### **Cornell University**

Report on Federal Awards in Accordance with the Uniform Guidance June 30, 2017

EIN: 15-0532082

## Cornell University Index June 30, 2017

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#### **Report of Independent Auditors**

To the Board of Trustees Cornell University

#### **Report on the Consolidated Financial Statements**

We have audited the accompanying consolidated financial statement of Cornell University (the "University"), which comprise the consolidated statement of financial position as of June 30, 2017, and the related consolidated statements of activities and of cash flows for the year then ended, and the related notes to the financial statements.

#### Management's Responsibility for the Consolidated Financial Statements

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

#### Auditors' Responsibility

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

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

#### **Opinion**

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Cornell University as of June 30, 2017, and the changes in their net assets and their cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.



#### Other Matters

We have previously audited the consolidated balance sheet as of June 30, 2016, and the related consolidated statements of activities and cash flows for the year then ended (not presented herein), and in our report dated October 27, 2016, we expressed an unmodified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying summarized financial information as of June 30, 2016 and for the year then ended is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

#### Other Information

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying schedule of expenditures of federal awards for the year ended June 30, 2017 is presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) 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 schedule of expenditures of federal awards is fairly stated, in all material respects, in relation to the consolidated financial statements as a whole.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 25, 2017 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

October 25, 2017

Pricewaterhouse Coopers UP

#### AS OF JUNE 30, 2017 AND JUNE 30, 2016 (in thousands)

		2017	2016
Assets			_
1	Cash and cash equivalents	\$ 181,265	\$ 182,096
2	Accounts receivable, net (note 2-A)	392,435	404,061
3	Contributions receivable, net (note 2-B)	902,846	986,322
4	Prepaid expenses and other assets	136,032	140,377
5	Student loans receivable, net (note 2-C)	<i>7</i> 9,211	80,956
6	Investments (note 3)	7,124,578	6,587,175
7	Land, buildings, and equipment, net (note 4)	4,256,807	4,009,285
8	Funds held in trust by others (note 5)	 110,917	 124,960
9	Total assets	\$ 13,184,091	\$ 12,515,232
Liabili	ties		
10	Accounts payable and accrued expenses	\$ 637,597	\$ 713,414
11	Deferred revenue and other liabilities	190,025	195,448
12	Obligations under split interest agreements (note 5)	133,459	135,444
13	Deferred benefits (note 6)	610,516	656,410
14	Funds held for others (note 7)	137,093	153,065
15	Obligations under capital leases (note 9)	67,842	4,359
16	Bonds and notes payable (note 8)	1,332,261	1,567,368
17	Government advances for student loans	 50,679	 50,730
18	Total liabilities	 3,159,472	3,476,238
Net as	ssets (note 11)		
19	Unrestricted	3,120,525	2,698,090
20	Temporarily restricted	3,329,946	3,204,004
21	Permanently restricted	 3,574,148	 3,136,900
22	Total net assets	 10,024,619	9,038,994
23	Total liabilities and net assets	\$ 13,184,091	\$ 12,515,232

The accompanying notes are an integral part of the consolidated financial statements.

#### CONSOLIDATED STATEMENT OF ACTIVITIES FOR THE YEAR-ENDED JUNE 30, 2017 (in thousands)

(WITH SUMMARIZED INFORMATION FOR THE YEAR-ENDED JUNE 30, 2016)

	Unrestricted	Temporarily Restricted
Pperating revenues		
Tuition and fees	\$ 1,044,627	\$ -
2 Scholarship allowance	(367,731)	
Net tuition and fees	676,896	-
4 State and federal appropriations	150,912	-
5 Grants, contracts and similar agreements		
6 Direct	451,023	-
7 Indirect cost recoveries	146,037	-
8 Contributions	88,777	208,851
9 Investment return, distributed	213,667	142,237
10 Medical Physician Organization	1,050,433	-
11 Auxiliary enterprises	162,433	-
Educational activities and other sales and services	722,590	-
Net assets released from restrictions	356,928_	(356,928)
14 Total operating revenues	4,019,696	(5,840)
Operating expenses (note 10)		
Compensation and benefits	2,585,582	-
Purchased services	31 <i>5,</i> 228	-
Supplies and general	655,409	-
Maintenance and facilities costs	132,302	-
19 Interest expense (note 8)	52,635	-
20 Depreciation	280,176	
Total operating expenses	4,021,332	-
22 Change in net assets from operating activities	(1,636)	(5,840)
lonoperating revenues and (expenses)		
23 State appropriations for capital acquisitions	45,096	-
24 Grants, contracts and similar agreements for capital acquisitions	31,168	-
25 Contributions for capital acquisitions, trusts and endowments	10,258	69,391
26 Investment return, net of amount distributed	1 <i>47,</i> 906	237,496
27 Change in value of split interest agreements	19,979	(16,111)
Pension and postretirement changes	64,213	-
Swap interest and change in value of interest rate swaps	55,560	-
30 Other	(8,659)	-
Net asset released for capital acquisitions and reclassifications	58,550	(158,994)
Change in net assets from nonoperating activities	424,071	131,782
Change in net assets	422,435	125,942
Net assets, beginning of the year	2,698,090	3,204,004
Net assets, end of the year	\$ 3,120,525	\$ 3,329,946

The accompanying notes are an integral part of the consolidated financial statements.

Permanently	2017	2016
Restricted	Total	Total
	<b>†</b> 1044407	¢ 000.040
-	\$ 1,044,627	\$ 998,942 1
<del>-</del>	(367,731)	(352,179) 2
-	676,896	646,763 3
-	150,912	149,138 4
	451 022	444.010
-	451,023 146,037	444,818 <i>6</i> 142,010 <i>7</i>
_	297,628	24442
-	355,904	
-	1,050,433	327,906 <i>9</i>
-		982,430 10
-	162,433	160,853 11
-	722,590	688,667 12
	4.012.054	2 900 21 4
-	4,013,856	3,809,214 14
-	2,585,582	2,442,735 15
-	315,228	313,165 16
-	655,409	666,041 17
-	132,302	122,324 18
-	52,635	56,803 19
=	280,176	258,698 20
-	4,021,332	3,859,766
-	(7,476)	(50,552) 22
-	45,096	41,604 23
-	31,168	39,592 24
310,886	390,535	245,669 25
19,612	405,014	(467,085) 26
6,703	10,571	(4,236) 27
-	64,213	(131,152) 28
-	55,560	(119,020) 29
(397)	(9,056)	2,763 30
100,444	<u> </u>	- 31
437,248	993,101	(391,865) 32
437,248	985,625	(442,417) 33
3,136,900	9,038,994	9,481,411 34
3,574,148	\$ 10,024,619	\$ 9,038,994 35

			2017		2016
	ows from operating activities				
	Change in net assets	\$ 9	985,625	\$	(442,417)
Α	Adjustments to reconcile change in net assets				
	to net cash provided/(used) by operating activities				
2	Proceeds from contributions for capital acquisitions, trusts and endowments	(4	464,383)		(293,552)
3	Depreciation and amortization	:	271,339		253,481
4	Net realized and unrealized (gain)/loss on investments	(4	572,248)		202,286
5	Pension and postretirement changes		(64,213)		131,152
6	Change in value of interest rate swaps		(81,451)		89,965
7	Bond call premium		18,973		-
8	Loss on disposals of land, building, and equipment		7,470		4,181
9	Other adjustments		(10,825)		(22,101)
	Change in assets and liabilities				
10	Accounts receivable, net		11,626		10,546
11	Contributions receivable, net		83,476		107,521
12	Prepaid expenses and other assets		(4,703)		(5,751)
13	Accounts payable and accrued expenses		(1,700)		19,757
14	Deferred revenue and other liabilities		(5,423)		4,489
15	Obligations under split interest agreements		12,058		(10,992)
16	Deferred benefits		18,319		(2,316)
17	Net cash provided/(used) by operating activities	-	103,940		46,249
	ows from investing activities		100,740		40,247
18	Proceeds from the sale and maturities of investments	17 '	338,583		9,900,735
19	Purchase of investments		181,628)		9,723,130)
	Acquisition of land, buildings, and equipment (net)		453,370)	,	(450,016)
20	Student loans granted		(12,655)		(17,273)
21	Student loans granted Student loans repaid		14,974		
22	•				13,090
23	Change in funds held for others, net of unrealized (gain)/loss on investments		(29,034)		(28,102)
24	Net cash used by investing activities		323,130)		(304,696)
Cash flo	ows from financing activities				
	Proceeds from contributions for capital acquisitions, trusts and endowments		205 750		007.407
25	Investment in endowments	,	395,753		207,687
26	Investment in physical plant		65,202		81,219
27	Investment subject to living trust agreements		3,428		4,646
28	Principal payments of bonds, notes payable and capital leases	(2	279,731)		(181,860)
29	Proceeds from issuance of bonds and notes payable		52,731		154,068
30	Bond call premium, bond premium and issuance costs		(18,973)		27,292
31	Government advances for student loans		(51)		(2,262)
32	Net cash provided by financing activities		218,359		290,790
33	Net change in cash and cash equivalents		(831)		32,343
34	Cash and cash equivalents, beginning of year		182,096		149,753
35	Cash and cash equivalents, end of year	\$	181,265	\$	182,096
Supplen	nental disclosure of cash flow information				
36	Cash paid for interest	\$	61,497	\$	61,725
37	Increase/(decrease) in construction payables, non-cash activity	\$	7,334	\$	9,895
38	Assets acquired under capital leases	\$	64,267	\$	1,561
39	Gifts-in-kind	\$	10,250	\$	16,562

