diseases Research	5K08HL124292-02REVIS 5K23HL105787-04	93.837 93.837	_	148,971 77,358
Cardiovascular Diseases Research Cardiovascular Diseases Research	5K23HL124287-02 5K99HL119567-02	93.837 93.837	=	139,249 8,415
Cardiovascular Diseases Research	5P01HL095070-05	93.837	(11,572)	(23,916)
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R00HL119567-04 5R01HL079040-09	93.837 93.837	=	262,861 871
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL109413-03 5R01HL109559-04	93.837 93.837	_	345,010 139,715
Cardiovascular Diseases Research	5R01HL111646-05	93.837	_	720,407
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL113167-03 5R01HL119291-04	93.837 93.837	85,183	(421) 345,447
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL119798-03 5R01HL122392-04	93.837 93.837	234,008 144,469	416,576 289,627
Cardiovascular Diseases Research	5R01HL125442-02	93.837	90,831	283,806
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL127759-02 5R21HL118454-02	93.837 93.837	_	435,456 119
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R21HL123928-02 5R34HL117351-02REVIS	93.837 93.837	_	228,349 (1,712)
Cardiovascular Diseases Research	5R34HL122557-02	93.837	65,929	140,849
Cardiovascular Diseases Research Cardiovascular Diseases Research	5T15HL098122-05 5T32HL007745-23	93.837 93.837	_	177,593 509,344
Cardiovascular Diseases Research	5U01HL105561-04	93.837	572,063	733,712

63

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

		Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity	Award number	I.D. number	subrecipients	expenditures
Cardiovascular Diseases Research Cardiovascular Diseases Research	5U01HL117721-03 5U01HL128566-02	93.837 \$ 93.837	1,100,202 162,607	1,694,764 457,789
Cardiovascular Diseases Research Cardiovascular Diseases Research	5U10HL110302-04Rev 5U54HL112309-04	93.837 93.837	261,905	123,638 1,598,102
Cardiovascular Diseases Research	7R34HL108761-04	93.837	19,758	41,416
Cardiovascular Diseases Research Cardiovascular Diseases Research	1K99HL093115-01 5K23HL098744-05	93.837 93.837	·—	864 302
Cardiovascular Diseases Research	5K23HL103842-05	93.837	=	121,793
Cardiovascular Diseases Research Cardiovascular Diseases Research	5K23HL105785-05 5K23HL105892-05	93.837 93.837	9,898	75,277 113,191
Cardiovascular Diseases Research	5K24HL077506-10	93.837	_	(2,546)
Cardiovascular Diseases Research Cardiovascular Diseases Research	5P01HL101398-05 Revi 5P20HL113451-04	93.837 93.837	66,476	774,032 428,340
Cardiovascular Diseases Research	5R01HL058863-15	93.837	· —	7,898
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL092150-04 5R01HL095479-04S1	93.837 93.837	(429) (301)	(429) (470)
Cardiovascular Diseases Research	5R01HL098481-05REVIS	93.837	(301)	19,148
Cardiovascular Diseases Research Cardiovascular Diseases Research	5R01HL125246-02 5R21HL109979-02 REV	93.837 93.837	_	623,068 7,571
Cardiovascular Diseases Research	5R37HL038206-29	93.837	_	325,689
Cardiovascular Diseases Research Cardiovascular Diseases Research	5U10HL109781-05 5R01HL08872604	93.837 93.837	110,004	169,986 87,385
Pass-through Boston Children's Hospital	RSTFD0000650142	93.837	=	10,629
Pass-through Children's Hospital Medical Center Pass-through Children's Hospital of Philadelphia	109317 FP11498-19-02	93.837 93.837	216 6,612	300 8,414
Pass-through Cornell University	16091605-03	93.837	0,012	52,537
Pass-through Duke Clinical Research Institute Pass-through Duke University	R01HL105448 193603	93.837 93.837	_	21,247 75,673
Pass-through Duke University	ATHENA	93.837	=	35,756
Pass-through Duke University Pass-through Duke University	ROSE-AHF U10HL084904	93.837 93.837	_	(63) (253)
Pass-through Duke University	U1HL084904	93.837	=	54,973
Pass-through Frontier Science and Technology Res Fdtn Pass-through Johns Hopkins	PSAWCIEM00 2001185468	93.837 93.837	_	17 162,405
Pass-through Massachusetts General Hospital	5U01HL23336-02	93.837	_	18,367
Pass-through Medical College of Wisconsin Pass-through Medical University of South Carolina	5R01HL119747-04 MUSC14-066 Am 2	93.837 93.837	_	2,041 13,989
Pass-through Morehouse School of Medicine	003-Emory-350080-02	93.837	_	144,495
Pass-through Mount Sinai School Of Medicine	0255-3102-4605 0255-3106-4605	93.837 93.837	_	5,659 17,753
Pass-through Mount Sinai School Of Medicine Pass-through Mount Sinai School Of Medicine	0255-9035-4609	93.837	_	60,712
Pass-through Mount Sinai School Of Medicine Pass-through Mount Sinai School Of Medicine	5U01HL088942-08 ISMMS 0255-3107-4605	93.837 93.837	_	48,446 48,668
Pass-through Natl Jewish Health	20200052108	93.837	_	91,286
Pass-through New England Research Institutes	5U10HL109781-05 U01HL68270	93.837 93.837	1,100	1,406 11,295
Pass-through New England Research Institutes Pass-through New England Research Institutes	U01HL68270	93.837	_	3,278
Pass-through New England Research Institutes Pass-through New England Research Institutes	U10HL068270 U01HL68270	93.837 93.837	_	5,405 4,371
Pass-through New York University	U01HL105907	93.837	=	1,995
Pass-through Oregon Health and Science University Pass-through University of California Davis	1002919-EU AM2 201401440-01	93.837 93.837	_	40,953 345,795
Pass-through University of California San Francisco	8043SC	93.837	_	50,201
Pass-through University of Florida Pass-through University of Georgia	UFDSP00010763 RR168-681/5054796	93.837 93.837	_	52,796 (96)
Pass-through University of Georgia	RR376-352/4945936	93.837	_	15,865
Pass-through University of Michigan Pass-through University of Pittsburgh	U01HL094345 0046317 (126441-3)	93.837 93.837	_	7,189 14,456
Pass-through University of Rochester	416745	93.837	150	30,628
Pass-through Vanderbilt University Pass-through Virginia Commonwealth University	VUMC43988 Amend 2 PT107848-SC104184	93.837 93.837	_	34,344 (3,269)
Pass-through Wake Forest University	WAKE FOREST UNIVERIT	93.837	5,150	189,179
Pass-through Wake Forest University Pass-through Washington University	WFUHS 110947 5U54HL112303-04	93.837 93.837	_	7,036 2,358
Pass-through Washington University	PO2928764A WU-16-179	93.837	=	26,735
Pass-through Weill Cornell Medical College Pass-through Yale University	15121982-09 nih nhlbi	93.837 93.837	_	39,403 2,232
Total CFDA No. 93.837	ini inio	75.057	3,106,605	19,345,010
Lung Diseases Research	3R01HL125042-03S1	93.838	3,100,003	765,372
Lung Diseases Research	3R01HL125042-0351 3R01HL126603-02S2REV	93.838	_	177,635
Lung Diseases Research Lung Diseases Research	4R01HL113548-05 4R01HL116958-04	93.838 93.838	_	49,018 219,403
Lung Diseases Research	4T32HL116271-04	93.838	=	18,973
Lung Diseases Research Lung Diseases Research	5F31HL114386-02REVIS 5R01 HL116958-03	93.838 93.838	_	991 381,126
Lung Diseases Research	5R01HL102167-04 REV	93.838	_	28
Lung Diseases Research Lung Diseases Research	5R01HL102167-06 5R01HL113548-04	93.838 93.838	11,548	319,254 226,183
Lung Diseases Research	5T32HL076118-10 REV	93.838	-	36,619
Lung Diseases Research Lung Diseases Research	5T32HL116271-03 5R01HL122559-02	93.838 93.838	=	278,786 447,621
Lung Diseases Research	7R01HL07776904	93.838	_	326
Pass-through Childrens Hopsital of Boston Pass-through Johns Hopkins University	74159 2001443924 Am 5	93.838 93.838	20,854	26,651 29,354
Pass-through Seattle Children's Research Institute	11028SUB	93.838	_	3,083
Pass-through Vanderbilt University Pass-through Wake Forest University	VUMC 40923 Am 3 WFUHS 115917	93.838 93.838	_	37,838 103,850
Total CFDA No. 93.838	WI (III) 113717	75.656	32,402	3,122,111
Blood Diseases and Resources Research	1K01HL131333-01REVIS	93.839	32,402	
Blood Diseases and Resources Research	1K23HL128942-01A1	93.839	=	67,321 49,569
Blood Diseases and Resources Research	1R01HL131414-01A1	93.839	_	8,234
Blood Diseases and Resources Research Blood Diseases and Resources Research	1R21HL133584-01 4U01HL117721-04	93.839 93.839	=	10,023 173,681
Blood Diseases and Resources Research Blood Diseases and Resources Research	5P01HL086773-07 5R01HL082808-09 REV	93.839	349,021	1,725,544
Blood Diseases and Resources Research Blood Diseases and Resources Research	5R01HL082808-09 REV 5R01HL082808-11	93.839 93.839	75,692	(652) 279,553
Blood Diseases and Resources Research	5R01HL095479-07	93.839	330,578	805,174
Blood Diseases and Resources Research Blood Diseases and Resources Research	5R01HL117061-05 5R01HL123984-02	93.839 93.839	_	262,250 342,052
Blood Diseases and Resources Research Blood Diseases and Resources Research	5R21HL117640-02 5R21HL117705-02	93.839 93.839	_	86,214 15,112
Dioca Discusso and resources research	3K21HE11//03-02	73.037	_	1,,112

64

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Blood Diseases and Resources Research	1F31HL131428-01	93.839 \$	- subrecipients	11,688
Blood Diseases and Resources Research	1P01HL086773-01A1REV	93.839	(2,322)	1,462
Blood Diseases and Resources Research Blood Diseases and Resources Research	2T32HL069769-11 5R01HL121264-03REVIS	93.839 93.839	27,490	118,035 420,556
Blood Diseases and Resources Research Blood Diseases and Resources Research	5T32HL069769-08REV 5T32HL069769-10	93.839 93.839	´—	(11,726) 11,726
Pass-through Baylor College of Medicine	5600706239	93.839	=	(19,835)
Pass-through Bloodcenter of Wisconsin Pass-through New England Research Institutes	0268-81148 U01HL072268	93.839 93.839	_	9,807 117,415
Pass-through Oklahoma Medical Research Foundation	0183-10	93.839	_	(88)
Pass-through University of Alabama Birmingham Pass-through University Of Iowa	000502659-002 W000732403	93.839 93.839	_	3,142 10,077
Pass-through University Of North Carolina Chapel Hill Pass-through University Of North Carolina Chapel Hill	5032283	93.839	_	45,875
Pass-through Washington University	5103509 WU-14-107	93.839 93.839	_	103,630 31,690
Pass-through Washington University	WU-15-415	93.839		5,586
Total CFDA No. 93.839			780,459	4,683,115
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	1F31 AR066476-01A1 1F31AR067645-02	93.846 93.846	_	24,372 43,669
Arthritis, Musculoskeletal and Skin Diseases Research	1F32AR068207-01A1	93.846	=	26,309
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	3R01AR048266-13S1 4R01AR048615-15	93.846 93.846	_	590,848 25,423
Arthritis, Musculoskeletal and Skin Diseases Research	4R01AR060268-05	93.846	_	131,781
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	4R01AR061267-05 4R01AR062483-05	93.846 93.846	_	144,727 24,036
Arthritis, Musculoskeletal and Skin Diseases Research	5K01AR061453-04	93.846	_	64,528
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	5K01AR065481-04 5R01AR047901-13	93.846 93.846	_	30,088 358,141
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR048615-14	93.846 93.846	_	310,133
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR054625-09 5R01AR061267-04	93.846	=	304,817 186,113
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis. Musculoskeletal and Skin Diseases Research	5R01AR062483-04 5R01AR064307-03	93.846 93.846	42,155	357,747 338,551
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR067786-02	93.846	· —	316,137
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR068157-02 5R21AR066920-02	93.846 93.846	_	550,827 177,296
Arthritis, Musculoskeletal and Skin Diseases Research	5U01AR067169-03	93.846	305	166,073
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis. Musculoskeletal and Skin Diseases Research	5R01AR050501-12 5R01AR05137205	93.846 93.846	_	355,036 290
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR05146605	93.846	_	553
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR059364-05 5R01AR060268-04	93.846 93.846	_	50 333,487
Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR060893-04 5R01AR061987-05	93.846 93.846	81,751	284,052 391,842
Pass-through Childrens Hospital Medical Center	134737	93.846	=	11,688
Pass-through Cincinnati Childrens Hospital Pass-through Cincinnati Childrens Hospital	105514 M2 131796	93.846 93.846	_	4,224 2,145
Pass-through Georgia Institute of Technology	RD248-G3	93.846	=	34,200
Pass-through Georgia Institute of Technology Pass-through Georgia Institute of Technology	RF880-G1 RG710-G1	93.846 93.846	_	19,966 11,688
Pass-through University Of California Los Angeles	1705GJC658/5R01AR037	93.846	_	(3,211)
Pass-through University Of Georgia Pass-through University Of Maryland	RR093-401/4708851 20395-Z0579001	93.846 93.846	_	39,899 455,394
Pass-through University Of North Carolina	5103371	93.846		13,407
Total CFDA No. 93.846			124,211	6,126,326
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	1DP3DK094346-01 REV 1F30DK109665-01	93.847 93.847	191,314	969,472 7,792
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F31DK111171-01	93.847	_	1,948
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	1F32DK107191-01A1 1R01DK107900-01 REVI	93.847 93.847	17,052	20,358 160,593
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK108842-01	93.847		158,878
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK109508-01 1R21DK105891-01	93.847 93.847	_	40,185 93,715
Diabetes, Digestive, and Kidney Diseases Extramural Research	1T32 DK108735-01 2R01DK054514-15A1	93.847 93.847	_	18,524 200,214
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK054514-15A1 2R01DK092722-05	93.847	_	39,575
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	2R56DK054154-15REV 2T32DK007656-26	93.847 93.847	=	32,699 33,014
Diabetes, Digestive, and Kidney Diseases Extramural Research	3DP3DK108245-01S1	93.847	_	417,285
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	3R01DK104125-02S1 3R25DK101390-03S1	93.847 93.847	_	235,546 104,110
Diabetes, Digestive, and Kidney Diseases Extramural Research	4K08DK091506-05	93.847	_	12,817
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	4K24DK096574-10 4R01DK056239-15	93.847 93.847	_	24,420 62,766
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	4R01DK059380-14 4R01DK062092-13	93.847 93.847	_	122,364 87,028
Diabetes, Digestive, and Kidney Diseases Extramural Research	4R01DK062092-13 4R01DK079713-10	93.847	_	132,508
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	4R01DK098231-04 4R37DK038842-28	93.847 93.847	_	19,429 31,997
Diabetes, Digestive, and Kidney Diseases Extramural Research	5 F30 DK097904-03	93.847	=	2,723
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5 R01 DK072564-20REV 5 U01 DK056956-14	93.847 93.847	_	(6,449) (2,127)
Diabetes, Digestive, and Kidney Diseases Extramural Research	5F30DK098928-02	93.847	_	503
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5F30DK100097-03 5F31DK107229-02	93.847 93.847		38,571 40,556
Diabetes, Digestive, and Kidney Diseases Extramural Research	5F32DK101163-02	93.847	_	47,210
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5K01DK087763-05 5K01DK099617-02REVIS	93.847 93.847	_	88,127 23
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5K01DK102851-03	93.847	_	96,930
Diabetes, Digestive, and Kidney Diseases Extramural Research	5K08DK091506-04 5K24DK096574-09	93.847 93.847	- - - - - - - - - -	36,425 124,601
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK041707-21 5R01DK044234-25	93.847 93.847	_	356,985 231,901
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK046493-13	93.847	_	3,669
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK059380-13 5R01DK059888-14REVIS	93.847 93.847	_	183,692 (360)
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK061418-13	93.847	_	295,970
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK062092-12 5R01DK071597-09	93.847 93.847	=	181,374 203,773
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK074731-05	93.847	_	295,596
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK079713-09	93.847	_	268,526