The accompanying notes are an integral part of the consolidated financial statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### 1. SIGNIFICANT ACCOUNTING POLICIES

#### A. Description of the Organization

Founded in 1865, Cornell University ("the University") is dedicated to a mission of learning, discovery, and engagement. Cornell is a private university, the federal land-grant institution of New York State, and a member of the Ivy League. Cornell administers four contract colleges, which are also units of the State University of New York. Described as the first truly American university because of its founders' revolutionary egalitarian and practical vision of higher education, the University is dedicated to its land-grant mission of outreach and public engagement. Cornell's community includes almost 23,400 students, nearly 4,000 faculty, and approximately 278,000 alumni who live and work across the globe.

The University comprises colleges and schools in Ithaca, New York (seven undergraduate units and four graduate and professional units), New York City (two medical graduate and professional units, together with its physician organization referred to collectively as "Weill Cornell Medicine"), and Doha, Qatar (the "Weill Cornell Medical College in Qatar"). Also in New York City, the Cornell Tech campus offers graduate programs in applied sciences, including two programs offered jointly with the Technion - Israel Institute of Technology under the auspices of the Joan and Irwin Jacobs Technion-Cornell Institute ("Jacobs Institute").

The University is subject to the common administrative authority and control of the Cornell University Board of Trustees. The University is prohibited from using funds attributable to the contract colleges (i.e., those colleges operated by the University on behalf of New York State) for other units of the University. Except as specifically required by law, the contract and endowed colleges at Ithaca, Cornell Tech in New York City, and Weill Cornell Medicine ("WCM") are, to the extent practicable, governed by common management principles and policies determined at the private discretion of the University. In addition to the activities of the endowed and contract colleges, the University's subsidiaries and certain affiliated organizations are included in the consolidated financial statements. All significant intercompany transactions and balances are eliminated in the accompanying consolidated financial statements.

#### **B.** Basis of Presentation

The accompanying consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). Net assets, revenues, gains, and losses are categorized based on the existence or absence of donor-imposed restrictions.

The University's Board of Trustees, with consideration to the actions, reports, information, advice, and counsel provided by its duly constituted committees and appointed officers of the University, including University Counsel, has instructed the University to preserve the historical dollar value of donor-restricted (true) endowment funds, absent explicit donor direction to the contrary. As a result, the University classifies as permanently restricted net assets the original gift value of true endowments, plus any subsequent gifts and accumulations made in accordance with the directions of the applicable gift instruments. In accordance with accounting standards, the portion of the true endowment fund not classified as permanently restricted net assets is classified as temporarily restricted net assets except when the fair value of the endowment fund is less than its historical dollar value. For these "underwater" funds, the difference between historic dollar value and fair value is reflected in unrestricted net assets.

Temporarily restricted net assets also include gifts and appropriations from the endowment that can be expended, but for which the donors' purpose restrictions have not yet been met, as well as net assets with explicit or implied time restrictions, such as pledges and split interest agreements. Expiration of donor restrictions is reported in the consolidated statement of activities as a reclassification from temporarily restricted net assets to unrestricted net assets on the net assets released from restriction lines.

Unrestricted net assets are the remaining net assets of the University.

#### C. Cash and Cash Equivalents

Cash and cash equivalents include cash on hand and in bank accounts, money market funds, and other temporary investments held for working capital purposes with an original maturity term of ninety days or less. The carrying amount of cash equivalents approximates fair value because of their short terms of maturity. Cash that is part of the University's investment portfolio is reported as investments and included in Note 3.

#### **D.** Contributions

Contributions, including unconditional promises to give (pledges), are recognized as revenues in the appropriate categories of net assets in the periods received. A pledge is recorded at the present value of estimated future cash flows, based on an appropriate discount rate determined by management at the time of the contribution. Amortization of this discount in subsequent years is included in contribution revenue. A contribution of assets other than cash is recorded at its estimated fair value on the date of the contribution. Contributions for capital projects, endowments, and similar funds are reported as non-operating revenues. Conditional promises to donate to the University are not recognized until the conditions are substantially met.

Temporarily restricted net assets include contributions to the University and to the Cornell University Foundation (the Foundation), an affiliated entity that is included in the consolidated financial statements. The Foundation maintains a donor-advised fund for which the donors can make recommendations to the fund's trustees regarding distributions to the University or other charitable organizations. Distributions from the Foundation to external charitable organizations are recorded as non-operating expenses.

#### **E.** Investments

The University values certain financial and non-financial assets and liabilities, on a recurring basis, in accordance with a hierarchy that categorizes and prioritizes the sources used to measure and disclose fair value. Fair value is defined as the price associated with an orderly transaction between market participants at the measurement date. This fair-value hierarchy is broken down into three levels based on inputs that market participants would use in valuing the financial instruments, which is based on market data obtained from sources independent of the University. The hierarchy of inputs used to measure fair value, and the primary valuation methodologies used by the University for assets and liabilities measured at fair value, are disclosed below.

Investment income is recorded on an accrual basis, and purchases and sales of investment securities are reflected on a trade-date basis. Realized gains and losses are calculated using average cost for securities sold.

Investment return included in operating revenues consists of amounts appropriated by the Board of Trustees from the pooled endowment, as well as income and realized gains and losses on investments from working capital and non-pooled endowments and similar funds. Unrealized gains and losses on investments, any difference between total return and amounts appropriated from the pooled endowment, and income and realized gains reinvested per donor restrictions are reported as non-operating activities.

#### F. Fair-Value Hierarchy

The University values certain financial and non-financial assets and liabilities, on a recurring basis, in accordance with a hierarchy that categorizes and prioritizes the sources used to measure and disclose fair value. Fair value is defined as the price associated with an orderly transaction between market participants at the measurement date. This fair-value hierarchy is broken down into three levels based on inputs that market participants would use in valuing the financial instruments, which is based on market data obtained from sources independent of the University. The hierarchy of inputs used to measure fair value, and the primary valuation methodologies used by the University for assets and liabilities measured at fair value, are disclosed below.

The fair value of Level 1 securities is based upon quoted prices in accessible active markets for identical assets. Market price data is generally obtained from exchange or dealer markets. The University does not adjust the quoted price for such assets.

The fair value of Level 2 securities is based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data. Inputs are obtained from various sources, including market participants, dealers, and brokers. In determining fair value of financial instruments, the University considers factors such as interest-rate yield curves, duration of the instrument, and counterparty credit

risk. The fair value of Level 2 securities is determined using multiple valuation techniques including the market approach, income approach, or cost approach.

The fair value of Level 3 securities is based upon valuation techniques that use significant unobservable inputs.

Inputs used in applying the various valuation techniques refer to the assumptions that are used to make valuation decisions. Inputs may include price information, credit data, liquidity statistics, and other factors. A financial instrument's level within the fair-value hierarchy is based on the lowest level of any input that is significant to the fair-value measurement. The University considers observable data to be market data that is readily available and reliable and provided by independent sources. The categorization of a financial instrument within the fair-value hierarchy is, therefore, based upon the pricing transparency of the instrument, and does not correspond to the University's perceived risk of that instrument.

#### **G.** Derivative Instruments

The University has approved the use of derivatives by outside investment managers, based on investment guidelines negotiated at the time of a manager's appointment. The derivatives are used to adjust fixed income durations and rates, to create "synthetic exposures" to certain types of investments, and to hedge foreign currency fluctuations. The University records the fair value of a derivative instrument within the applicable portfolio. The change in the fair value of a derivative instrument held for investment is included in non-operating investment return in the consolidated statement of activities.

In addition, the University holds other derivatives to manage its current and/or future long-term debt. These instruments are recorded at fair value as either prepaid or accrued expenses in the consolidated statement of financial position, and the swap interest and change in fair value is recorded as non-operating activity in the consolidated statement of activities.

Derivatives involve counterparty credit exposure. To minimize this exposure, the University manages counterparty risk by limiting swap exposure for each counterparty and monitoring the financial health of swap counterparties, and has structured swap documents to limit maximum loss in the event of counterparty default.

#### H. Land, Buildings, and Equipment

Land, buildings, and equipment are stated in the consolidated statement of financial position at cost on the date of acquisition or at fair value on the date of donation, net of accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful life of the asset, and is reflected as an operating expense. Expenditures associated with the construction of new facilities are recorded as construction in progress until the projects are completed.

The University's collections of art, rare books, and other property have been acquired through purchases and contributions since the University's inception. They are recognized as capital assets and are reflected, net of accumulated depreciation, in the consolidated statement of financial position. A collection received as a gift is recorded at fair value as an increase in net assets in the year in which it is received.

#### I. Split Interest Agreements

The University's split interest agreements with donors consist primarily of charitable gift annuities, pooled income funds, and charitable trusts for which the University serves as trustee. Assets held in trust are either separately invested or included in the University's investment pools in accordance with the agreements. Contributions of split interest agreements, net of related liabilities, increase temporarily restricted net assets or permanently restricted net assets. Liabilities associated with charitable gift annuities and charitable trusts represent the present value of the expected payments to the beneficiaries based on the terms of the agreements. Pooled income funds are recognized at the net present value of the net assets expected at a future date. Gains or losses resulting from changes in fair value, changes in assumptions, and amortization of discount are recorded as changes in value of split interest agreements in the appropriate restriction categories in the non-operating section of the consolidated statement of activities.

#### J. Funds Held in Trust by Others

Funds held in trust by others represent resources that are not in the possession or under the control of the University. These funds are administered by outside trustees, with the University receiving income or residual interest. Funds held in trust by others are recognized at the estimated fair value of assets or the present value of future cash flows due to the University when the irrevocable trust is established or the University is notified of its existence. Gains or losses resulting from changes in fair value are recorded as non-operating activities in the consolidated statement of activities.

(dollars in thousands)

#### K. Endowments

The responsibility for accepting, preserving, and managing those funds entrusted to the University rests, by law, with the Board of Trustees; however, the Trustees have delegated authority for investment decisions to the Investment Committee of the Board of Trustees. The Investment Committee determines investment policy, objectives, and guidelines, including allocation of assets between classes of investments.

The University's investment objective for its endowment assets is to maximize total return within reasonable risk parameters, specifically to achieve a total return, net of expenses, of at least five percent in excess of inflation, as measured by the Consumer Price Index over rolling five-year periods. The achievement of favorable investment returns enables the University to distribute over time increasing amounts from the endowment so that present and future needs can be treated equitably in inflation-adjusted terms. Diversification is a key component of the University's standard for managing and investing endowment funds, and asset allocation targets are subject to ongoing reviews by the Investment Committee of the Board of Trustees.

The University applies the "prudent person" standard when deciding whether to appropriate or accumulate endowment funds, and considers the following factors: the duration and preservation of the endowment fund, the purposes of the institution and the endowment fund, the general economic conditions including the potential effect of inflation or deflation, the expected total return of the fund, other resources of the University, the needs of the University and the fund to make distributions and preserve capital, and the University's investment policy.

The Board authorizes an annual distribution from endowment funds that is within a target range of 4.4 percent to 5.9 percent of a 12-quarter rolling average of the unit fair value. The Trustees may occasionally make step adjustments, either incremental or decremental, based on prior investment performance, current market conditions, and/or any of the factors for prudent judgment described above. Total distributions, or spending, are presented as investment return, distributed, on the consolidated statement of activities, and includes endowment payout and an administrative fee that supports the investment and stewardship costs of the University endowment.

The New York Prudent Management of Institutional Funds Act ("NYPMIFA") established a requirement related to appropriations from endowments for which the fair value falls below the historic dollar value ("underwater"). The University, in compliance with NYPMIFA, notified available donors who had established endowments prior to September 17, 2010 of the new law, and offered these donors the option of requiring the University to maintain historical dollar value for their endowment funds. A minority of donors requested this option; for those who did, the University has designed procedures to ensure that the University maintains historical dollar value by not expending the payout on any underwater fund.

#### L. Sponsored Agreements

Revenues under grants, contracts, and similar agreements are recognized at the time expenditures are incurred. These revenues include the recovery of facilities and administrative costs, which are recognized according to negotiated predetermined rates. Amounts received in advance and in excess of incurred expenditures are recorded as deferred revenues.

#### M. Medical Physician Organization

The Medical Physician Organization ("MPO") provides the management structure for the practice of medicine at the WCM academic medical center and the Physician Organization Network. In addition to conducting instructional and research activities, physician members generate clinical practice income from their professional services to patients. MPO revenue represents patient care and management service agreement fees. Expenses of the clinical practice, including physician compensation, administrative operations, and provision for uncollectible accounts, are reflected as University expenses.

#### N. Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses during the reporting period. Management's assumptions are primarily related to the appropriate discount rate for the purposes of fair-value calculations, to allowances for doubtful accounts and contractual allowances, and to self-insured risks. Actual results may differ from those estimates.

#### O. Comparative Financial Information

The consolidated statement of activities includes prior-year information in summary form rather than by restriction class. Such information does not include sufficient detail to constitute a presentation of prior-year data in conformity with U.S. GAAP. Accordingly, such information should be read in conjunction with the University's consolidated financial statements for the prior fiscal year from which the summarized information was derived.

#### **P. Accounting Pronouncements**

In April 2015, the Financial Accounting Standards Board ("FASB") issued ASU 2015-03—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, to reduce the cost and complexity in presentation of debt issuance cost by aligning its presentation with the debt discount or premium. This update requires all costs incurred to issue debt to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability. The effective date of this change for the University was the fiscal year ended June 30, 2017. Implementation of this standard update resulted in the reclassification of \$7.5 million and \$10.7 million from the prepaid expenses and other assets line to the bonds and notes payable line for the fiscal years ended June 30, 2017 and 2016, respectively. The unamortized issuance costs have been added to the unamortized premium and issuance costs line in the Summary of Bonds and Notes Payable table in Note 8.

In April 2015, the FASB also issued ASU 2015-05—Intangibles - Goodwill and Other Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement, which provides guidance to help entities evaluate whether a cloud computing arrangement includes a software license. If there is contractual right to take possession of software at any time during its hosting period without significant penalty, and it is feasible to either run the software on the University's hardware or contract with another party unrelated to the vendor to host the software, then the contract (or portion thereof) is accounted for as an acquisition of software. Otherwise, the contract is accounted for as a service contract (i.e., expensed). The effective date of this change for the University was the fiscal year ended June 30, 2017. The University performed an analysis of its cloud computing arrangements and determined that no contracts met the criteria as software acquisition under this new standard.

In March 2017, the FASB issued ASU 2017-07—Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. Currently, net periodic costs are recorded as operating expenses and are comprised of: service costs, interest costs, expected return on assets, and amortized net loss/ (gain). This accounting standard allows only the service costs to be presented as operating expenses; the other elements of the net periodic costs must be considered non-operating. The effective date of this change is the fiscal year ending June 30, 2019; however, the University has elected to adopt this standard for the fiscal year ended June 30, 2017. The impact of this presentation change is a reclassification of \$17.6 million and \$7.8 million, from operating to non-operating expense, for the years ended June 30, 2017 and 2016, respectively. The pension and postretirement changes line on the consolidated statement of activities includes both the change in funded status and the other components of net periodic costs. These two amounts are separately disclosed in the Summary of Obligations and Funded Status table in Note 6C.

In May 2014, the FASB issued ASU 2014-09—Revenue from Contracts with Customers (Topic 606) at the conclusion of a joint effort with the International Accounting Standards Board to create common revenue recognition guidance for U.S. GAAP and international accounting standards. This framework ensures that entities appropriately reflect the consideration to which they expect to be entitled in exchange for goods and services, by allocating transaction price to identified performance obligations, and recognizing that revenue as performance obligations are satisfied. Qualitative and quantitative disclosures will be required to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. In August of 2015, FASB issued ASU 2015-14—Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, which makes ASU 2014-09 effective for the fiscal year ending June 30, 2019. The University is planning for the implementation of this new standard.

In February 2016, the FASB issued ASU 2016-02—Leases (Topic 842) which provides accounting guidance for leases from both the lessor's and lessee's perspective. The main difference between previous GAAP and Topic 842 is the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases; however, the University will evaluate other impacts of the new guidance. The new standard will be effective in the fiscal year ending June 30, 2020. The University has begun its planning for implementation of this new standard.

In August 2016, the FASB issued ASU 2016-14–Not-for-Profit Entities (Topic 958): Presentation of Financial Statements for Not-for-Profit Entities to improve the information presented in financial statements and notes about a not-for-profit entity's liquidity, financial performance, and cash flows. The significant changes under the new guidance include the reduction of net asset classifications to two categories based on the existence or absence of donor restrictions, and addi-

(dollars in thousands)

tional disclosure requirements related to board designation of net assets, and related to the liquidity and availability of the entity's financial assets. ASU 2016-14 is effective for the fiscal year ending June 30, 2019. The University is planning for the implementation of this new standard.