Supplementary Schedule of Expenditures of Federal Awards  $Year\ ended\ August\ 31,2016$ 

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK080684-07	93.847 \$	42,310	341,742
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK083356-04 REV 5R01DK089763-04	93.847 93.847	<i></i>	793 86,499
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK095610-04	93.847	=	285,478
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK09575004 5R01DK096983-03	93.847 93.847	_	176,681 648,573
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK100582-03	93.847	=	437,782
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R03DK096157-02 5R21DK098558-02	93.847 93.847	3,434 96,331	42,336 168,692
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R21DK099716-02	93.847	-	128,718
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R37 DK038842-27 5R37DK057665-18	93.847 93.847	=	354,050 351,654
Diabetes, Digestive, and Kidney Diseases Extramural Research	5T32DK007734-19	93.847	_	81,122
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5T32DK007771-15 5U01DK106994-02	93.847 93.847	_	91,582 260,375
Diabetes, Digestive, and Kidney Diseases Extramural Research	7R01DK092722-04	93.847	_	281,367
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	4R01DK095750-05 3R01DK085097-05S1	93.847 93.847	=	120,475 (64)
Diabetes, Digestive, and Kidney Diseases Extramural Research	3R01DK083097-0331	93.847	44,753	556,920
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK047987-23 5R01DK056239-14	93.847 93.847	_	430,506 396,819
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK036239-14 5R01DK056481-10	93.847	(470)	(470)
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK061379-13	93.847	· — ·	6,358
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK061417-09 5R01DK064730-08	93.847 93.847	_	(492) 3,519
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK080684-05	93.847	_	28
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK087838-05 5R01DK089828-04	93.847 93.847	_	171,291 203,029
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK091780-04	93.847	_	212,399
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK098231-03 5R01DK098391-03REVIS	93.847 93.847	163,664	625,597 372,744
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R03DK101870-02	93.847	=	78,014
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5R24DK064399-10	93.847	_	1,165
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R37DK057665-16 5T32DK007298-35 REVI	93.847 93.847	_	7,430 5,984
Diabetes, Digestive, and Kidney Diseases Extramural Research	5T32DK007656-25S1	93.847	_	215,983
Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	5U01DK062408-12REV 5U01DK062470-13	93.847 93.847	170,350	(3,181) 506,310
Diabetes, Digestive, and Kidney Diseases Extramural Research	5U01DK084585-03REVIS	93.847		7,425
Diabetes, Digestive, and Kidney Diseases Extramural Research Pass-through Brigham and Womens Hospital	R37DK038842-24 111977	93.847 93.847	_	1,725 133,555
Pass-through Brigham and Womens Hospital	112659	93.847	_	90,054
Pass-through Connecticut Childrens Medical Center Pass-through George Washington University	15-179296-03 U01 -DK061230-09	93.847 93.847	=	142,828 388
Pass-through Medical University of South Carolina	MUSC15-032	93.847	_	124,897
Pass-through Research Institute at Nationwide Childrens Pass-through Research Institute at Nationwide Childrens	25UM1DK100866-02 952614	93.847 93.847	_	16,241 97,414
Pass-through University of California Los Angeles	1652 G TA 103	93.847	_	9,626
Pass-through University of California San Francisco	105871 EP05(42102 PP	93.847	_	69
Pass-through University of Chicago Pass-through University of Chicago	FP05642102-PR FP060692	93.847 93.847	_	33,063 120,754
Pass-through University of Colorado Denver	FY14.220.031	93.847	183	4,437
Pass-through University of Iowa Pass-through University of Michigan	1001305395 U54DK083912	93.847 93.847	_	18,442 6,814
Pass-through University of Michigan	3001819808	93.847	_	477
Pass-through University of Michigan Pass-through University of Michigan	3003756238 SUBK00003798	93.847 93.847	13,037	172,408 13,037
Pass-through University of Pennsylvania	565161	93.847	_	9,305
Pass-through University of Pittsburgh Pass-through University of Rochester	0019927 124826-8A 416167	93.847 93.847	56,571 810	58,284 2,739
Pass-through University of Texas Southwestern	/ nmGMO-140903	93.847	_	930
Pass-through University of Texas Southwestern Pass-through University of Wisconsin-Madison	RGC 000000782 361K620 Am.4	93.847 93.847	_	68,405 5,785
Pass-through Virginia Commonwealth University	PD303567-SC105312	93.847	8,193	152,190
Total CFDA No. 93.847		•	807,532	14,454,556
Digestive Diseases and Nutrition Research	5R01DK06473004	93.848		1,023
Digestive Diseases and Nutrition Research	5R01DK07237204	93.848	_	170
Digestive Diseases and Nutrition Research	5T32DK007771-10	93.848		(19)
Total CFDA No. 93.848		-		1,174
Kidney Diseases, Urology and Hematology Research	5U01DK04537315	93.849		(15,102)
Total CFDA No. 93.849		-		(15,102)
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS071518-05 1 R03 NS091699-02	93.853 93.853	_	109,937 59,535
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	1 R03 NS091699-02 1 R24 NS092989-01A1	93.853	_	9,664
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS093859-01A1	93.853	_	13,125
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS098673-01 1F31NS098736-01	93.853 93.853	_	1,948 9,216
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F32NS098615-01	93.853	_	8,006
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS091585-01A1 1R01NS095064-01A1	93.853 93.853	_	83,364 82,166
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS095269-01A1REV	93.853	_	7,454
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS096236-01 1R21NS093446-01A1	93.853 93.853	_	51,608 124,719
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS096455-01	93.853	=	(11,621)
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS098776-01 2T32NS007480-16	93.853 93.853	_	7,563 21,826
Extramural Research Programs in the Neurosciences and Neurological Disorders	2U54NS065701-06 REVI	93.853	133,843	188,043
Extramural Research Programs in the Neurosciences and Neurological Disorders	3P50NS071669-05S1	93.853	8,076	107,581
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	3R01NS084844-02S1 RE 3R01NS087142-02S1	93.853 93.853	_	123,614 214,306
Extramural Research Programs in the Neurosciences and Neurological Disorders	3R01NS088413-03S1	93.853	_	325,697
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	3R01NS097776-01S1 4R01 NS079331-04	93.853 93.853	_	95,841 233,759
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS036232-17REVIS	93.853	_	223,153
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS057190-10 4R01NS061070-11	93.853 93.853	_	54,625 49,028
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS065371-08	93.853	_	42,348
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS078095-05	93.853	_	26,513
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS079625-05	93.853	_	89,655

Supplementary Schedule of Expenditures of Federal Awards  $Year\ ended\ August\ 31,2016$ 

Downson state (follow) and to (for a decorate and to	Arrod combo	Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity  Extramural Research Programs in the Neurosciences and Neurological Disorders	Award number 4R01NS079858-04	I.D. number 93.853 \$	subrecipients	expenditures 181,629
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS083386-04	93.853	=	216,525
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS084844-04 4R01NS085006-04	93.853 93.853	=	191,584 28,080
Extramural Research Programs in the Neurosciences and Neurological Disorders	4U01NS038455-15	93.853	_	22,190
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	4U10NS077366-06 4U10NS086607-04	93.853 93.853	_	41,600 10,988
Extramural Research Programs in the Neurosciences and Neurological Disorders	5 F31NS081828-03REVI	93.853	_	(698)
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS071802-03REV 5F31NS081830-03REVIS	93.853 93.853	_	(2,485) 74
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS084730-03	93.853	_	28,544
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS084739-03REV 5F31NS086370-03	93.853 93.853	_	11,551 32,613
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS087713-03	93.853	_	56,122
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS089242-02 5F31NS089406-02REVIS	93.853 93.853	_	43,637 38,848
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F31NS092437-02REVIS 5F32NS070572-03REVIS	93.853 93.853	_	43,739 (970)
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5F32NS087915-03	93.853	_	53,607
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F32NS092342-02	93.853 93.853	_	53,660
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5K23NS083748-03 5P30NS055077-07	93.853	_	175,770 641,251
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R00NS065974-05 5R01NS036654-18	93.853 93.853	15,000	113,339 406,904
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS037112-16	93.853	77,213	473,474
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS047357-12	93.853	_	394,503
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS057190-09 5R01NS061070-10	93.853 93.853	_	253,625 341,632
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS073994-05 5R01NS077982-04	93.853 93.853	100,251	309,867 793,547
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS07/982-04 5R01NS078095-04	93.853	72,746	348,751
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS079268-04	93.853	(15,601)	125,178
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS079625-04 5R01NS079858-03	93.853 93.853	74,330	307,598 130,823
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS083386-03	93.853	_	349,778
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS084744-03 5R01NS085006-03	93.853 93.853	_	248,734 371,065
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS085568-03	93.853	_	451,134
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS088528-02 REVI 5R01NS088748-03	93.853 93.853	273,931	336,795 631,199
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS089694-03	93.853	´—	272,682
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS089719-02 5R01NS090319-02	93.853 93.853	41,437	458,350 304,564
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS090677-02	93.853	80,031	476,535
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS091201-02 5R01NS091749-02	93.853 93.853	_	221,921 383,191
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS092122-02	93.853	7,891	274,348
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS092343-02 5R01NS093016-02	93.853 93.853	_	189,234 335,637
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS093362-02 5R01NS095181-02	93.853 93.853	_	373,432 380,040
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS095279-02	93.853	_	341,988
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS077905-01REVIS 5R21NS081606-02	93.853 93.853	36,655	567 17,950
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS082546-02	93.853	- 50,055	8,745
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS082680-02 5R21NS083026-02	93.853 93.853	_	58,282 38,225
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS084229-02	93.853	=	60,878
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS084358-02 5R21NS085382-02	93.853 93.853	_	179,231 157,596
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS085553-02	93.853	_	70,796
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS088503-02 5R21NS089080-02REV	93.853 93.853	_	107,369 301,447
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS091038-02	93.853	_	212,215
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS091630-02REVIS 5R21NS091986-02	93.853 93.853	19,524	154,336 231,494
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS092385-02	93.853	_	132,171
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS093550-02 5R25NS065739-08	93.853 93.853	_	95,365 82,705
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R31NS086174-03	93.853	_	43,263
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5T32NS007480-15 REVI 5U01NS038455-14REVIS	93.853 93.853	45,667 2,759,666	232,754 3,280,804
Extramural Research Programs in the Neurosciences and Neurological Disorders	5U01NS094302-02	93.853	176,670	322,087
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5U10NS059032-09 5U10NS086607-03	93.853 93.853	_	237,014 386,833
Extramural Research Programs in the Neurosciences and Neurological Disorders	5U18NS082143-02revis	93.853	_	(3,048)
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	7R01NS073768-06 9T32NS096050-21	93.853 93.853	35,025	148,971 24,754
Extramural Research Programs in the Neurosciences and Neurological Disorders	IF31NS095528-01	93.853	_	31,184
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS072810-02 1R56NS070879-01	93.853 93.853	(2,793)	(2,793) 687
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F32NS086368-03	93.853	_	31,099
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5F32NS087775-02 5K02NS059416-05	93.853 93.853	_	51,348 6,013
Extramural Research Programs in the Neurosciences and Neurological Disorders	5K02NS070960-05	93.853	_	99,596
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5KD8NS087121-03 5R01NS036232-12	93.853 93.853	_	175,674 (11,182)
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS036232-17	93.853	_	11,183
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS038455-10 REV 5R01NS045627-10	93.853 93.853	_	(31,991) (10,021)
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS05143904	93.853	_	(70,909)
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS051630-11 5R01NS05372705	93.853 93.853	230,236	515,616 (1,068)
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS062097-05	93.853	=	53,461
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS064162-04 5R01NS065371-07	93.853 93.853	11,879	94,321 331,052
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS065949-05 REV	93.853	=	65
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS065992-04 5R01NS067201-05	93.853 93.853	6,131	4,619 7,833
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS070526-05	93.853		205,286
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS071074-05 5R01NS071867-05	93.853 93.853	109,417	29 155,419
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS072221-04	93.853		47,037