#### Q. Reclassifications

The University reclassified certain lines in the consolidated statement of financial position to conform to the current year presentation. These changes impacted the prepaid expenses and other assets, deferred revenue and other liabilities, and bonds and notes payable lines. In addition, changes impacting the consolidated statement of activities were made on the compensation and benefits and the pension and postretirement changes lines due to the early adoption of ASU 2017-07, and certain prior year expenses within the purchased services and supplies and general lines to conform to the current year presentation. Also, the impact of net settlements of the interest rate swaps was reclassified from interest expense to the swap interest and change in value of interest rate swaps line. Finally, revenue from WCM's agreement with New York-Presbyterian Hospital was reclassified from MPO revenue to the educational activities and other sales and services line.

#### R. Income Taxes

The University is a not-for-profit organization as described in Section 501(c)(3) of the Internal Revenue Code and is generally exempt from income taxes on related income pursuant to the appropriate sections of the Internal Revenue Code. In accordance with the accounting standards, the University evaluates its income tax position each fiscal year to determine whether the position is more likely than not to be sustained if examined by the applicable taxing authority. This review had no material impact on the University's consolidated financial statements.

#### 2. RECEIVABLES

#### A. Accounts Receivable

The University's receivables from the sources identified in the table below are reviewed and monitored for aging and other factors that affect collectability.

Accounts receivable from the following sources were outstanding as of June 30:

#### SUMMARY OF ACCOUNTS RECEIVABLE

	2017	2016
Grants and contracts	\$ 95,361	\$ 85,386
New York Presbyterian Hospital and other affiliates	40,484	44,603
Patients (net of contractual allowances)	118,608	131,669
Reinsurance receivable	103,726	102,891
Student accounts	13,659	16,095
Other	60,339	59,329
Gross accounts receivable	\$ 432,177	\$ 439,973
Less: allowance for doubtful accounts	(39,742)	(35,912)
Net accounts receivable	\$ 392,435	\$ 404,061

The patient accounts receivable for medical services was comprised of the following at June 30, 2017 and 2016, respectively: commercial third parties 67.3 percent and 64.4 percent; federal/state government 16.7 percent and 15.3 percent; and patients 16.0 percent and 20.2 percent. Note 12 provides additional information related to the reinsurance receivable.

Other accounts receivable include receivables from other government agencies, matured bequests, and receivables from other operating activities.

#### **B.** Contributions Receivable

Unconditional promises to give, or pledges, are recorded in the consolidated financial statements at present value using discount rates ranging from 1.0 percent to 7.0 percent. The methodology for estimating uncollectible amounts is based on an analysis of the historical collectability of contributions receivable. Contributions are expected to be realized as follows:

#### (dollars in thousands)

#### SUMMARY OF CONTRIBUTIONS RECEIVABLE

	2017	2016
Less than one year	\$ 372,009	\$ 366,885
Between one and five years	413,276	561,661
More than five years	242,001	155,652
Gross contributions receivable	\$ 1,027,286	\$ 1,084,198
Less: unamortized discount	(96,517)	(67,371)
Less: allowance for uncollectible amounts	(27,923)	(30,505)
Net contributions receivable	\$ 902,846	\$ 986,322

Contributions receivable as of June 30 are intended for the following purposes:

#### EXPECTED PURPOSE OF CONTRIBUTIONS RECEIVABLE

	2017		2016
Program support	\$ 469,049	•	\$ 521,273
Capital purposes	184,457		289,949
Long-term support	249,340		175,100
Net contributions receivable	\$ 902,846	•	\$ 986,322

At June 30, 2017, conditional promises not reflected in the consolidated financial statements, which consist primarily of bequest intentions and conditional promises with significant requirements, were \$460,329.

#### C. Student Loans Receivable

In keeping with Ezra Cornell's vision, the University has a "need-blind" policy of admission. Many students receive financial aid that consists of scholarship/fellowship grants, work-study opportunities and, when appropriate, student loans.

Student loan programs are funded by donor contributions, other institutional sources, and governmental programs, primarily the Federal Perkins Loan Program. The amounts received from the federal government's portion of the Perkins program are ultimately refundable to the federal government and are reported as a liability on the University's consolidated statement of financial position as government advances for student loans.

Credit worthiness is not a factor when granting a student a loan from institutional or federal resources; the loan is based on financial need. However, once the loan is in repayment status, the University monitors, no less than quarterly, the aging of the student loans receivable. If a loan is 75 days past due, the University generally will not release a transcript and/ or diploma. If the loan is 180 days past due, the University evaluates whether to assign the account to an external agency for collection.

The Cornell University Bursar authorizes any write-off of a student loan receivable; such write-offs are based primarily on the aging report and an evaluation of any recent activity in the account. Overall default rates and general economic conditions are evaluated at least annually. The University, because of its close and continuing relationship with its students and graduates, seeks to work closely with the students to help ensure repayment. At June 30, 2017, the average default rate approximated 9.1 percent, with a rate of approximately 2.2 percent on the federal revolving loan portfolio. Student loans are considered to be in default status when over 150 days past due. The average rate includes both the federal loans and the institutional loans.

Student loans are often subject to unique restrictions and conditions and, therefore, it is not practical to determine their fair values. The allowance for doubtful accounts is for all loans, whether in repayment status or not.

The two tables below provide additional information about the student loan receivables and the allowances associated with federal and institutional loan programs.

#### SUMMARY OF STUDENT LOANS RECEIVABLE

	 2017					2016	
	Receivable		Allowance	Ne	t receivable	Ne	et receivable
Federal revolving loans	\$ 49,365	\$	(1,396)	\$	47,969	\$	51,714
Institutional loans	 34,133		(2,891)		31,242		29,242
Total student loans receivable	\$ 83,498	\$	(4,287)	\$	<i>7</i> 9,211	\$	80,956

#### CHANGE IN STUDENT LOAN ALLOWANCE

		2017						2016
	Federal revolving Institu		nstitutional Total allowance			Total allowance		
Allowance at beginning of year	\$	(2,360)	\$	(2,501)	\$	(4,861)	\$	(4,647)
Current year provisions		964		(138)		826		34
Current year write-offs		-		(252)		(252)		(248)
Allowance at end of year	\$	(1,396)	\$	(2,891)	\$	(4,287)	\$	(4,861)

#### 3. INVESTMENTS

#### A. General Information

The University's investments are overseen by the Investment Committee of the Board of Trustees. The University's investment strategy incorporates a diversified asset allocation approach and maintains, within defined limits, exposure to the movements of the world equity, fixed income, commodities, real estate, and private equity markets. Based on guidelines established by the Investment Committee, the University's Investment Office directs the investment of endowment and trust assets, certain working capital, and temporarily invested expendable funds.

The University maintains a number of investment pools or categories for specific purposes as follows:

#### INVESTMENT POOLS/CATEGORIES AT FAIR VALUE

	2017	2016
Long-term investments (LTI)		
Long-term investment pool (LTIP)	\$ 6,363,271	\$ 5,629,008
Other LTI	394,477	343,333
Total LTI	\$ 6,757,748	\$ 5,972,341
Intermediate-term	62	277,263
Separately invested and other assets	366,768	337,571
Total investments	\$ 7,124,578	\$ 6,587,175

Total earnings on the University's investment portfolio for the fiscal years ended June 30 is presented in the following table:

#### SUMMARY OF INVESTMENT RETURN

	2017		2016
Interest and dividends, net of investment fees	\$ 75,608	\$	77,473
Net realized gain/(loss)	324,262		210,733
Net unrealized gain/(loss)	361,048		(427,385)
Total investment return	\$ 760,918	\$	(139,179)

#### **B. Fair Value**

The University's investment holdings as of June 30, categorized in accordance with the fair-value hierarchy, are summarized in the following table:

#### **INVESTMENTS AT FAIR VALUE**

		Level 1	Level 2	Level 3	Net	2017	2016
		fair value	fair value	fair value	asset value	Total	 Total
Cash and cash equivalents	\$	332,132	\$ 16,566	\$ -	\$ -	\$ 348,698	\$ 323,766
Derivatives		(342)	(1,918)	-	-	(2,260)	(3,527)
Equity							
Domestic equity		419,412	61,390	1,656	207,434	689,892	646,613
Foreign equity		697,320	33,534	6,744	506,785	1,244,383	886,137
Hedged equity		-	-	4,945	430,809	435,754	629,455
Private equity		-	-	47,822	1,332,736	1,380,558	1,173,988
Fixed income							
Asset backed fixed income		-	26,646	929	-	27,575	29,604
Corporate bonds		-	213,805	2,888	-	216,693	446,485
Equity partnership		-	74	-	459,107	459,181	<i>478,517</i>
International		1 <i>5,5</i> 85	76,629	-	-	92,214	110,355
Municipals		-	11,005	-	-	11,005	12,998
Mutual funds (non-equity)		-	19,921	-	-	19,921	22,603
Preferred/convertible		-	15,103	5,014	-	20,117	28,929
Other fixed income		-	105	-	-	105	5,737
US government		42,897	87,886	-	-	130,783	156,155
Marketable alternatives		-	152	-	878,830	878,982	722,079
Real assets		-	1,350	23,953	1,160,483	1,185,786	936,496
Receivable for investments sold		19,842	-	-	-	19,842	39,336
Payable for investments purchased		(58,727)	-	-	-	(58,727)	(83,011)
Other		-	-	24,076	-	24,076	24,460
Total investments	\$	1,468,119	\$ 562,248	\$ 118,027	\$ 4,976,184	\$ 7,124,578	\$ 6,587,175
Securities not included in investment	portfo	olio					
Cash and cash equivalents	\$	69,963	\$ -	\$ -	\$ -	\$ 69,963	\$ 84,714

Level 1 investments consist of cash and cash equivalents, equity, and fixed-income securities with observable market prices. Fair value is readily determinable based on quoted prices in active markets. Unsettled trade receivable and payable valuations are reflective of cash settlements subsequent to the fiscal year-end and are also categorized as Level 1. The University does not adjust the quoted price for such instruments, even in situations where the University holds a large position and a sale of all its holdings could reasonably impact the quoted price.

Investments that are classified as Level 2 include domestic and foreign equities, as well as fixed income securities that trade in markets that are not considered to be active. Fair value is based on observable inputs for similar instruments in the market, and obtained by various sources including market participants, dealers, and brokers; the University's custodian secures pricing for these assets. The fair value of derivative investments is based on market prices from the financial institution that is the counterparty to the derivative.

Level 3 investments have significant unobservable inputs, as they trade infrequently or not at all. The inputs into the determination of fair value are based upon the best information in the circumstance and may require significant management judgment. Investments included in Level 3 consist primarily of the University's ownership in real estate, oil and mineral rights, limited partnerships, and equity positions in private companies.

#### C. Investments Using Net Asset Value

The net asset value ("NAV") column above represents the University's ownership interest in certain alternative investments. As a practical expedient, the University uses its ownership interest in the NAV to determine the fair value of all alternative investments that do not have a readily determinable fair value, and have financial statements consistent with the measurement principles of an investment company or have the attributes of an investment company. The NAV of these investments is determined by the general partner and is based upon appraisal or other estimates that require varying degrees of judgment. If no public market exists for the investment securities, the general partner will take into consideration, among other things, the cost of the securities, prices of recent significant placements of securities of the same issuer, and subsequent developments concerning the companies to which the securities relate. The University has performed significant due diligence around these investments to ensure that NAV is an appropriate measure of fair value as of June 30.

The following tables provide additional information about alternative investments measured at NAV:

#### SUMMARY OF ALTERNATIVE INVESTMENTS MEASURED USING NET ASSET VALUE

				Unfunded	Timing to draw
Asset class	Strategy	 NAV in funds	Remaining life	 commitments	commitment
Private equity	Buyout	\$ 337,326		\$ 329,677	
	Growth	327,515		204,258	
	Venture capital	 667,895		 162,660	
	Total private equity	\$ 1,332,736	1 to 10 years	\$ 696,595	1 to 10 years
Real assets	Real estate	574,092		308,893	
	Natural resource	 586,391		 282,761	
	Total real assets	\$ 1,160,483	1 to 10 years	\$ 591,654	1 to 10 years
Fixed income	Distressed	214,158		76,194	
	Leveraged loans	48,215		6,250	
	Mezzanine	96 <i>,</i> 7 <i>5</i> 7		132,593	
	Multi-strategy	 99,977		 93,167	
	Total fixed income	\$ 459,107	1 to 10 years	\$ 308,204	1 to 10 years
Foreign equity	Emerging markets	123,757			
	Global equity	163,420			
	Foreign index	 219,608			
	Total foreign equity	\$ 506,785			
Hedged equity	Global equity long/short	250,006			
	U.S. equity long/short	 180,803			
	Total hedged equity	\$ 430,809			
Marketable	Event driven	153,223			
alternatives	Global macro	 725,607			
	Total marketable alternatives	\$ 878,830			
Domestic equity	Indexed	207,434			
	Total domestic equity	\$ 207,434			
Total for alternative	e investments using NAV	\$ 4,976,184		\$ 1,596,453	

#### REDEMPTION INFORMATION FOR ALTERNATIVE INVESTMENTS MEASURED USING NET ASSET VALUE

Asset class	Redemption terms	Redemption restrictions*
Private equity	n/a**	n/a
Real assets	n/a**	n/a
Fixed income	Rolling 2 year redemptions with 90 days notice***	50% of each new contribution has 2 year lock up and 50% has 3 year lock up
Foreign equity	Ranges between thrice-monthly redemption with 2 days notice, to rolling 3 year redemption with 90 days notice	No lock up provisions
Hedged equity	Ranges between quarterly redemption with 30 days notice, to 25% per year redemption with 90 days notice	No lock up provisions
Marketable alternatives	Ranges between quarterly redemption with 65 days notice, to 33% redemption per year with 60 days notice	14.38% has remaining lock up for 12 months
Domestic equity	Daily redemption with 2 day notice	No lock up provisions

<sup>\*</sup> Represents initial investment lock up restriction. No other material redemption restrictions, such as redemption gates, were in place at year end.

#### D. Level 3 Investments

The table below presents a summary of Level 3 investment activity. All net realized and unrealized gains/(losses) in the table are reflected in the accompanying consolidated statement of activities. Net unrealized gains/(losses) relate to those financial instruments held by the University at June 30, 2017. There were no significant transfers into or out of Level 3 during the fiscal year ended June 30, 2017.

#### SUMMARY OF LEVEL 3 INVESTMENT ACTIVITY

	Fa	ir value at June 30,		Realized	,	Inrealized				ansfers (out) of	Fc	air value at June 30,
		2016	ç	gain/(loss)		nrealizea jain/(loss)	Purchases	Sales	in/	Level 3		201 <i>7</i>
Equity												
Domestic equity	\$	3,416	\$	-	\$	(1,664)	\$ -	\$ (96)	\$	-	\$	1,656
Foreign equity		1 <i>7,</i> 8 <i>5</i> 7		(1,495)		2,337	2,485	(14,440)		-		6,744
Hedged equity		1,949		(6)		(256)	3,448	(190)		-		4,945
Private equity		42,058		-		5,418	500	(154)		-		47,822
Fixed income												
Asset backed fixed income		1,006		-		-	-	(77)		-		929
Corporate bonds		127		5		(239)	3,209	(214)		-		2,888
Preferred/convertible		4,959		-		55	-	-		-		5,014
Real assets		27,383		(172)		(1,648)	397	(2,007)		-		23,953
Other		24,460		297		(3,080)	2,399	-		-		24,076
Total level 3 investments	\$	123,215	\$	(1,371)	\$	923	\$ 12,438	\$ (17,178)	\$	-	\$	118,027

Level 3 equities not priced by qualified third parties (e.g., brokers, pricing services, etc.) are valued using discounted cash flow, taking into account various factors including nonperformance risk, counterparty risk, and marketability. Investment value is also derived using a market approach through comparison to recent and relevant market multiples of comparable companies. Start-up assets, held by the University's student-run venture fund or other similar programs, are maintained at or near initial investment amounts due to the nature of the activity.

<sup>\*\*</sup> These funds are in private equity structure, with no ability to be redeemed.

<sup>\*\*\* 88.04%</sup> of NAV is in private equity structure, with no ability to be redeemed. Redemption provisions for the remaining 11.96% are shown above.

Level 3 asset-backed fixed income investments are valued using discounted cash flows. Preferred/convertible fixed income investments are valued using discounted cash flows or a market approach using a dividend multiplier. Investments in startup companies, as described above, are valued at or near initial investment amounts.

Level 3 real assets represent directly owned real estate, and oil or mineral rights. To the extent feasible, third party appraisals are used to value real estate directly owned by the University. If current appraisals are not available, fair value is based on the capitalization rate valuation model or discounted cash flow, corroborated by local market data, if available. Oil and mineral rights are valued based on industry standard revenue multiplier methodologies or discounted cash flow.

The following table provides additional information related to the valuation of the investments classified by the University as Level 3.