Supplementary Schedule of Expenditures of Federal Awards  $Year\ ended\ August\ 31,2016$ 

		Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity	Award number	I.D. number	subrecipients	expenditures
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS072394 5R01NS072467-05	93.853 \$ 93.853	_	862 2,905
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS076775-04	93.853	7,976	39
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS079331-03REV 5R01NS085387-03	93.853 93.853	_	197,104 255,430
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R03NS05837602	93.853	_	542
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS05380102 5R21NS05480902	93.853 93.853	_	476 1,038
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS06093502	93.853	=	668
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS084163-02	93.853	_	223,205
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS084647-02REV 5R21NS084870-02	93.853 93.853	_	102,715 99
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS087488-02	93.853	_	166,125
Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	5R21NS094136-02 5R37NS036654-16 REVI	93.853 93.853	_	236,922 308,601
Extramural Research Programs in the Neurosciences and Neurological Disorders	5U01NS058158-10REVIS	93.853	_	463,383
Extramural Research Programs in the Neurosciences and Neurological Disorders	5U01NS062778-05REV 5U10NS053379-05 REV	93.853 93.853	391,013	511,924 (45,594)
Extramural Research Programs in the Neurosciences and Neurological Disorders  Extramural Research Programs in the Neurosciences and Neurological Disorders	5U10NS033379-03 REV 5U10NS077366-05	93.853	_	166,093
Extramural Research Programs in the Neurosciences and Neurological Disorders	5U54NS065701-05 REVI	93.853	(13,784)	(26,315)
Extramural Research Programs in the Neurosciences and Neurological Disorders Pass-through Case Western Reserve University	7R01NS045810-06REVIS RES510707	93.853 93.853	_	1,024 27,328
Pass-through Cleveland Clinic Foundation	681-SUB	93.853	_	13,503
Pass-through Columbia University	7(GG006906-11)	93.853	_	15,786
Pass-through Dana Farber Cancer Institute Pass-through Duke University	1148001/1R21NS063877 13-NIH-1001	93.853 93.853	_	(1,068) 3,040
Pass-through Duke University	16-NIH-1038	93.853	_	9,377
Pass-through George Washington University Pass-through Georgia Institute of Technology	15-S27 RC836-G1	93.853 93.853	_	41,754 36,975
Pass-through Georgia Institute of Technology	RG321-G1	93.853	_	71,474
Pass-through Georgia Institute of Technology	RG574-G1	93.853	_	167,413
Pass-through Georgia Institute of Technology Pass-through Harvard University	7P01NS057228-09 112065	93.853 93.853	_	133,529 7,800
Pass-through Johns Hopkins University	2001976905	93.853	_	87,145
Pass-through Massachusetts General Hospital	5U01NS04964005/ALS S	93.853	_	(2,477)
Pass-through Massachusetts General Hospital Pass-through Mayo Clinic	U01NS077366-01 EMO-187276-02	93.853 93.853	_	63,683 518
Pass-through Medical College of Wisconsin	PO# 1292659	93.853	_	56,877
Pass-through Northwestern University Pass-through Northwestern University	60036745EU 60040984 EU	93.853 93.853	=	97,265 31,774
Pass-through Optima Neurosciences	OPT-004-EMORY	93.853	_	58,850
Pass-through Stanford University	60137320-51128-C	93.853	_	18,131
Pass-through University of Cincinnati Pass-through University of Cincinnati	COEUS 006883-010 PN U01NS091951-131885	93.853 93.853	_	1,032
Pass-through University Of Melbourne	TA17404_EU	93.853	_	49,353
Pass-through University of Miami	662706	93.853	_	91,800
Pass-through University of Michigan Pass-through University of Michigan	111993-SHN 30002672030-ISPOT	93.853 93.853	_	234,826 6,298
Pass-through University of Michigan	3001413083-PNT	93.853	_	80,650
Pass-through University of Michigan Pass-through University of Michigan	3002268352 SUBK00002373-ATACHII	93.853 93.853	_	54,138 75,778
Pass-through University of Michigan	SUBK000023/3-ATACHII SUBK00004094-ESETT	93.853	1,520	50,812
Pass-through University of North Carolina	5100029	93.853	´—	2,594
Pass-through University of North Carolina Pass-through University of Southern California	5102005 32949287	93.853 93.853	_	215,593 143,137
Pass-through University of Southern California	65772478	93.853	_	11,633
Pass-through University Of Washington Seattle	675520	93.853 93.853	_	(1,977)
Pass-through University Of Wisconsin-Madison Pass-through University Of Wisconsin-Madison	613K476 Am 1 652K330	93.853	_	95,820 68,845
Pass-through Wright State University	AMDT#3/5R01NS0493240	93.853	_	4,193
Pass-through Wright State University	P01NS057228	93.853		(62,777)
Total CFDA No. 93.853			4,683,950	27,524,433
Allergy, Immunology and Transplantation Research	1F31AI118558-01 REVI	93.855	_	13,699
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1F31AI122973-01A1 1F31AI124611-01A1	93.855 93.855	_	23,109 5,844
Allergy, Immunology and Transplantation Research	1K08AI119448-01A1	93.855	_	113,266
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1K23AI108335-03 1K23AI124913-01A1	93.855 93.855	_	134,421 5,348
Allergy, Immunology and Transplantation Research	1P01AI125180-01	93.855	_	45,070
Allergy, Immunology and Transplantation Research	1R01AI113883-01	93.855		189,882
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1R01AI116835-01 REVI 1R01AI121252-01	93.855 93.855	80,587	333,367 256,350
Allergy, Immunology and Transplantation Research	1R01AI123126-01	93.855	_	187,209
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1R01AI123733-01 1R01AI124680-01	93.855 93.855	886	161,574 340,736
Allergy, Immunology and Transplantation Research	1R01A1125064-01	93.855		541,442
Allergy, Immunology and Transplantation Research	1R01AI125268-01	93.855	_	6,658
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1R01AI126322-01 1R21AI094402-01A1	93.855 93.855	_	10,605 158,585
Allergy, Immunology and Transplantation Research	1R21AI109601-02	93.855	=	97,364
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1R21AI116361-01A1	93.855		145,698
Allergy, Immunology and Transplantation Research	1R21AI117459-01A1 1R21AI121684-01	93.855 93.855	14,263 57,821	79,934 123,148
Allergy, Immunology and Transplantation Research	1R21AI121860-01	93.855	_	20,056
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1R56AI095712-01A1 1R56AI103382-01A1	93.855 93.855	16,999	74 237,958
Allergy, Immunology and Transplantation Research	1R56AI109526-01	93.855	10,999	(31,919)
Allergy, Immunology and Transplantation Research	1R56AI110516-01	93.855	_	96,603
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1R56AI117851-01 1UM1AI124436-01	93.855 93.855	_	478,403 401,431
Allergy, Immunology and Transplantation Research	2R01AI065429-12	93.855	_	245,154
Allergy, Immunology and Transplantation Research	2R56AI083366-06A1	93.855 93.855	6,004	150,902 371,288
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	3R01AI104699-03 3R01AI111948-03S1	93.855 93.855	141,696	571,288 538,248
Allergy, Immunology and Transplantation Research	3R37AI040519-19S1	93.855		205,381
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	3T32AI074492-07S1 4 R37 AI040519-20	93.855 93.855	_	320,571 361,058
Allergy, Immunology and Transplantation Research	4K01AI103544-04	93.855	_	35,692
Allergy, Immunology and Transplantation Research	4K23AI103044-04	93.855	_	21,601
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4K23SI108335-04 4P30AI050409-18REVIS	93.855 93.855	509	23,216 147,810
Allergy, Immunology and Transplantation Research	4R01AI028731-26	93.855	_	308,626

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

	Annal annal an	Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity	Award number	I.D. number	subrecipients	expenditures
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4R01AI053668-16 4R01AI058057-12	93.855 \$ 93.855	_	121,618 139,550
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4R01AI058706-14 4R01AI064462-10	93.855 93.855	_	160,357 144,676
Allergy, Immunology and Transplantation Research	4R01AI004402-10 4R01AI070101-10	93.855	_	71,946
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4R01AI072435-11 4R01AI093881-05	93.855 93.855	_	90,441 92,763
Allergy, Immunology and Transplantation Research	4R01AI096879-05	93.855	=	86,581
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4R01AI098628-05 4R01AI100110-05	93.855 93.855	_	610,139 48,108
Allergy, Immunology and Transplantation Research	4R01AI104699-04	93.855	_	154,472
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4R37AI051231-15 4R37AI066998-13	93.855 93.855	50,184	326,040 454,296
Allergy, Immunology and Transplantation Research	4T32AI070081-10	93.855	_	12,693
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4U19AI051731-15 5 R01 AI093881-04	93.855 93.855	_	52,486 46,844
Allergy, Immunology and Transplantation Research	5 R01 AI111907-02	93.855	52,468	242,280
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5 R03 AI109194-02 5 R21 AI116200-02	93.855 93.855	_	8,099 211,702
Allergy, Immunology and Transplantation Research	5 R37 AI048638-16	93.855	_	443,382
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5F31AI112261-03REVIS 5F31AI114250-03	93.855 93.855	_	40,765 45,711
Allergy, Immunology and Transplantation Research	5K23AI103044-03	93.855	12,643	148,671
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5K23AI114407-03 5K23AI116388-03	93.855 93.855	_	170,823 172,430
Allergy, Immunology and Transplantation Research	5P30AI050409-17REVIS	93.855	183,766	2,214,819
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01 AI088025-07 5R01AI028731-25	93.855 93.855	23,338	449,321 135,767
Allergy, Immunology and Transplantation Research	5R01AI030048-24	93.855 93.855	_	161,903
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI049781-14 5R01AI053668-15	93.855	=	464,486 266,640
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI058057-09 Revi 5R01AI058706-13	93.855 93.855	14,279	369,312 332,038
Allergy, Immunology and Transplantation Research	5R01AI058828-10	93.855	· —	140,731
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI064060-12 5R01AI064462-09	93.855 93.855	627,427	1,419,494 159,519
Allergy, Immunology and Transplantation Research	5R01AI070101-09	93.855	=	555,967
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI084808-06REVIS 5R01AI084836-05	93.855 93.855	=	1,072 101
Allergy, Immunology and Transplantation Research	5R01AI087465-05	93.855	142,449	321,037
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI089349-06 REV 5R01AI093406-05	93.855 93.855	127,060 344,054	444,661 543,608
Allergy, Immunology and Transplantation Research	5R01AI094575-04 REVI	93.855	177,430	291,173
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI098628-04REVIS 5R01AI100110-04 REVI	93.855 93.855	22,890	955,342 640,145
Allergy, Immunology and Transplantation Research	5R01AI101047-04	93.855	170,938	474,384
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI101982-02REV 5R01AI106715-03	93.855 93.855	13,907	(29,115) 179,607
Allergy, Immunology and Transplantation Research	5R01AI107960-03	93.855	215,632	548,441
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI110113-02 5R01AI110334-03	93.855 93.855	338,834	442,439 1,015,592
Allergy, Immunology and Transplantation Research	5R01AI110474-03	93.855	_	288,479
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI110482-02 5R01AI110680-02	93.855 93.855	496,046 300,374	787,215 851,589
Allergy, Immunology and Transplantation Research	5R01AI110701-03	93.855	_	534,254
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI110720-03 5R01AI111557-03	93.855 93.855	246,311 261,952	442,660 784,606
Allergy, Immunology and Transplantation Research	5R01AI111851-03	93.855	82,141	477,785
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI111863-03 5R01AI112723-02	93.855 93.855	181,313	582,401 637,441
Allergy, Immunology and Transplantation Research	5R01AI113021-03 5R01AI116379-02	93.855 93.855	_	395,821
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI1169379-02 5R01AI116933-02	93.855	_	576,321 342,435
Allergy, Immunology and Transplantation Research	5R01AI118853-02REVIS 5R03AI111396-02	93.855 93.855	31,618	399,201 68,210
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI095718-02	93.855	- 31,016	6,862
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI098581-02 REV 5R21AI098592-02	93.855 93.855	_	(452) 15
Allergy, Immunology and Transplantation Research	5R21AI098800-02	93.855	=	(1,340)
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI101775-02 5R21AI102197-02	93.855 93.855	=	69,054 163
Allergy, Immunology and Transplantation Research	5R21AI103270-02	93.855	_	40,693
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI103651-02 5R21AI104278-02REV	93.855 93.855	_	108,845 764
Allergy, Immunology and Transplantation Research	5R21AI106386-02	93.855	18,163	86,152
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI111388-02 5R21AI112768-02	93.855 93.855	37,776	190,774 147,911
Allergy, Immunology and Transplantation Research	5R21AI113385-02	93.855	108,154	259,614
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI113485-02 5R21AI115018-02	93.855 93.855	32,167	179,905 186,244
Allergy, Immunology and Transplantation Research	5R21AI115183-02	93.855	_	192,833
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI117162-02 5R21AI118542-02	93.855 93.855	_	302,805 211,521
Allergy, Immunology and Transplantation Research	5R33AI098800-05	93.855	_	421,865
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R33AI102197-05 5R33AI104278-04	93.855 93.855	_	405,183 889,983
Allergy, Immunology and Transplantation Research	5R37AI021150-31	93.855	106,736	461,088
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R37AI049660-11 5R37AI049660-13	93.855 93.855	_	53 327,218
Allergy, Immunology and Transplantation Research	5R37AI066998-11	93.855	88,249	323,623
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R37AI112787-03 5T32 AI007610-15	93.855 93.855	57,744	844,024 15,885
Allergy, Immunology and Transplantation Research	5T32AI070081-09	93.855	_	186,737
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5T32AI106699-03 5U01AI08415-05 REVIS	93.855 93.855	1,160,814	182,551 1,902,824
Allergy, Immunology and Transplantation Research	5U01AI103408-03 REV	93.855	32,000	1,011,978
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5U01AI115651-02 REVI 5U19AI051731-14REVIS	93.855 93.855	152,389 1,916,006	601,353 3,256,181
Allergy, Immunology and Transplantation Research	5U19AI057266-10 REV	93.855	_	33,088
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5U19AI057266-13REVIS 5U19AI090023-05	93.855 93.855	1,386,388 (30,240)	3,984,937 (49,051)
Allergy, Immunology and Transplantation Research	5U19AI090023-07	93.855	524,884	2,322,235
Allergy, Immunology and Transplantation Research	5U19AI109633-03 REVI	93.855	42,974	2,375,634