#### QUANTITATIVE INFORMATION ABOUT LEVEL 3 FAIR VALUE MEASUREMENT

	Level 3 fair value	Valuation technique(s)	Unobservable input	Range (weighted average)
Equity		·	<u> </u>	
Domestic equity	\$ 1,656	Start-up valuation		
Foreign equity	6,744	Third-party pricing		
Hedged equity	4,945	Third-party pricing		
Private equity	18,016	Discounted cash flow/market	Discount rate	4.4% - 12.1% (5.2%)
		comparable		, , , , , , , , , , , , , , , , , , , ,
			Discount for lack of marketability	15% - 20% (19.5%)
			Earnings multiple	7.4x
			Revenue multiple	1.7x
	3,745	Start-up valuation		
	26,061	Third-party pricing		
Fixed income				
Asset backed fixed	929	Discounted cash flow	Discount rate	2.6% - 3.7% (3.4%)
Corporate bonds	2,888	Third-party pricing		
Preferred/convertible	5,014	Market comparable	Dividend multiple	17.0x - 21.2x (20.4x)
Real assets	12,720	Cap rate valuation model	Capitalization rate	4.5% - 6.9% (5.3%)
	3,020	Discounted cash flow	Discount rate	15%
			Years to maturity	12
	1,176	Sales comparison approach	Recent transactions	
	4,700	Start-up valuation		
	2,337	Third-party pricing		
Other	8,252	Discounted cash flow	Discount rate Years to maturity	2.1% - 5.3% (2.6%) 5 - 14 (8)
	1,170	Start-up valuation	,	(**
	14,654	Third-party pricing		
Total Level 3 investments	\$ 118,027			

The methods described above may produce a fair-value calculation that is not indicative of net realizable value or reflective of future fair values. Furthermore, while the University believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

#### **E. Derivative Holdings**

The use of certain financial derivative instruments is governed by either the University's written investment policy, specific manager guidelines, or partnership/fund agreement documents. Specifically, financial derivative instruments may be used to manage foreign currency exposure, to obtain commodity exposure, to create synthetic exposure, or to obtain protection against increases in interest rates. These derivatives, based on definitions in GAAP, are not designated as hedging instruments.

As part of its overall diversification strategy, the University allocates a percentage of its assets to investment managers specializing in securities whose prices are denominated in foreign currencies. The investment guidelines provide discretion to these managers to adjust the foreign currency exposure of their investment portfolios by using derivative instruments. The derivatives are used for buying or selling foreign currency under a short-term contract to lock in the dollar cost of a specific pending purchase or sale of a foreign security, and selling foreign currency under a longer-term contract to hedge against a general decline in the dollar value of foreign security holdings.

Some investment managers have discretion, limited by overall investment guidelines, to use derivative instruments to create investment exposures that could not be created as efficiently with other types of investments. These synthetic exposures in the University's portfolio consist of four types: 1) forward contracts used to increase exposure to a foreign currency beyond the level of underlying security investments in that currency; 2) futures contracts used to create exposures to assets where the futures market provides a more efficient investment than the underlying securities; 3) swap contracts, also used to provide a more efficient means to gain exposure than the underlying securities; and 4) option contracts used to adjust the exposure of the long-term portfolio to interest rate volatility.

The University entered into option contracts on interest rate swaps as a way to mitigate the impact of a significant rise in interest rates in the future. Under the terms of certain option contracts on interest rate swaps, the University is obligated to make future premium payments. At June 30, 2017 and 2016, the University had unfunded premium payment commitments of \$4,097 and \$5,411 respectively. The University's premium payment schedule is as follows: \$1,025 for the year ending June 30, 2018; and \$1,024 annually for the years ending June 30, 2019, 2020 and 2021.

The following table provides detailed information on the derivatives included in the investment portfolio as of June 30.

FAIR VALUE OF DERIVATIVE HOLDINGS IN STATEMENT OF FINANCIAL POSITION

			2017			2016	
		 Notional	# of		Notional	# of	
Location	Derivative type	amount	Contracts	Fair value	amount	Contracts	Fair value
Investments	•						
	Foreign currency	\$ -	43	\$ (341)	\$ -	35	\$ 252
	Synthetic	(3,464)	2	(1)	(3,458)	1	(95)
	Interest rate	301,004	3	(1,918)	444,703	4	(3,684)
Total fair v	alue	\$ 297,540	48	\$ (2,260)	\$ 441,245	40	\$ (3,527)

#### 4. LAND, BUILDINGS, AND EQUIPMENT

#### A. General Information

Land, buildings, and equipment are detailed as follows:

#### LAND, BUILDINGS, AND EQUIPMENT

	Book value at	Book value at
	June 30, 2017	June 30, 2016
Land, buildings, and equipment	\$ 5,745,468	\$ 5,384,208
Furniture, equipment, books, and collections	1,310,794	1,236,420
Capital Leases	68,708	4,452
Construction in progress	488,652	489,898
Total before accumulated depreciation	\$ 7,613,622	\$ 7,114,978
Accumulated depreciation	(3,356,815)	(3,105,693)
Net land, buildings, and equipment	\$ 4,256,807	\$ 4,009,285

Certain properties, for which the University has possession and beneficial use for an indefinite period and which other entities may also record as assets, are included in the consolidated statement of financial position, as follows: (1) land, buildings, and equipment of the Contract Colleges aggregating \$742,876 and \$712,553 at June 30, 2017 and 2016, respectively, the acquisition cost of which was borne primarily by New York State and (2) land, buildings, and equipment for which titles rest with government and corporate agencies aggregating \$2,438 and \$2,048 at June 30, 2017 and 2016, respectively.

The future commitments on capital projects in progress, excluding projects funded by New York State, are approximately \$100,229 at June 30, 2017.

#### **B. Cornell Tech Campus**

In December 2011, the University, in partnership with Technion-Israel Institute of Technology, won the Applied Sciences NYC competition to build and operate a new applied sciences and engineering campus in New York City. The city committed through the New York City Economic Development Corporation (NYCEDC) a location and seed funding for the initial construction of the new campus. Under the terms of the agreement with the NYCEDC and the ninety-nine year ground lease for Roosevelt Island, the University made the commitment to create the new applied sciences campus in three phases, with milestones in 2017, 2027, and 2037. In addition, the University has enrollment, faculty, and other operational commitments as part of the agreement.

In 2014, the University broke ground on Roosevelt Island, taking the first steps toward the completion of the Phase I development commitments, which include the first academic building, a residential building, a corporate colocation space, and an executive education facility. The total cost of demolition of the existing structures on the site is considered to be a prepaid cost of the ground lease, and will be amortized over the term of the lease. At June 30, 2017, the unamortized amount of the demolition costs is \$53,458.

On March 31, 2016, the University entered into a joint venture with the Hudson Companies through its subsidiary H/R Tech Residential LLC. The purpose of the new joint venture, called Hudson Cornell Residential JV LLC, is to construct and operate the new residential facility on the Cornell Tech campus. The University has an equity interest of 86.59 percent and controlling financial interest and, therefore, consolidates the joint venture. This consolidation resulted in \$130,786 included in land, buildings, and equipment attributed to the joint venture at June 30, 2017. In addition, Hudson Cornell Tech LLC, a subsidiary of Hudson Cornell Residential JV LLC, held bonds and notes payable related the construction of the residential building (the House) (see Note 8A). Unrestricted net assets of \$5,625 and \$5,754, representing the minority interest of H/R Tech Residential LLC, is also consolidated into the University's net assets at June 30, 2017 and 2016, respectively. Operating activity is immaterial in the current fiscal year.

The Bridge is a condominium association comprised of a "Cornell Unit" and one or more other units initially owned by the developer and/or its affiliates. The University has entered into a lease agreement for the Cornell Unit for a term of thirty-five years. The capital lease is reflected in the consolidated statement of financial position as increase on the land, buildings, and equipment line of \$64,212 as of June 30, 2017, with a corresponding liability presented as obligations under capital leases. As part of the lease agreement, the University has also made a commitment in the form of gap rent for the

developer's unit(s) in amount not to exceed \$2,982 annually, or \$44,731 over twenty years. The annual amount gap rent is adjusted based upon the occupancy level in the developer's unit(s). During the year ended June 30, 2017, no payment was made for gap rent.

Cornell Tech met its first milestone when faculty, staff, and researchers moved into the first academic building (Bloomberg Center) on Roosevelt Island during the summer of 2017, and students, faculty, and researchers moved into the House in advance of the fall semester. In addition, programs and operations in both the Bloomberg Center and the corporate colocation building ("The Bridge") are slated to begin during the 2017-2018 academic year, rounding out the University's operational commitments.

#### 5. OBLIGATIONS UNDER SPLIT INTEREST AGREEMENTS AND FUNDS HELD IN TRUST BY OTHERS

The University reports its obligations under split interest agreements at fair value. The fair value of the obligation is calculated annually and considered Level 3 in the fair-value hierarchy. The discount rate is based on average return of investment grade corporate bonds, weighted using a schedule of actuarial estimates of the lives of the income beneficiaries and the relative value of the agreements.

The University's interest in funds held in trust by others is considered Level 3 in the fair-value hierarchy. Trusts in which the University has an income interest are valued annually using estimated cash flows based on average actual income over three years. Remainder interests are based on annual valuation reports received from the funds' trustees. The discount rates used to estimate present value are based on the average return of investment grade corporate bonds, weighted according to a schedule of actuarial estimates.

The following tables summarize the fair values and activity of funds held in trust by others and obligations under split interest agreements.

#### SPLIT INTEREST AGREEMENTS AT FAIR VALUE AND LEVEL 3 QUANTITATIVE INFORMATION

E da bald :- km kb ak a	<b>2017</b> Total	Valuation methodologies	Unobservable inputs	Range (weighted average)
Funds held in trust by others Remainder	\$ 50,067	Present value calculation	Discount rate Years to maturity	3.20% 0-56 (13)
Lead and perpetual Total funds held in trust by others	\$ 110,917	Discounted cash flow	Discount rate	4.30%
Obligations under split interest agreements	\$ 133,459	Discounted cash flow	Discount rate Years to maturity	3.60% 0-76 (16)

#### SUMMARY OF LEVEL 3 SPLIT INTEREST AGREEMENT ACTIVITY

	Fair value										Fair value
	at								Tro	ansfers	at
	June 30,		Realized	U	nrealized				in/(	out) of	June 30,
	2016	go	ain/(loss)	g	ain/(loss)	P	urchases	Sales	L	evel 3	2017
Funds held in trust by others					,				,		
Remainder	\$ 64,650	\$	1,208	\$	488	\$	2,280	\$ (18,559)	\$	-	\$ 50,067
Lead and perpetual	60,310		355		185		-	-		-	60,850
Total funds held in trust by others	\$ 124,960	\$	1,563	\$	673	\$	2,280	\$ (18,559)	\$	-	\$110,917
Obligations under split interest agreements	\$ 135,444	\$	-	\$	(1,985)	\$	-	\$ -	\$	-	\$133,459

#### 6. DEFERRED BENEFITS

#### A. General Information

Accrued employee benefit obligations as of June 30 include:

#### SUMMARY OF DEFERRED BENEFITS

	2017	 2016
Postemployment benefits	\$ 27,526	\$ 27,694
Pension and other postretirement benefits	395,243	445,623
Other deferred benefits	187,747	183,093
Total deferred benefits	\$ 610,516	\$ 656,410

Accrued postemployment benefits include workers' compensation and medical continuation benefits for those on long-term disability. Other deferred benefits include primarily vacation accruals, deferred compensation, and medical benefit claims incurred but not reported. Additionally, the University provides various benefits to former or inactive employees after employment, but before retirement, that are recognized when they are earned.

#### **B. Pension and Postretirement Plans**

The University's employee retirement plan coverage is provided by two basic types of plans: one based on a predetermined level of funding (defined contribution), and the other based on a years-of-service calculation to determine the level of benefit to be provided (defined benefit).

The primary defined contribution plans for Endowed Ithaca and for exempt employees (those not subject to the overtime provisions of the Fair Labor Standards Act) at WCM are carried by the Teachers Insurance and Annuity Association, the College Retirement Equities Fund, the Vanguard Group (WCM only), and Fidelity Investments (Endowed Ithaca only), all of which permit employee contributions. Total contributions of the Endowed Ithaca and WCM plans for the fiscal years ended June 30, 2017 and 2016 amounted to \$111,336 and \$103,083 respectively.

WCM maintains the University's only defined benefit plan. The participants include non-exempt employees at WCM who meet the eligibility requirements for participation. The plan was frozen in 1976 for exempt employees at WCM and the accrued benefits were merged with the active non-exempt retirement plan in 1989. In accordance with Employee Retirement Income Security Act (ERISA) requirements for the defined benefit plans, the University must fund annually with an independent trustee an actuarially determined amount that represents normal costs.

Additionally, the University provides health and life insurance benefits for eligible pre-Medicare and Medicare-eligible retired employees and their dependents, based on the attainment of a set of defined service and age requirements. The cost of providing these benefits is accrued during the service lives of employees.

#### C. Obligations and Funded Status

The following table sets forth the pension and postretirement plans' obligations and funded status as of June 30:

#### SUMMARY OF OBLIGATIONS AND FUNDED STATUS

		Pension	benefi	ts	Other pos	retirement		
		2017		2016	2017		2016	
Change in plan assets			•					
Fair value of plan assets at beginning of year	\$	96,109	\$	92,405	\$ 257,704	\$	263,208	
Actual return on plan assets		13,147		1,963	38,434		(6,181)	
Employer contribution		6,000		5,500	23,052		18,887	
Benefits paid		(3,726)		(3,759)	(18,052)		(18,210)	
Fair value of plan assets at end of year	\$	111,530	\$	96,109	\$ 301,138	\$	257,704	
Change in benefit obligation								
Benefit obligation at beginning of year	\$	160,601	\$	121,274	\$ 638,835	\$	538,217	
Service cost (benefits earned during the period)		9,509		7,199	30,535		24,731	
Interest cost		6,758		6,190	24,734		25,150	
Actuarial (gain)/loss		2,728		29,697	(46,851)		65,896	
Gross benefits paid		(3,726)		(3,759)	(16,614)		(16,497)	
Less: federal subsidy on benefits paid		-		-	1,402		1,338	
Projected benefit obligation at end of year	\$	175,870	\$	160,601	\$ 632,041	\$	638,835	
Funded status	\$	(64,340)	\$	(64,492)	\$ (330,903)	\$	(381,131)	
Amounts recognized in the consolidated								
statement of financial position	\$	(64,340)	\$	(64,492)	\$ (330,903)	\$	(381,131)	
Amounts recorded in unrestricted net assets not yet amortized as co	mpone	nts of net perio	dic be	nefit cost				
Prior service cost	\$	(416)	\$	(508)	\$ -	\$	-	
Net actuarial (gain)/loss		44,933		52,307	 97,315		171,844	
Amount recognized as reduction in unrestricted net assets	\$	44,517	\$	<i>5</i> 1, <i>7</i> 99	\$ 97,315	\$	171,844	
Amounts recorded in nonoperating pension and postretirement cha Change in amounts not yet amortized as components of net	nges							
periodic benefit cost	\$	7,282	\$	(33,584)	\$ 74,529	\$	(89,758)	
Other components of net periodic benefit cost		(3,621)		(339)	 (13,977)		(7,471)	
Total nonoperating pension and postretirement changes	\$	3,661	\$	(33,923)	\$ 60,552	\$	(97,229)	

The accumulated benefit obligation for the pension plans was \$150,761 and \$136,219 at June 30, 2017 and 2016, respectively. The accumulated benefit obligation differs from the projected benefit obligation in the table above in that it includes no assumptions about future compensation levels. It represents the actuarial present value of future payments to plan participants using current and past compensation levels. For postretirement plans other than pensions, the accumulated benefit obligation is the same as the projected benefit obligations because the liabilities are not compensation-related.

#### **D. Net Periodic Benefit Cost**

Net benefit expense related to the pension and postretirement plans for the fiscal years ended June 30 includes the following components:

#### NET PERIODIC BENEFIT COST

NET PERIODIC BENEFIT COST	Pension	benefits		Other postretirement					
	2017		2016		2017	2016			
Service cost (benefits earned during the period)	\$ 9,509	\$	7,199	\$	30,535	\$	24,731		
Interest cost	6,758		6,190		24,734		25,150		
Expected return on plan assets	(6,621)		(6,552)		(18,811)		(19,223)		
Amortization of prior service cost	(92)		(92)		-		-		
Amortization of net (gain)/loss	3,576		793		8,054		1,543		
Net periodic benefit cost	\$ 13,130	\$	7,538	\$	44,512	\$	32,201		

The amounts of prior service costs and actuarial gains/losses that will be amortized into net periodic benefit cost for the year ending June 30, 2018 are estimated as follows:

#### ESTIMATED COMPONENTS OF NET PERIODIC BENEFIT COST

	 Pension benefits	Other postretiremen				
Prior service cost	\$ (92)	\$	-			
Net actuarial (gain)/loss	 2,453		3,204			
Total	\$ 2,361	\$	3,204			

#### **E.** Actuarial Assumptions

Assumptions used in determining the pension and postretirement plans' benefit obligations and net periodic costs are:

#### SUMMARY OF ACTUARIAL ASSUMPTIONS

	Pension be	nefits	Other post	retirement
	2017	2016	2017	2016
Used to calculate benefit obligations at June 30				
Discount rate	4.04%	3.94%	3.97% / 3.96%	3.83% / 3.79%
Rate of compensation increase	3.00%	3.00%		
Used to calculate net periodic cost at July 1				
Discount rate	3.94%	4.80%	3.83% / 3.79%	4.67% / 4.61%
Expected return on plan assets	7.00%	7.00%	7.30%	7.30%
Rate of compensation increase	3.00%	3.00%		
Assumed health care cost trend rates				
Health care cost trend rate assumed for next year	n/a	n/a	6.00%	6.50%
Ultimate trend rate	n/a	n/a	4.50%	4.50%
Years to reach ultimate trend rate	n/a	n/a	5	5

The health care cost trend rate assumption has a significant effect on the amounts reported for other postretirement (health care) plans. Increasing the health care cost trend rate by one percent in each future year would increase the benefit obligation by \$150,992 and the annual service and interest cost by \$15,545. Decreasing the health care cost trend rate by one percent in each future year would decrease the benefit obligation by \$102,830 and the annual service and interest cost by \$11,025.