69

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

		Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity	Award number	I.D. number	subrecipients	expenditures
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5U19AI110483-03 5U19AI111211-03REV	93.855 \$ 93.855	1,601,722	567,332 3,188,689
Allergy, Immunology and Transplantation Research	5U19AI117891-02	93.855	352,275	1,771,422
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5U24U120134-02 5UH2AI122320-02	93.855 93.855	376,875	440,707 417,118
Allergy, Immunology and Transplantation Research	5UM1AI069418-09REVIS	93.855 93.855	449,598	2,183,158
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	1F31AI115968-02 REVI 1R21AI122001-01	93.855	15,430	60,725 20,406
Allergy, Immunology and Transplantation Research	1R21AI26816-01 4R01HD067359-05	93.855 93.855	-	6,446 222,762
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	4U01AI103408-04	93.855	_	1,338,209
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5K01AI091864-05	93.855 93.855	29 562	37,326
Allergy, Immunology and Transplantation Research	5K01AI103544-03 5K01AI106961-03	93.855	38,562	116,834 108,180
Allergy, Immunology and Transplantation Research	5P01AI080192-05	93.855	_	77
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5P01AI088575-04 REV 5P30AI050409-13	93.855 93.855	=	92 (3,548)
Allergy, Immunology and Transplantation Research	5R01AI02115024	93.855		290
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI047498-13 5R01AI05433730	93.855 93.855	737	101,182 23
Allergy, Immunology and Transplantation Research	5R01AI064060-10	93.855	22,032	37,336
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI072435-10 5R01AI072462-05	93.855 93.855	(3,993)	(3,943) 253
Allergy, Immunology and Transplantation Research	5R01AI074417-03	93.855	_	(22)
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R01AI078773-05REVIS 5R01AI083366-05 REVI	93.855 93.855	=	(109) 24,495
Allergy, Immunology and Transplantation Research	5R01AI087798-05	93.855	=	18,740
Allergy, Immunology and Transplantation Research	5R01AI096879-04 5R01AI099000-04	93.855 93.855	_	349,216 333,948
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R21AI099000-04 5R21AI098028-03	93.855	_	46,498
Allergy, Immunology and Transplantation Research	5R21AI103653-02	93.855	-	7,085
Allergy, Immunology and Transplantation Research Allergy, Immunology and Transplantation Research	5R37AI051231-14 5T32AI074492-05	93.855 93.855	114,555	583,338 (8,639)
Allergy, Immunology and Transplantation Research	5U19AI096187-05 REVI	93.855	509,763	4,031,045
Allergy, Immunology and Transplantation Research Pass-through Albert Einstein College of Medicine	P01AI078907 310842	93.855 93.855	684,666	847,641 15,539
Pass-through Albert Einstein College of Medicine	PO# 154518	93.855	_	(86)
Pass-through Benaroya Research Institute At Virginia Pass-through Benaroya Research Institute At Virginia	FY14ITN090/UM1AI1019 FY15ITN023	93.855 93.855	_	97,420 5,664
Pass-through Benaroya Research Institute At Virginia	FY15ITN117	93.855	=	289,085
Pass-through Benaroya Research Institute At Virginia Pass-through Benaroya Research Institute At Virginia	FY15ITN153 FY15ITN166	93.855 93.855	_	1,741 29,064
Pass-through Beth Israel Deaconess Medical Center	1024717	93.855	_	1,306,412
Pass-through Beth Israel Deaconess Medical Center	1028933	93.855	_	24,467
Pass-through Boston University Pass-through Brandeis University	4500002016 401862	93.855 93.855	78,762	199,739 441,044
Pass-through Brigham And Womens Hospital	2UM1AI068636-08	93.855		79,375
Pass-through Brigham And Womens Hospital Pass-through Brigham And Womens Hospital	109461 110007	93.855 93.855	_	83,353 15,853
Pass-through Brigham And Womens Hospital	111406	93.855	_	93,539
Pass-through Brigham And Womens Hospital Pass-through Case Western Reserve University	5UM1AI068636 RES509044	93.855 93.855	_	110,746 51,237
Pass-through Case Western Reserve University	RES509540 Amen 1	93.855	=	226,428
Pass-through Centre For The Aids Program of Res. In South Africa	1R21AI115978 12.8216.002	93.855 93.855	_	76,165
Pass-through Childrens Hospital And Res Ctr Oakland Pass-through Childrens Hospital Oakland	12.8216.002 12.7845 Emory 5	93.855	_	(3,045) 252,022
Pass-through Childrens Hospital of Boston	5R0AI084011-04	93.855	5,000	6,292
Pass-through Dana Farber Cancer Institute Pass-through Duke University	1194806 5U19AI058363-10	93.855 93.855	=	196,856 87,488
Pass-through Duke University	189925/218470	93.855	_	61
Pass-through Duke University Pass-through Duke University	2033045 Duke ID 2032979	93.855 93.855	_	2,456 109,388
Pass-through Feinstein Institute For Medical Research	R01A1068759	93.855	_	(5,666)
Pass-through Fred Hutchinson Cancer Research Center Pass-through Fred Hutchinson Cancer Research Center	841666 852867	93.855 93.855	_	89,321 402,320
Pass-through Fred Hutchinson Cancer Research Center	853370	93.855	_	138,971
Pass-through Georgia Institute of Technology Pass-through Georgia Institute of Technology	RC670-G3 RE606-G2 Am.2	93.855 93.855	_	16,788 107,816
Pass-through Georgia State University	SP00011121-01	93.855	_	(279)
Pass-through Georgia State University Pass-through Georgia State University	SP00011162-01 SP00011272-02	93.855 93.855	=	52,520 110,762
Pass-through Georgia State University	SP00011671-02/AMND1	93.855	_	107,207
Pass-through Georgia State University Pass-through Georgia State University	SP00012035-01 SP00012035-02	93.855 93.855	_	9,926 9,224
Pass-through Georgia State University	SP00012249-01	93.855	=	39,121
Pass-through Georgia State University	SP00012355-02	93.855	_	68,625
Pass-through Harvard University Pass-through Henry M Jackson Foundation	152382.5087277.1106 1U19AI113170-02	93.855 93.855	_	336,229 119,195
Pass-through Henry M Jackson Foundation	PO:828074	93.855	=	76,189
Pass-through Johns Hopkins University Pass-through Johns Hopkins University	2002351815 2002658448	93.855 93.855	_	63,376 66,238
Pass-through Johns Hopkins University	2002849223	93.855	_	25,451
Pass-through Johns Hopkins University Pass-through Massachusetts General Hospital	PO# 2001007978 223544	93.855 93.855	=	24,085 168,039
Pass-through Massachusetts General Hospital	228429	93.855	_	4,306
Pass-through Mayo Clinic Pass-through Mayo Clinic	63484620 po 63807180	93.855 93.855	_	184,459 17,824
Pass-through Md Anderson	1893	93.855	_	37,519
Pass-through Mount Sinai School of Medicine Pass-through Mount Sinai School of Medicine	0254-3193-4609	93.855	_	367,421
Pass-through Mount Sinai School of Medicine Pass-through Mount Sinai School of Medicine	0255-1351-4609/AMD 2 25580714609	93.855 93.855	_	158,660 72,231
Pass-through Mount Sinai School of Medicine	0255-8624-4609	93.855		31,846
Pass-through Mount Sinai School of Medicine Pass-through Research Institute At Nationwide Children's Hospital	1U19AI118610-01 763416	93.855 93.855	_	178,500 190,237
Pass-through Scripps Research Institute	5-50824	93.855	_	(24,513)
Pass-through Scripps Research Institute Pass-through Scripps Research Institute	5-52290 5-52754	93.855 93.855	_	686,251 82,316
Pass-through Scripps Research Institute	PO# 5-50268	93.855	_	2,100
Pass-through Seattle Childrens Hospital	11330SUB	93.855	_	55,004
Pass-through Stanford University Pass-through Stanford University	61019079-117727 61212672-28291	93.855 93.855	_	52,023 34,104
Pass-through Tulane University	HSC-553582-15/16	93.855	_	76,565
Pass-through University of Alabama Birmingham	000338217-SP021-010	93.855	_	4,032

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Pass-through University of Alabama Birmingham	000502889-SP007-001	93.855 \$		366,599
Pass-through University of Alabama Birmingham	000505362-001	93.855	_	73,582
Pass-through University of Alabama Birmingham Pass-through University of California Davis	5R01AI084772-05 201303042-07	93.855 93.855	_	8,344 270,762
Pass-through University of California Bavis Pass-through University of California San Francisco	7264sc	93.855	_	23,070
Pass-through University of California San Francisco	8096sc	93.855		3,272
Pass-through University of California San Francisco Pass-through University of California San Francisco	8503sc 8820sc	93.855 93.855	_ _ _ _	312,847 38,589
Pass-through University of Georgia	RR374-101/4708622	93.855	_	88,837
Pass-through University of Houston Pass-through University of Illinois	R-15-0005 2015-01658-01 Am. 1	93.855 93.855	_ _ _	49,068 37,331
Pass-through University of Louisiana at Lafayette	87100-02	93.855	=	91,573
Pass-through University of Louisiana at Lafayette Pass-through University of Minnesota	8799-01 N002877205	93.855	_	88,980
Pass-through University of Nevada	N002877305 UNR-16-45	93.855 93.855		474,030 31,304
Pass-through University of North Carolina Chapel Hill	5101375	93.855	_	36,591
Pass-through University of Pennsylvania Pass-through University of Pennsylvania	562140 566103	93.855 93.855	_	576 228,735
Pass-through University of Texas Southwestern	150402	93.855	_	115,430
Pass-through University of Texas Southwestern Pass-through University of Washington	GMO-130601 751640	93.855 93.855	_	(636) (45,036)
Pass-through University of Washington Seattle	UWSC6143	93.855	_	360,450
Pass-through University of Wisconsin-Madison	298K012 / 581K523	93.855	_	1
Pass-through University of Wisconsin-Madison Pass-through Vanderbilt University	627K664 PO 4016078156	93.855 93.855	_	200,000 4,973
Pass-through Vanderbilt University	VUMC 38503	93.855	_	337,606
Pass-through Vanderbilt University Pass-through Vanderbilt University	VUMC 57217 VUMC34383,AMD5	93.855 93.855	_	78,000 (29)
Pass-through Vanderbilt University	VUMC50821	93.855	_	5,154
Pass-through Vanderbilt University Medical Center	VUMC40875	93.855	_	1,282
Pass-through Washington University	WU-16-326	93.855		44,029
Total CFDA No. 93.855			14,316,007	80,353,261
Microbiology and Infectious Diseases Research Pass-through Dartmouth College	5U19AI06172805 1644	93.856 93.856	_	(28,519) 1,097
Pass-through Dartmouth College	R106	93.856	_	3,741
Total CFDA No. 93.856				(23,681)
Biomedical Research and Research Training	1F31GM115178-01A1	93.859		15,060
Biomedical Research and Research Training	1F31GM116556-01A1	93.859	_	3,432
Biomedical Research and Research Training Biomedical Research and Research Training	1F32GM117895-01 REVI	93.859	_	26,673
Biomedical Research and Research Training  Biomedical Research and Research Training	1R01GM112547-01REVIS 1R01GM114561-01A1	93.859 93.859	_	(16) 69,922
Biomedical Research and Research Training	1R01GM117946-01	93.859	_	41,745
Biomedical Research and Research Training Biomedical Research and Research Training	1R01GM122083-01 3 T32 GM008490-23S1	93.859 93.859	_	266 400,880
Biomedical Research and Research Training	3R01GM035463-28S1	93.859	_	219,208
Biomedical Research and Research Training	3R01GM049245-23S1	93.859 93.859	_	503,469
Biomedical Research and Research Training Biomedical Research and Research Training	3R01GM097399-04S1 3R01GM104198-06S1	93.859	_	(18) 34,080
Biomedical Research and Research Training	3R01GM104540-03S1	93.859	38,010	139,198
Biomedical Research and Research Training Biomedical Research and Research Training	3T32GM008169-29S1 3T32GM008169-30S1	93.859 93.859	_	1,093,565 87,575
Biomedical Research and Research Training	4R01GM035463-29	93.859	_	273,128
Biomedical Research and Research Training	4R01GM051173-31REV	93.859 93.859	_	282,010
Biomedical Research and Research Training Biomedical Research and Research Training	4R01GM058728-16 4R01GM077569-08	93.859	_	186,396 58,916
Biomedical Research and Research Training	R01GM077569	93.859		277,936
Biomedical Research and Research Training Biomedical Research and Research Training	4R01GM097399-05 4R01GM101040-04	93.859 93.859	_	290,626 178,921
Biomedical Research and Research Training	4R01GM103613-04	93.859	_	85,318
Biomedical Research and Research Training Biomedical Research and Research Training	4R01GM104323-04 4R01GM104540-04REVIS	93.859 93.859	_	149,359 144,012
Biomedical Research and Research Training	4R01GW1104340-04REV13 4R25GM102789-04	93.859	_	26,228
Biomedical Research and Research Training	4T32GM008490-24	93.859	_	33,299
Biomedical Research and Research Training Biomedical Research and Research Training	4T32GM008602-20 5F31GM111047-02	93.859 93.859	_	21,710 40,786
Biomedical Research and Research Training	5F31GM112418-03	93.859	_	43,037
Biomedical Research and Research Training Biomedical Research and Research Training	5F31GM113397-02 5F31GM113631-02	93.859 93.859	_	45,495 49,600
Biomedical Research and Research Training	5F32GM112517-02	93.859	_	51,818
Biomedical Research and Research Training	5F32GM113570-02	93.859		41,898
Biomedical Research and Research Training Biomedical Research and Research Training	5K12GM000680-15 5K12GM000680-17	93.859 93.859	107,332 43,073	128,997 1,383,073
Biomedical Research and Research Training	5P41GM103694-02REV	93.859	35,897	34,164
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM047310-19 REV 5R01GM051173-30 REVI	93.859 93.859	_	128,640 74,384
Biomedical Research and Research Training	5R01GM051175-30 RE VI 5R01GM054787-22	93.859	_	439,567
Biomedical Research and Research Training	5R01GM058728-15	93.859	_	176,258
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM072808-12 5R01GM083889-18	93.859 93.859	_	353,142 134,496
Biomedical Research and Research Training	5R01GM084070-08	93.859	_	473,291
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM090158-06 5R01GM093278-07	93.859 93.859	23,026 79,723	277,756
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM093278-07 5R01GM093294-04	93.859	44,682	269,525 45,851
Biomedical Research and Research Training	5R01GM099142-04REV	93.859	´—	(1,432)
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM099142-06 5R01GM101040-03	93.859 93.859	_	247,836 291,753
Biomedical Research and Research Training	5R01GM104198-05	93.859	=	269,553
Biomedical Research and Research Training	5R01GM104323-03	93.859	_	154,277
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM105813-03 5R01GM106565-03	93.859 93.859	103,919	13 426,127
Biomedical Research and Research Training	5R01GM108838-03	93.859	_	415.924
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM109779-03 5R01GM110000-03	93.859 93.859	_	237,955 303,259
Biomedical Research and Research Training	5R01GM110663-03	93.859	_	425,655
Biomedical Research and Research Training	5R01GM111027-19	93.859	71,303	281,544
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM113228-02 5R01GM114306-02	93.859 93.859	_	256,522 250,492
Biomedical Research and Research Training	5R01GM114612-02	93.859	55,620	241,545
Biomedical Research and Research Training	5R01GM116065-02	93.859	27,899	257,182
Biomedical Research and Research Training Biomedical Research and Research Training	5R25GM099644-03 5R25GM102789-03 REVI	93.859 93.859	48,610	835,877 96,362
5		,,		,

71

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

	Annual complex	Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity	Award number	I.D. number	subrecipients	expenditures
Biomedical Research and Research Training Biomedical Research and Research Training	5T32GM008367-27 5T32GM008602-19	93.859 \$ 93.859	_	317,964 248,445
Biomedical Research and Research Training	5T32GM008605-20 2R01GM06679405A1	93.859 93.859	_	283,130
Biomedical Research and Research Training Biomedical Research and Research Training	2R01GM00679403A1 2R01GM093278-06A1	93.859	_	807 171
Biomedical Research and Research Training	5K08GM110537-02	93.859	_	124,083
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM046331-21 5R01GM053640-20	93.859 93.859	_	89 509,478
Biomedical Research and Research Training	5R01GM060448-12	93.859	_	117,861
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM069971-11 5R01GM082932-04	93.859 93.859	_	554,716 (132)
Biomedical Research and Research Training	5R01GM082932-04 5R01GM090158-04	93.859	_	4,662
Biomedical Research and Research Training	5R01GM091875-16	93.859	_	261,850
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM097331-04 REV 5R01GM100151-04 REV	93.859 93.859	_	483,639 (24)
Biomedical Research and Research Training	5R01GM103613-03REV	93.859	_	69,589
Biomedical Research and Research Training Biomedical Research and Research Training	5R01GM108480-03 5R01GM109501-03	93.859 93.859	301,400	340,899 340,735
Biomedical Research and Research Training	5T32GM008602-15	93.859	501,400	(155)
Biomedical Research and Research Training	5T32GM00860515	93.859	_	10,645
Biomedical Research and Research Training Biomedical Research and Research Training	5T32GM074909-08 5T32GM095442-05	93.859 93.859	_	172 211,421
Pass-through Albert Einstein College Of Medicine	31550L	93.859	_	(3,868)
Pass-through Albert Einstein College Of Medicine	31610E	93.859	_	519,222
Pass-through Duke University Pass-through Fred Hutchinson Cancer Research Center	13-NIH-1020 215918	93.859 93.859	_	124,304 179,760
Pass-through Fred Hutchinson Cancer Research Center	subaward 0000870470	93.859	_	11,427
Pass-through Georgia Institute Of Technology Pass-through Georgia State University	RA927-G2 SP00010548-03/AMD 5	93.859 93.859	_	22,965 20,318
Pass-through Ohio State University	6Q044032-001	93.859	_	50,553
Pass-through Rice University	R22071 Amendment 4	93.859	_	2,103
Pass-through Rosalind Franklin University Pass-through University Of Florida	212970EU UF09107	93.859 93.859	_	78,664 196
Pass-through University Of Fiorida	RR166-500/S000883	93.859	_	20,365
Pass-through University Of Georgia	RR166-500/S001097	93.859	_	19,932
Pass-through University Of Georgia Pass-through University Of Georgia	RR166-501/4708616 RR166-501/4708617	93.859 93.859	_	413,959 255,936
Pass-through University Of Georgia	RR549-343/4785766	93.859	_	63,848
Pass-through University of Minnesota Pass-through University of Texas Medical Branch	P003397401/AMND2 16-052	93.859 93.859	_	58,122 21,273
Total CFDA No. 93.859	10-032	75.057	980,494	19,564,244
	5 LID (LID 2707 5 02 00	02.064	900,494	
Population Research	5 UB6HP27875-03-00	93.864		(2,409)
Total CFDA No. 93.864				(2,409)
Child Health and Human Development Extramural Research	1R01HD082373-02	93.865 93.865	_	294,619
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	1R03HD084884-01 1R21HD079969-02	93.865	_	3,402 95,510
Child Health and Human Development Extramural Research	2UG1HD027851-26	93.865	_	101,747
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	4K01HD074726-04 4K12HD072245-05	93.865 93.865	_	29,865 275,196
Child Health and Human Development Extramural Research	4R01HD071982-04	93.865	_	215,892
Child Health and Human Development Extramural Research	4R01HD072659-05 4R01HD074486-04	93.865 93.865	6,097	140,134
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	4R01HD074480-04 4R01HD077623-04	93.865	_	73,288 541,127
Child Health and Human Development Extramural Research	5F31HD070735-04	93.865	_	14,475
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5F31HD079226-02 5F31HD080404-02	93.865 93.865	_	34,443 58,209
Child Health and Human Development Extramural Research	5K01HD079584-03	93.865	_	127,271
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5K01HD080722-02 5K12HD085850-02	93.865 93.865	_	142,588 234,984
Child Health and Human Development Extramural Research	5K23HD069199-04 REVI	93.865	_	(551)
Child Health and Human Development Extramural Research	5K23HD078153-03	93.865	_	126,543
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5K23HD080837-02 5R01HD072659-04	93.865 93.865	246,364	120,045 198,539
Child Health and Human Development Extramural Research	5R01HD074486-03	93.865		240,510
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R01HD075655-02REVIS 5R01HD081274-03	93.865 93.865	31,600	(431)
Child Health and Human Development Extramural Research	5R01HD081274-03 5R01HD085877-02	93.865	42,982	466,026 344,765
Child Health and Human Development Extramural Research	5R03HD074724-02	93.865	´—	15,961
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R03HD081438-02 5R03HD083727-02	93.865 93.865	_	49,916 70,563
Child Health and Human Development Extramural Research	5R21HD074502-02	93.865	_	92,727
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R21HD075264-02 5R21HD075612-02 REV	93.865 93.865	_	53,079 57,716
Child Health and Human Development Extramural Research	5R21HD073012-02 REV 5R21HD078077-02	93.865	6,552	1,737
Child Health and Human Development Extramural Research	5R21HD078121-02	93.865	_	135,825
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R21HD078778-02 5R21HD080107-02	93.865 93.865	98,795 108,216	209,537 165,677
Child Health and Human Development Extramural Research	5R21HD080429-02	93.865	_	328,853
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R21HD084114-02 5R25HD079102-03	93.865	26,281	110,562
Child Health and Human Development Extramural Research	5R25HD079T02-03 5T32HD071845-03	93.865 93.865	_	49,984 180,229
Child Health and Human Development Extramural Research	5U01HD066439-04	93.865	_	66,855
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5U10HD027851-25REVIS T32HD071845	93.865 93.865		162,465 44,719
Child Health and Human Development Extramural Research	5U54NS091859-02	93.865	_	1,553,577
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	1R03HD083729-01A1 1R21HD086762-01	93.865 93.865	_	17,686 23,004
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	2R21HD086762-01 2R21HD067906-02	93.865	_	23,004 419
Child Health and Human Development Extramural Research	3P01HD032571-19S1	93.865	384,432	646,021
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	4P01HD032571-20 5 R01 HD066059-05	93.865 93.865	165,186	364,747 218,340
Child Health and Human Development Extramural Research	5F31HD076617-03	93.865	_	30,596
Child Health and Human Development Extramural Research	5K01HD074726-03	93.865	_	80,874
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5K12HD072245-04REVIS 5R01HD038979-13	93.865 93.865	_	163,575 (127)
Child Health and Human Development Extramural Research	5R01HD04120305	93.865	=	264
Child Health and Human Development Extramural Research	5R01HD043099-08	93.865	_	20,454
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R01HD04650105 5R01HD046922-10	93.865 93.865	79,578	2,084 143,731
Child Health and Human Development Extramural Research	5R01HD056956-06	93.865	_	(1,124)
Child Health and Human Development Extramural Research	5R01HD059122-05REVIS	93.865	_	201

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Child Health and Human Development Extramural Research	5R01HD071982-03	93.865 \$	11,818	399,488
Child Health and Human Development Extramural Research	5R01HD075784-03	93.865	373,656	519,154
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R01HD077623-03 5R03HD05488602	93.865 93.865	_	438,109 (32,182)
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R03HD067490-02 5R03HD076368-02	93.865 93.865	_	(775) 38,865
Child Health and Human Development Extramural Research	5R03HD082436-02	93.865	40,967	77,883
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5R21HD05525502 5R21HD076387-02	93.865 93.865	29,683	527 76,237
Child Health and Human Development Extramural Research	5T32HD052460-05	93.865	2>,003	(43,032)
Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	5T32HD052460-10 R01HD067359-04	93.865 93.865	_	243,803 75,839
Pass-through Case Western Reserve University	RES506273	93.865	_	46,766
Pass-through Georgia State University Pass-through Georgia State University	SP00010461-3/5P01HD0 SP00011537-1 AMD 3	93.865 93.865	_	18,892 163,831
Pass-through Georgia State University	SP00011537-2	93.865 93.865	_	105,756
Pass-through Mount Sinai School of Medicine Pass-through New York University	0255-4421-4609 14-A0-00-002901-01	93.865	_	106,167 40,341
Pass-through New York University Pass-through Rehabilitation Institute of Chicago	PO# M130002002 R24	93.865 93.865	_	48,791 833
Pass-through Univ of Massachusetts Medical School	WA00441545-0SP201700	93.865	_	416,937
Pass-through University of California Davis Pass-through University of California Santa Barbara	201224693-01/AMND4 KK1601	93.865 93.865	_	46,801 45,147
Pass-through University of Georgia	RR376-416/S000739	93.865	_	17,149
Pass-through University of Michigan Pass-through University of Michigan	3003518660 5R01HD078131-03	93.865 93.865	_	130,779 145,384
Pass-through University of Pennsylvania	560191/10035484/6381	93.865	_	6,653
Pass-through University of Pennsylvania Pass-through University of Utah	567200/1005143816243 2408022-06A	93.865 93.865	(9,426)	45,687 15,574
Pass-through University of Washington	UWSC7432 Amendment 3	93.865		29,602
Pass-through Washington University Pass-through Washington University	WU-13-134-MOD 5 WU-16-106	93.865 93.865	24,939	103,274 105,609
Total CFDA No. 93.865			1,667,720	12,372,812
Aging Research		93.866		(81)
Aging Research Aging Research		93.866 93.866	_	(222) 39,403
Aging Research		93.866	=	222,072
Aging Research Aging Research		93.866 93.866	_	180,296 6,337
Aging Research		93.866	_	362,693
Aging Research Aging Research		93.866 93.866	35,099	672,318 19,631
Aging Research		93.866	62,901	1,747,306
Aging Research Aging Research		93.866 93.866	_	237,257 518,320
Aging Research		93.866	436,476	1,153,035
Aging Research Aging Research		93.866 93.866	_	43,824 25,896
Aging Research		93.866	_	65,938
Aging Research Aging Research		93.866 93.866	_	39,172 43,120
Aging Research		93.866	_	131,352
Aging Research Aging Research		93.866 93.866	_	132,985 60,490
Aging Research Aging Research		93.866 93.866	113,385	72,488 421,013
Aging Research		93.866	113,363	454,727
Aging Research Aging Research		93.866 93.866	48,561	1,125,180 432,743
Aging Research		93.866		694
Aging Research Aging Research		93.866 93.866	_	74,577 215,242
Aging Research		93.866	_	1,274
Pass-through Barrow Neurological Institute Pass-through Boston University	PO#500920649-0-SERV 4500002111	93.866 93.866	_	262,596 60,595
Pass-through Columbia University	5356425U24AG02639505	93.866	_	(5,006)
Pass-through Georgia State University Pass-through Georgia State University	SP00011514-01 SP00012468-01	93.866 93.866	_	85,058 72,375
Pass-through Johns Hopkins University	2002710289 Am 1	93.866	_	11,808
Pass-through Medical University of South Carolina Pass-through Northwestern University	MUSC14-075 60041739EU	93.866 93.866	_	17,087 35,687
Pass-through Rush University Medical Center Pass-through University of Alabama Birmingham	09031002-SUB01 000410331-003	93.866 93.866	_	23,153 12,653
Pass-through University of California San Diego	ADC-040-A4	93.866	=	(2,231)
Pass-through University of California San Diego Pass-through University of Michigan	ADNI-2 3003482994	93.866 93.866	_	48,120 5,475
Pass-through University of Pennsylvania	567052/10043900/1076	93.866	_	56,160
Pass-through University of Pennsylvania Pass-through University of Southern California	PO#3428890/ 557704 CTAADNI032	93.866 93.866	_	75,922 1,999
Pass-through University of Washington	UWSC7721	93.866	_	24,530
Pass-through Wake Forest University	WFUHS 110918 Neigh	93.866		17,986
Total CFDA No. 93.866			696,422	9,303,047
Vision Research Vision Research	1UG1EY025553-01 2R01EY016435-06A1	93.867 93.867	62,061	96,146 9,573
Vision Research	2UE1EY013287-13	93.867	_	187,655
Vision Research Vision Research	2UG1EY013272-13 5F30EY025154-02	93.867 93.867	_	241,955 40,555
Vision Research	5K23EY021760-05	93.867	19,485	192,696
Vision Research Vision Research	5R01EY014852-11 5R01EY016400-10	93.867 93.867	_	7,460 140,292
Vision Research Vision Research	5R01EY016470-09 5R01EY017841-08	93.867 93.867	145,078	483,315
Vision Research	5R01EY021592-03	93.867	31,668 1,381	446,370 381,798
Vision Research Vision Research	5R01EY025978-02 5T32EY007092-30	93.867 93.867	81,407	442,835 241,968
Vision Research	2 R01 EY014852-12A1	93.867	01,40/	118,567
Vision Research Vision Research	5P30EY006360-30 5R01EY004864-33	93.867 93.867	_	473,494 383,816
Vision Research	5R01EY014026-10	93.867	1,331	284,271
Vision Research Vision Research	5R01EY016435-05REVIS 5U10EY013287-12REVIS	93.867 93.867	_	(281) (1,397)
		,,,,,,,		(-,-/-/)

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,\ 2016$

	Award number	Federal CFDA number or other I.D. number	Passed through to	Federal
Program title/federal grantor/pass-through entity  Pass-through Georgia Institute of Technology	RG181-G1	93.867 \$	subrecipients	expenditures 47,508
Pass-through Jaeb Center For Health Research	Protocol V	93.867	_	15,299
Pass-through Jaeb Center For Health Research Pass-through Johns Hopkins University	PROTOCOL W 2000594943	93.867 93.867	_	510 41,864
Pass-through Johns Hopkins University	2001619544	93.867	_	6
Pass-through Johns Hopkins University Pass-through Massachusetts Eye and Ear	2002484216 PO#142925	93.867 93.867	_	4,076 21,588
Pass-through Morehouse School of Medicine	1R01EY022216-12	93.867	_	(9,917)
Pass-through New England College of Optometry Pass-through Pennsylvania State University	3708-01-01-16EU EMUEY023533	93.867 93.867	_	13,205 11,018
Pass-through Rice University	R22564	93.867	_	2,679
Pass-through St Lukes Roosevelt Institute for Health Pass-through University of California San Francisco	IIHTT 8319sc Amend1	93.867 93.867	_	(45,463) 18,392
Pass-through University of Colorado	FY14.558.002	93.867	_	134,245
Pass-through University of Florida Pass-through University of Pennsylvania	UFDSP00010865 560624 PO# 3387224	93.867 93.867	25,602	35,029 191,519
Pass-through University of Texas Medical Branch	12-090AMD2	93.867	´—	(10,824)
Pass-through Vanderbilt University Pass-through Washington University	VUMC 41809 WU-16-110	93.867 93.867	_	150,422 16,979
Total CFDA No. 93.867			368,013	4,809,223
Medical Library Assistance	5K22LM011576-03	93.879		146,443
Pass-through State University Of New York Stony Brook	67542-116467-2	93.879		65,731
Total CFDA No. 93.879				212,174
Grants for Training in Primary Care Medicine and Dentistry	5 D55HP232050400	93.884	_	(189,400)
Grants for Training in Primary Care Medicine and Dentistry Grants for Training in Primary Care Medicine and Dentistry	5 T0BHP28571-02-00 5D55HP232050500	93.884 93.884	_	277,695 387,234
Total CFDA No. 93.884	3B331H 232030300	75.004		475,529
Alcohol Research Center Grants	5P50AA01375703	93.891		4,372
Alcohol Research Center Grants	5P50AA013757-10REVIS	93.891		(1,290)
Total CFDA No. 93.891				3,082
HIV Emergency Relief Project Grants				
Pass-through Fulton County Pass-through Fulton County	PO11813SC89167B-BR PO11814SC94085B-TR/V	93.914 93.914	_	1,076 (387)
Pass-through Fulton County	PO118-15SC98514B-BR	93.914	_	621,535
Pass-through Fulton County Pass-through Fulton County	SOUT981170-P VS0000014448/PO 1181	93.914 93.914	_	1,473 367,952
Total CFDA No. 93.914	V30000014448/10 1181	93.914		991,649
Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease	6 H76HA078481001	93.918		686,818
Total CFDA No. 93.918	0 H/0HA0/6481001	95.916		686,818
	U90HA07632	93.928		
Special Projects of National Significance	U90HA07632	93.928		(10,636)
Total CFDA No. 93.928	11/01/2005/12 01	02.041		(10,636)
HIV Demonstration, Research, Public and Professional Education Projects HIV Demonstration, Research, Public and Professional Education Projects	1U01PS005112-01 5U01PS003322-04 REVI	93.941 93.941	87,868	4,469 93,962
HIV Demonstration, Research, Public and Professional Education Projects	5U01PS003322-04REV	93.941	· —	5
HIV Demonstration, Research, Public and Professional Education Projects	5U01PS004977-02	93.941	112,636	316,687
Total CFDA No. 93.941			200,504	415,123
Epidemiologic Research Studies of Acquired Immunodeficiency (AIDS) and Human Immunodeficiency	U65/CCU42337203	93.943		(3,640)
Total CFDA No. 93.943				(3,640)
Assistance Programs for Chronic Disease and Prevention Control Pass-through Tennessee Department of Health	34352-06215	93.945	_	18,288
Total CFDA No. 93.945	3 1332 00213	,,,,,		18,288
Cooperative Agreements to Support State-Based Safe Motherhood and Infant Health Initiative Programs	5 U01 DP003894-05	93.946		146,052
Cooperative Agreements to Support State-Based Safe Motherhood and Infant Health Initiative Programs	5U01DP003894-03	93.946		1
Total CFDA No. 93.946				146,053
Block Grants for Prevention and Treatment of Substance Abuse				
Pass-through Georgia Department of Behavioral Health	MSACD 44100-906-0000	93.959		94,753
Total CFDA No. 93,959				94,753
Geriatric Education Centers	6 UB4HP19215-05-02	93.969	50,173	50,335
Total CFDA No. 93.969			50,173	50,335
Family Planning_Service Delivery Improvement Research Grants	5 FPRPA006056-03-00	93.974	_	162,825
Family Planning_Service Delivery Improvement Research Grants	6FPRPA006056-02-02	93.974		36
Total CFDA No. 93.974				162,861
Preventive Health Services Sexually Transmitted Diseases Research, Demonstrations, and Public Information and Education Grants	NH25PS004311-03-01	93.977	_	155,002
Total CFDA No. 93.977				155,002
International Research and Research Training	3R24TW009545-02S1	93.989	31,094	49,916
International Research and Research Training	4D43TW009127-04	93.989	10,964	140,258
International Research and Research Training International Research and Research Training	4D43TW009135-05 5D43TW00712405	93.989 93.989	16,915	83,004 12,265
International Research and Research Training	5D43TW007124-12	93.989	_	186,825
International Research and Research Training International Research and Research Training	5D43TW009127-03 5D43TW009135-04	93.989 93.989	27,481	108,622 58,960
International Research and Research Training	5K01TW009664-03	93.989	16,838	146,494
International Research and Research Training Pass-through Addis Ababa University	5U2RTW010114-02 1D43TW010143-01	93.989 93.989	140,459	224,033 17,709
Pass-through Aga Khan University	2D43TW007585	93.989	=	23,075
Pass-through Vanderbilt University Pass-through Vanderbilt University	mVUMC 40185 VUMC 54581	93.989 93.989	_	4,469 36,770
Pass-through Vanderbilt University	VUMC 54581	93.989	_	37,990
Pass-through Vanderbilt University	VUMC 54584	93.989		72,258
Total CFDA No. 93.989			243,751	1,202,648
Contract	200-2011-41278	93.RD	_	580,902
Contract Contract	200-2012-51279 200-2013-M-56221	93.RD 93.RD	=	117,809 26,250
Contract	200-2014-M-59415	93.RD	_	(393)

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,\ 2016$

Decrease title/federal greater large through artife	Arroad number	Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity  Contract	Award number 200-2016-M 88579	I.D. number 93.RD \$	subrecipients	expenditures 43,474
Contract	HHSN26100006 Mod 3	93.RD \$	72,625	2,260,386
Contract	HHSN261201300015I	93.RD	´—	(1,789)
Contract Contract	HHSN2612013000/HHSN26100007 HHSN268201400169P	93.RD 93.RD	_	42,601 4,351
Contract	HHSN272200800005C	93.RD	_	395,608
Contract	HHSN272201200031C	93.RD 93.RD	849,361	3,669,787
Contract Contract	HHSN272201300006C HHSN272201300018	93.RD 93.RD	_	2,396,834 6,242
Contract	HHSN272201300018I	93.RD	_	569,417
Contract Contract	HHSN27200010 HHSN272201400004C	93.RD 93.RD	947,693	88,869 4,095,813
Contract	HHSN272201500008C	93.RD	250,688	1,015,834
Contract	HHSN275201400017C	93.RD	28,728	156,064
Contract Contract	999HHSN272201300018I HHSN272200800005C	93.RD 93.RD	_	570,907 1.331.162
Contract	HHSN272201300018	93.RD	_	1,083,338
Contract Contract	HHSN272201300018I HHSN27200008	93.RD 93.RD	_	102,730 243,147
Contract	HHSN27200008 HHSN27200012	93.RD	_	18,600
Contract	HHSN27200011	93.RD	_	260,759
Contract Pass-through Assoc of Schools & Pgms of Public Health	HHSN27200013 S5033	93.RD 93.RD	1,939,976	39,825 2,246,029
Pass-through Franklin And Marshall College	CHIMPS GI PARASITES	93.RD		1,189
Pass-through Fred Hutchinson Cancer Research Center	828757 2011056	93.RD	_	687
Pass-through Georgia Department Of Community Health Pass-through Georgia Dept Of Public Health	0240500-032-13120764	93.RD 93.RD	_	171,701 11,234
Pass-through Georgia Institute Of Technology	RB307-S1/AMND4	93.RD	_	56,743
Pass-through Harvard Pilgrim Health Care Institute Pass-through Human Sciences Research Council	HHSF22320091006I/HHF GH000258	93.RD 93.RD	_	9,876 87,274
Pass-through Johns Hopkins University	ABTC0904	93.RD	=	21
Pass-through Kaiser Foundation Research Health Plan	200-2012-53583	93.RD	_	671
Pass-through Leidos Biomedical Research Pass-through Leidos Biomedical Research	13xs019 14X138	93.RD 93.RD	17,274	42,272 202,223
Pass-through Leidos Biomedical Research	29X132 T002 MOD03	93.RD		203,048
Pass-through Leidos Biomedical Research Pass-through Leidos Biomedical Research	29XS132 29XS132T024MOD 07	93.RD 93.RD	_	543,255 65,748
Pass-through Minneapolis Medical Research Foundation	HHSH250201000018C	93.RD 93.RD	_	798
Pass-through Minneapolis Medical Research Foundation	HHSN250201500009C	93.RD	_	16,636
Pass-through Nebraska Department of Health And Human Pass-through Ocean Nanotech	Svc Ctr 1R43CA183312-01	93.RD 93.RD	_	18,722 40,009
Pass-through Pennsylvania State University	EMU 109086	93.RD	506	30,628
Pass-through Research Triangle Institute Pass-through SAIC Frederick	HD036790 13xs019	93.RD 93.RD	_	244,596
Pass-through Scripps Research Institute	5-52291	93.RD 93.RD	_	15,132 1,741,227
Pass-through University of Alabama Birmingham	000406291-010	93.RD	_	46,934
Pass-through University of Alabama Birmingham Pass-through University of Miami	000500918-T010-SC004 666578	93.RD 93.RD	_	13,242 47,744
Pass-through University of Pittsburgh	0024031-1	93.RD	=	105,197
Pass-through University of Southern California	75860854	93.RD		20,842
Pass-through University of Utah Pass-through University of Wisconsin-Madison	10032734-03 603K691	93.RD 93.RD	_	(2,525) 17,133
Pass-through Utah State University	10069005	93.RD	_	76,390
Pass-through Wake forest University	WFUHS330220	93.RD 93.RD	70.542	16,354
Pass-through Weill Cornell Medical College	15060932	93.KD	78,542	261,974
Total CFDA No. 93.RD			4,185,393	25,471,530
U.S. Department of Health and Human Services Total			51,873,615	355,739,286
U.S. Agency for International Development:	AVD GV D 44 00000	00.004	4.000	=0.044
USAID Foreign Assistance for Programs Overseas Pass-through Colorado State University	AID-GH-F-15-00008 G9650-19-Amend 4	98.001 98.001	4,378	70,241 51
Pass-through Int'l Aids Vaccine Initiative	2013 ZAMBIA -FEDERAL	98.001	_	(43)
Pass-through Int'l Aids Vaccine Initiative Pass-through Int'l Aids Vaccine Initiative	Annual SOW 1929 Annual SOW 2166	98.001 98.001	21,995	1,636 1,181,435
Pass-through Int'l Aids Vaccine Initiative	Annual SOW 2175	98.001	21,993	693,684
Pass-through Int'l Aids Vaccine Initiative	Annual SOW 2176	98.001	_	346,046
Pass-through Int'l Aids Vaccine Initiative Pass-through University of California San Diego	IAVI Atlanta 2013: F 45032328	98.001 98.001	_	37 38,082
Pass-through University Research Corporation	FY14-G08-6990	98.001		11,661
Total CFDA No. 98.001			26,373	2,342,830
Cooperative Development Program (CDP)				
Pass-through Georgia Institute of Technology	RF409-G1	98.002		30,968
Total CFDA No. 98.002			_	30,968
U.S. Agency for International Development Total			26,373	2,373,798
Total Research and Development Cluster			58,313,384	388,044,737
Student Financial Assistance Cluster (notes 3 and 4):				
U.S. Department of Education:				
Federal Work Study Program		84.033	_	1,977,333
Federal Supplemental Education Opportunity Grant Program Federal Pell Grant Program		84.007 84.063	_	1,257,999 7,240,693
Federal Direct Stafford Loan Program		84.268	_	79,655,241
Federal Direct PLUS Loan Program		84.268	_	44,160,240 15,015,316
Federal Perkins Loan Program		84.038		
Total U.S. Department of Education				149,306,822
Total Student Financial Assistance Cluster				149,306,822
U.S. Department of Agriculture:				
Special Supplemental Nutrition Program for Women, Infants, and Children Pass-through Georgia Dept of Public Health	40500-041-13110410	10.557	_	39
Total CFDA No. 10,557		/		39
				39
U.S. Department of Agriculture Total				

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,\ 2016$

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
U.S. Department of Defense:				
Contract Contract	W81XWH-12-C-0203 N62645-11-C-4008	12.CTR \$ 12.CTR	355,980	18,998 355,980
Total CFDA No. 12,CTR			355,980	374,978
U.S. Department of Defense Total U.S. Department of State:			355,980	374,978
O.S. Department of State: Academic Exchange Programs – Humphrey Fellowship Program: Pass-through Institute of International Education	3067_EU_10.1.15	19.010		594
Total CFDA No. 19.010				594
U.S. Department of State Total				594
National Endowment for The Arts and Humanities: Promotion of the Humanities_Division of Preservation and Access	PT-50202-11	45.149		(3,987)
Total CFDA No. 45.149				(3,987)
Promotion of the Humanities_Professional Development	FV-230920-15	45.163		116,744
Total CFDA No. 45.163	HV 22009/ 15	45.160		116,744
Promotion of the Humanities_ Office of Digital Humanities  Total CFDA No. 45.169	HK-230986-15	45.169		167,954 167,954
National Endowment for The Arts and Humanities Total		•		280,711
National Science Foundation:		•		
Engineering Grants	1640848	47.071		8,522
Total CFDA No. 47.041	DDI 1246540	47.074		8,522
Biological Sciences Total CFDA No. 47.074	DBI-1346549	47.074		92,847
Social, Behavioral, and Economic Sciences		•		92,847
Pass-through Rutgers University	5341	47.075		232
Total CFDA No. 47.075				232
National Science Foundation Total				101,601
U.S. Department of Veterans Affairs Contract	V247P1895/SURGERY	64.CTR	_	80,943
Contract	VA247-13-C-0364	64.CTR		1,631
Total CFDA No. 64.CTR		•		82,574
U.S. Department of Veterans Affairs Total				82,574
National Archives and Records Administration: National Historical Publications and Records Grants	NAR13-RH-50063-13	89.003		63,621
Total CFDA No. 89.003				63,621
National Archives and Records Administration Total				63,621
U.S. Department of Health and Human Services: Global AIDS Global AIDS	5 NU2GGH001443-02-00 5 U2G GH001815-02	93.067 93.067	34,827	33,917 85,449
Total CFDA No. 93.067			34,827	119,366
Birth Defects and Developmental Disabilities - Prevention and Surveillance	1NU50DD004932-02-00	93.073		436,034
Total CFDA No. 93.073				436,034
Maternal and Child Health Federal Consolidated Programs Pass-through American College of Medical Genetics and Genomics Pass-through Hemophilia Of Georgia	5 H46MC24090-05-00 1 U22MC24100:14 66469933	93.110 93.110 93.110		154,329 19,999 61,194
Total CFDA No. 93.110				235,522
Community Programs to Improve Minority Health Grant Program Pass-through Lupus Research Institute	1CPIMP141065-01-00	93.137		1,018
Total CFDA No. 93.137	TCFIMF141003-01-00	93.137		1,018
Health Program for Toxic Substances and Disease Registry Pass-through Amer Academy of Pediatrics	771102-EUSM	93.161	40,978	117,552
Total CFDA No. 93.161			40,978	117,552
Disabilities Prevention	CD00011717 01 AMEN 1	02 104		92 (71
Pass-through Georgia State University  Total CFDA No. 93.184	SP00011716-01 AMEN 1	93.184	<del></del>	82,671 82,671
Rapid Expansion of Antiretroviral Therapy Programs for HIV-Infected Persons in Selected Countries in Africa and the Caribbean Under the President's Emergency Plan for AIDS Relief				
Pass-through Addis Ababa University	T84HA21124-05-07	93.266		64,719
Total CFDA No. 93.266  Centers for Disease Control and Prevention Investigations and Technical Assistance	5U01DP005119-03REVIS	93.283	7,180	204,629
Centers for Disease Control and Prevention_Investigations and Technical Assistance	5U38HK00001503	93.283	· -	(30,661)
Pass-through Assoc of Schools and Programs of Public Health Pass-through Assoc. of American Medical Colleges	U36 OE00002 GT-32001-02-2	93.283 93.283	_	225,045 5,572
Pass-through Atlanta Research And Education Fdtn Pass-through Atlanta Research And Education Fdtn	AREF MOU M16005 M15007	93.283 93.283	42,065	(26,025) 89,025
Total CFDA No. 93.283		· · · · · · · · · · · · · · · · · · ·	49,245	467,585
National State Based Tobacco Control Programs Pass-through Kansas Department of Health & Environment	DP15-1509	93.305		42,334
Pass-through Nebraska Department of Health and Human	69599-04	93.305		44,908
Total CFDA No. 93.305				87,242
Protecting and Improving Health Globally: Building and Strengthening Public Health Impact, Systems, Capacity and Security:	5U19GH001583-02	93.318	920,725	1,624,711
Total CFDA No. 93.318			920,725	1,624,711
Cooperative Agreement to Support Navigators in Federally-facilitated and State Partnership Marketplaces Pass-through Community Health Works	MOA CMS	93.332		39,825
Pass-through Community Health Works Total CFDA No. 93.332	WOA CMS	93.332		39,825
10m C. D. 110. 75.552		•		37,023

76

# Supplementary Schedule of Expenditures of Federal Awards $Year\ ended\ August\ 31,2016$

		Federal CFDA number or other	Passed through to	Federal
Program title/federal grantor/pass-through entity	Award number	I.D. number	subrecipients	expenditures
National Center for Advancing Translational Sciences	5UL1TR000454-10	93.350 \$	_	106,704
National Center for Advancing Translational Sciences	4UL1TR000454-10	93.350		574,422 681,126
Total CFDA No. 93.350				081,120
NON-ACA/PPHF—Building Capacity of the Public Health System to Improve Population Health through National Nonprofit Organizations:				
Pass-through Assoc State Territorial Health Official	63-10723 Req. No.652	93.424		194,623
Total CFDA No. 93.424				194,623
PPHF: State Nutrition, Physical Activity, and Obesity Programs - financed in part by PPHF:  Pass-through South Dakota Department of Health	15SC090715	93.548	_	159
Total CFDA No. 93.548	13500,0,13	75.510		159
Children's Justice Grants to States:				
Pass-through Georgia Department of Human Services	42700-040-0000029413	93.643	3,820	98,570
Total CFDA No. 93.643			3,820	98,570
Social Services Block Grant:	42700 272 0000047807	02.667	_	10.741
Pass-through Georgia DHS/Division of Aging Services	42700-373-0000047896	93.667		19,741
Total CFDA No. 93.667				19,741
Diabetes Prevention - State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke	N. CY-5-626	93.757	_	44,367
Total CFDA No. 93.757				44,367
Medical Assistance Program				
Pass-through Georgia Department of Behavioral Health Pass-through University of South Florida	44100-907-0000070367 5820106200MMOD3	93.778 93.778	_	354,879 (23,903)
Total CFDA No. 93.778	3820100200WINIOD3	93.778		330,976
Hospital Preparedness Program (HPP) Ebola Preparedness and Response Activities				330,770
Pass-through Georgia Dept of Public Health	1 U3REP150546-01-00	93.817	67,439	236,772
Total CFDA No. 93.817			67,439	236,772
Cooperative Agreements to Support State-Based Safe Motherhood and Infant Health Initiative Programs	5 U01 DP003894-05	93.946	120,932	527,893
Total CFDA No. 93.946			120,932	527,893
Block Grants for Prevention and Treatment of Substance Abuse	44100 004 0000072704	02.050		426 100
Pass-through Georgia Dept of Behavioral Health	44100-906-0000073706	93.959		436,188
Total CFDA No. 93.959	200 2000 24752/0001	02 CTD		436,188
Contract Contract	200-2008-24753/0001 200-2012-51332	93.CTR 93.CTR	_	104,963 150,946
Contract Contract	200-2014-M-58528 200-2014-M-59732	93.CTR 93.CTR	16,338	24,713 458
Contract	200-2014-M-61117	93.CTR	=	65,301
Contract Contract	200-2015-61471Mod1 200-2015-87862	93.CTR 93.CTR	_	90,918 981,149
Contract	200-2015-M-62909	93.CTR	_	68,595
Contract Contract	HHSH258201300008C HHSN275201400450P	93.CTR 93.CTR	_	46,194 8,916
Contract Contract	HHSN2752015000001I	93.CTR 93.CTR	_	5,873
Contract	HHSN261201500402P HHSN312201500004P	93.CTR	=	15,316 2,670
Pass-through Benaroya Research Institute at Virginia Pass-through Childrens Healthcare of Atlanta	FY15ITN125 U01CA180886	93.CTR 93.CTR	_	11,607 15,001
Pass-through Childrens Healthcare of Atlanta	637000-1216-01	93.CTR	_	14,975
Pass-through Childrens Healthcare of Atlanta Pass-through Childrens Healthcare of Atlanta	657004-1120-01 U01CA180886	93.CTR 93.CTR	_	6,877 90,001
Pass-through Childrens Hospital of Los Angeles	2011-01	93.CTR	463	591
Pass-through Childrens Hospital of Los Angeles Pass-through Childrens Mercy Hospital	2011-04 13-0027	93.CTR 93.CTR	3,987	3,678 33,991
Pass-through Duke University Pass-through Duke University	201316 Pro 00045657	93.CTR 93.CTR	1,100	2,489 1,890
Pass-through Eastern Virginia Medical School	S2050211-2	93.CTR	200	256
Pass-through Feinstein Institute for Medical Research Pass-through Frontier Science and Technology Res Fdtn	HHSN-27I-2009-00019C E2408: BVR VS. BR	93.CTR 93.CTR	_	5,924 447
Pass-through Frontier Science and Technology Res Fdtn	PSAWCIEM00	93.CTR	_	149
Pass-through Frontier Science and Technology Res Fdtn Pass-through Frontier Science and Technology Res Fdtn	PSAWCIEM00 E1609 PSAWIEM00	93.CTR 93.CTR	_	136 106
Pass-through Georgia Department of Community Health	2017001	93.CTR	_	32,141
Pass-through Georgia State University Pass-through Grady Memorial Hospital	PM00316479 S201413	93.CTR 93.CTR	_	12 (378)
Pass-through H Lee Moffitt Cancer Center And Res Inst Pass-through H Lee Moffitt Cancer Center And Res Inst	10-16385-99-01-01 HHSN261201100100C	93.CTR 93.CTR	_	(31,150) 1,881
Pass-through H Lee Moffitt Cancer Center And Res Inst	P9445#A03PAMDREVW01	93.CTR	=	21,802
Pass-through Johns Hopkins University Pass-through Johns Hopkins University	W81XWH-09-20108 W8XWH-10-2-0090/METR	93.CTR 93.CTR	_	202 942
Pass-through Leidos Biomedical Research	15X071	93.CTR		16,623
Pass-through Massachusetts General Hospital Pass-through Massachusetts General Hospital	RAPID Subaward Ref #225183	93.CTR 93.CTR	_	53,374 16,481
Pass-through Massachusetts General Hospital	Subcontract # 225532	93.CTR		36,048
Pass-through Menssana Research, Inc Pass-through Morehouse School of Medicine	TBI-MR-EU-3 HHSO1002 HHSN272200700031C	93.CTR 93.CTR	_	436 2,389
Pass-through Natl Marrow Donor Program Pass-through New England Research Institutes	RIDER0402/PO14829 U01HL68270	93.CTR 93.CTR	200	470 256
Pass-through New England Research Institutes	HHSN268201200001I	93.CTR	200	20,327
Pass-through NORC at The University of Chicago Pass-through Northwestern University	7843.Emory.01 SP0035018 60041567EU	93.CTR 93.CTR		43,786 18,217
Pass-through SAIC Frederick	13XS019/STO1	93.CTR	=	8,133
Pass-through SAIC Frederick	13XS045,MOD1	93.CTR	_	(612)

Supplementary Schedule of Expenditures of Federal Awards Year ended August 31, 2016

Program title/federal grantor/pass-through entity	Award number	Federal CFDA number or other I.D. number	Passed through to subrecipients	Federal expenditures
Pass-through SAIC Frederick	13xs066	93.CTR \$		3,707
Pass-through Univ of Arkansas for Medical Services	51095 POG160101318	93.CTR	_	5.303
Pass-through Univ of Arkansas for Medical Services	51096 POG160101316	93.CTR	_	6,168
Pass-through Univ of Arkansas for Medical Services	51097 POG160101317	93.CTR	_	7,647
Pass-through Univ of Arkansas for Medical Services	51205 POG160101437	93.CTR	_	2,558
Pass-through University of Alabama Birmingham	000406257-013	93.CTR	1,300	12,055
Pass-through University of Alabama Birmingham	000406291-010	93.CTR	_	64,672
Pass-through University of Alabama Birmingham	41610	93.CTR	_	11,069
Pass-through University of California San Francisco	3123SCAMEND9/N01AI15	93.CTR	_	343
Pass-through University of California San Francisco	N01-AI-15416	93.CTR	_	63
Pass-through University of South Florida	TrialNet Clinic Agmt	93.CTR	4,157	93,247
Pass-through University of Southern California	75956840	93.CTR	_	16,774
Pass-through University of Texas Southwestern	GMO 120703	93.CTR	23,488	38,495
Pass-through University of Texas Southwestern	GMO601018/N01HB07159	93.CTR	_	(63,417)
Pass-through University of Washington Saint Louis	WU-14-179/PO2923076X	93.CTR		11,057
Total CFDA No. 93.CTR			51,232	2,205,252
U.S. Department of Health And Human Services Total			1,289,198	8,051,912
Federal Emergency Management Agency Assistance to Firefighters Grant Pass-through Columbia University	COLUM-0000066367	97.044		9,588
Total CFDA No. 97.044				9,588
Federal Emergency Management Agency Total				9,588
U.S. Agency for International Development Cooperative Development Program (CDP) Pass-through Aspen Institute Pass-through Aspen Institute	AID-00AA-A-15-0038 AID-0AA-A-15-0038	98.002 98.002	=_	288,501 40,000
Total CFDA No. 98.002				328,501
U.S. Agency for International Development Total				328,501
Total Expenditures of Federal Awards		\$	59,958,562	546,645,678

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

# 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, 2016

State of Georgia contract number	State of Georgia Agency	Program title		Cash receipts	Expenditures
0240500-032-13120764	GEORGIA DEPT OF PUBLIC HEALTH	CRC Program Evaluation	\$	69,999	_
1 U3REP150546-01-00	GEORGIA DEPT OF PUBLIC HEALTH	Hospital Preparedness Program (HPP) Ebola Preparedness and Response Activities		190,973	236,772
2011056	GEORGIA DEPARTMENT OF COMMUNITY HEALTH	Evaluation of the Planning for Healthy Babies (P4HB) Family Planning Waiver Progra		204,245	171,701
2017001	GEORGIA DEPARTMENT OF COMMUNITY HEALTH	Evaluation Services for the Planning for Healthy Babies Family Planning Waiver Pro		_	32,141
40500-036-14100293	GEORGIA DEPT OF PUBLIC HEALTH	40500-036-14100293: Georgia Coverdell Acute Stroke Registry		_	(8,462)
40500-036-16161891	GEORGIA DEPT OF PUBLIC HEALTH	Statistical Support for Syndromic Surveillance		22,284	7,600
40500-036-17161799	GEORGIA DEPT OF PUBLIC HEALTH	Operation of the Statewide Georgia Comprehensive Cancer Registry		649,334	667,569
40500-041-13110410	GEORGIA DEPT OF PUBLIC HEALTH	Medical Foods For Wic Participants With Positive Inborn Errors Of Metabolic Disord		_	39
4050004615151505	GEORGIA DEPT OF PUBLIC HEALTH	Georgia Department Of Public Health - Contract For Services 2015		26,961	17,747
42700-040-0000009916	GEORGIA DEPARTMENT OF HUMAN RESOURCES	2011 Emory Summer Child Advoca		_	512
42700-040-0000029413	GEORGIA DEPARTMENT OF HUMAN SERVICES	2015 Summer Child Advocacy Program		109,336	121,663
42700-373-0000034541	GEORGIA DEPARTMENT OF HUMAN SERVICES	Cross Training DAS		7,500	76
42700-373-0000047896	GEORGIA DHS/DIVISION OF AGING SERVICES	2016 Georgia Department of Aging Services Contract		8,333	19,741
427-040C-R1458056625	GEORGIA DEPARTMENT OF HUMAN RESOURCES	External Review - Div of Family and Children Services, GA DHS		3,974	_
44100-906-0000062709	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Improving Community-Based Infrastructure		191,119	420,844
44100-906-0000073706	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Maternal Substance Abuse and Child Development Project		416,660	436,188
44100-907-0000056259	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Fetal Alcohol Clinic: Emory Neurodevelopment Exposure Clinic			41,319
44100-907-0000070367	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Emory Neuro Developmental Exposure Clinic (ENEC)		285,000	354,879
MSACD 44100-906-0000	GEORGIA DEPARTMENT OF BEHAVIORAL HEALTH	Fetal Alcohol And Drug Screening Project: Maternal Substance Abuse	_	83,331	94,753
			\$	2,269,049	2,615,082

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

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

Year ended August 31, 2016

## (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 (the University) and is presented on the accrual basis of accounting. 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) Pass-Through Funding

The University passes through certain federal awards to subrecipient organizations. Such subrecipients are responsible for compliance with the applicable provisions of the grants and contracts governing the underlying federal awards. Federal awards passed through to subrecipients by the University during 2016 are presented by individual award on the Schedule and are summarized as follows:

Federal program	Number	 Amount
Research and Development Cluster Other federally funded programs	Various Various	\$ 58,313,384 1,645,178
Total		\$ 59,958,562

## (3) 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.

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

Year ended August 31, 2016

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 Unsubsidized Stafford Loan Program	84.268	\$	9,281,247 70,374,331
Total Direct Stafford Loan Program		_	79,655,578
Federal Direct PLUS Loan Program		_	44,160,240
Total Direct Student Loan Programs		\$ _	123,815,818
Federal Perkins Loan Program	84.038	\$	1,390,226

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. Federal Perkins loans outstanding at August 31, 2016 totaled approximately \$12,400,820.

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, 2016. These loans are not included in the University's consolidated financial statements.

## (4) Matching

Under the Federal Supplemental Educational Opportunity Grant (FSEOG) program, the University matched \$314,500 in funds awarded to students for the year ended August 31, 2016 in addition to the federal share of expenditures included in the Schedule.

Under the Federal Work Study (FWS) program, the University matched \$587,883 in total compensation to students for the year ended August 31, 2016 in addition to the federal share of expenditures included in the Schedule.

#### (5) Indirect Cost

For the year ended August 31, 2016, the University did not elect to use the 10% de minimis Indirect Cost Rate permitted by the Uniform Guidance as a negotiated indirect cost rate applied on all grants where indirect costs are applicable.





### 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 subsidiaries (Emory University), which comprise the consolidated statement of financial position as of August 31, 2016, 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 20, 2016.

### **Internal Control Over Financial Reporting**

In planning and performing our audit of the consolidated financial statements, we considered Emory 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 Emory University's internal control. Accordingly, we do not express an opinion on the effectiveness of Emory 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 Emory 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 Emory 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 Emory University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



December 20, 2016



#### **KPMG LLP**

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

Independent Auditors' Report on Compliance for Each 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 Each 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 each of Emory University's major federal programs for the year ended August 31, 2016. Emory University's major federal programs are 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 each of Emory University's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and 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 each major federal program. However, our audit does not provide a legal determination of Emory University's compliance.

## Opinion on Each 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 each of its major federal programs for the year ended August 31, 2016.



## **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 each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of 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 Schedule of Expenditures of Federal Awards Required by the Uniform Guidance, and the Supplementary Schedule of Cash Receipts and Expenditures of State of Georgia Awards

We have audited the consolidated financial statements of Emory University as of and for the year ended August 31, 2016, and have issued our report thereon dated December 20, 2016, 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 schedule of expenditures of federal awards and supplementary schedule of 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 are 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 schedule of expenditures of federal awards and the supplementary 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.



March 8, 2017

# Schedule of Findings and Questioned Costs Year ended August 31, 2016

## (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) Significant deficiencies in internal control were disclosed by the audit of the consolidated financial statements: **None reported** Material weaknesses: **No**
- (c) Noncompliance which is material to the consolidated financial statements: No
- (d) Significant deficiencies in internal control over major programs: **None reported** Material weaknesses: **No**
- (e) The type of auditors' report issued on compliance for major programs: **Unmodified**
- (f) Any audit findings which are required to be reported under 2 CFR 200.516(a): None reported
- (g) Major programs: Research and Development Cluster (various CFDA numbers); Protecting and Improving Health Globally: Building and Strengthening Public Health Impact, Systems, Capacity and Security (CFDA 93.318)
- (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.