#### F. Plan Assets

The University's overall investment objectives for the pension plan and postretirement medical benefit plan assets are broadly defined to include an inflation-adjusted rate of return that seeks growth commensurate with a prudent level of risk. To achieve this objective, the University has established fully discretionary trusts with a custodial bank as trustee and investment manager for WCM's defined benefit pension plan and the postretirement medical benefit plan for the University's endowed employees on the Ithaca campus. Under those trust agreements, the custodial bank establishes investment allocations and implements those allocations through various investment funds in order to carry out the investment objectives. The custodial bank has also been appointed as investment manager for WCM's postretirement medical benefit plan with full discretion as to investment allocations in specific named funds managed by the bank.

The University's Retirement Plan Oversight Committee ("RPOC") is chaired by the Vice President and Chief Human Resources Officer, with committee members selected from across multiple disciplines at the University. Its primary purpose is to assist the University in fulfilling its fiduciary responsibilities by providing guidance and oversight for the University's retirement plans, including oversight of the custodial bank. The RPOC, in accordance with an Investment Policy Statement, and in conjunction with its outside consultant, regularly reviews the investment strategies, along with evolving institutional objectives, and will make recommendations regarding possible changes to asset allocation and investment managers accordingly.

Risk mitigation is achieved by diversifying investments across multiple asset classes, investing in high quality securities, and permitting flexibility in the balance of investments in the recommended asset classes. Market risk is inherent in any portfolio, but the investment policies and strategies are designed to avoid concentration of risk in any one entity, industry, country, or commodity. The funds in which the plan assets are invested are well-diversified and managed to avoid concentration of risk.

The expected rate of return assumptions are based on the expertise provided by investment managers at the custodial bank. The factors that impact the expected rates of return for various asset types includes assumptions about inflation, historically based real returns, anticipated value added by investment managers, and expected average asset allocations. The expected return on plan assets by category for the fiscal year ended June 30, 2017 are similar to the prior fiscal year: 7.4 percent on equity securities, 3.6 percent on fixed income securities, and 5.5 percent on real estate, compared to 7.2 percent, 4.4 percent and 5.5 percent, respectively.

The fair values of the pension plan assets and postretirement medical benefit plan assets are categorized according to the fair-value hierarchy. Both the pension plan and postretirement medical benefit plans invest in funds to meet their investment objectives. The asset allocation is based on the underlying assets of the various funds. The fair-value level is based upon each fund as the unit of measure. The fair value of the plans' assets as of June 30 and the rollforward for Level 3 assets are disclosed in the tables below.

#### **SUMMARY OF PLAN ASSETS**

	Target	Pension ber	nefits	Other postretirement		
	allocation	2017	2016	2017	2016	
Percentage of plan assets						
Equity securities	39-85%	65%	62%	77%	72%	
Fixed income securities	15-55%	29%	32%	23%	28%	
Real estate	0-5%	6%	6%	0%	0%	
Total		100%	100%	100%	100%	

#### PENSION PLAN ASSETS AT FAIR VALUE

	Level 1 fair value	Level 2 fair value	Level 3 fair value		<b>2017</b> Total	<b>2016</b> Total
Cash and cash equivalents	 	 	 			 
Money market	\$ 342	\$ -	\$ -	\$	342	\$ 287
Equity securities						
U.S. small cap	-	7,629	-		7,629	5,695
U.S. large cap	-	32,008	-		32,008	28,677
U.S. multi cap	-	6,798	-		6,798	5,757
U.S. REITS	-	2,695	-		2,695	2,411
Emerging markets	-	8,053	-		8,053	4,795
International equity	-	1 <i>5,</i> 371	-		1 <i>5,</i> 3 <i>7</i> 1	11,836
Fixed income securities						
U.S. high yield bonds	-	6,140	-		6,140	4,846
Corporate bonds	-	20,557	-		20,557	20,093
Mortgage-backed securities	-	30	2,985		3,015	5,009
International fixed income	-	2,176	-		2,176	1,041
Other types of investments						
Real estate	-	-	6,746		6,746	5,736
Receivable for investments sold	-	-	-		-	769
Payable for investments purchased		 <u>-</u>	 =		-	 (843)
Total assets	\$ 342	\$ 101,457	\$ 9,731	\$	111,530	\$ 96,109

#### SUMMARY OF LEVEL 3 PENSION PLAN ACTIVITY

	F	air value,								Tre	ansfers	F	air value,
		June 30,	Re	ealized	Uni	realized				in/	out) of		June 30,
		2016	gain	/(loss)	gai	in/(loss)	P	urchases	 Sales		Level 3		2017
Mortgage-backed securities	\$	2,627	\$	-	\$	51	\$	307	\$ -	\$	-	\$	2,985
Real estate		5,736				209		801	-		-		6,746
Total Level 3 assets	\$	8.363	\$	-	\$	260	\$	1.108	\$ -	\$		\$	9.731

#### POSTRETIREMENT PLAN ASSETS AT FAIR VALUE

	Level 1 fair value		Level 2 fair value		Level 3 fair value		<b>2017</b> Total		<b>2016</b> Total	
Cash and cash equivalents										
Money market	\$	4,816	\$	-	\$	-	\$	4,816	\$	2,428
Equity securities										
U.S. small cap		-		33,086		-		33,086		27,058
U.S. large cap		-		92,696		-		92,696		80,380
Emerging markets		-		36,549		-		36,549		26,311
International equity		-		61,415		-		61,415		43,750
U.S. REITS		-		7,564		-		7,564		7,160
Fixed income securities										
U.S. high yield bonds		-		18,710		-		18 <i>,</i> 710		11,528
Corporate bonds		-		40,199		-		40,199		55,067
Emerging markets debt		-		6,087		-		6,087		4,017
Receivable for investments sold		2,125		-		-		2,125		1,425
Payable for investments purchased		(2,109)		-		-		(2,109)		(1,420)
Total assets	\$	4,832	\$	296,306	\$	-	\$	301,138	\$	257,704

#### G. Expected Contributions and Benefit Payments

The expected annual contributions and benefit payments that reflect anticipated service are as follows:

#### EXPECTED CONTRIBUTIONS AND BENEFIT PAYMENTS

			 Other postretirement		
	Pe	nsion benefits	 Employer paid	Government subsidy	
University contributions					
2018	\$	6,000	\$ 23,077	n/a	
Future benefit payments					
2018		5,989	19,347	1,773	
2019		5,969	21,324	1,955	
2020		6,474	23,191	2,152	
2021		7,299	24,952	2,354	
2022		7,678	26,500	2,572	
2023-2027		46,112	161,680	16,828	

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 established a prescription drug benefit known as "Medicare Part D" that also established a federal subsidy to sponsors of retiree healthcare benefit plans. The estimated future government subsidy amounts are reflected in the table above.

#### H. Contract College Employees

Employees of the Contract Colleges are covered under the New York State pension plans. Contributions to the state retirement system and other employee benefit costs are paid directly by the state. The amount of direct payments made by the state on behalf of Contract College employees are not currently determinable and are not included in the consolidated financial statements. The University reimburses the state for employee benefit costs on certain salaries, principally those associated with externally sponsored programs. The amounts reimbursed to the state during the fiscal years ended June 30, 2017 and 2016 were \$16,834 and \$18,192, respectively, and were included in operating expenses.

#### 7. FUNDS HELD FOR OTHERS

The University, in limited instances, invests funds on behalf of related parties. Independent trustees are responsible for the designation of income distribution. The value of the funds included on the investment line in the consolidated statement of financial position was \$259,275 and \$268,421 for the fiscal years ended June 30, 2017 and 2016, respectively. The University recognizes an offsetting liability for funds held for others, with one adjustment described below.

The New York Hospital-Cornell Medical Center Fund, Inc. ("Center Fund"), which benefits Weill Cornell Medicine and the New York-Presbyterian Hospital, is the major external organization invested in the University's long-term investment portfolio with assets and an offsetting liability of \$174,655 and \$162,153 for the fiscal years ended June 30, 2017 and 2016, respectively. Because WCM holds a significant beneficial interest in the assets of the Center Fund, the liability is reduced by \$122,182 and \$115,356 for the fiscal years ended June 30, 2017 and 2016, respectively, representing the present value of the future income stream that will benefit WCM.

The Boyce Thompson Institute for Plant Research ("BTI") is an independent, non-profit organization whose mission is to advance and communicate scientific knowledge in plant biology to improve agriculture, protect the environment, and enhance human health. In 2017, BTI elected to withdraw its assets from the University's long-term investment portfolio. The withdrawal was completed in July 2017. The fair value of BTI investments was \$44,881 and \$68,824 as of June 30, 2017 and 2016, respectively, with an offsetting liability on the University's consolidated statement of financial position.

#### 8. BONDS AND NOTES PAYABLE

#### A. General Information

Bonds and notes payable are reported at carrying value, which is the par amount net of unamortized issuance costs, premiums, and discounts. Bonds and notes payable as of June 30 are summarized as follows:

#### SUMMARY OF BONDS AND NOTES PAYABLE

				Final
	2017	 2016	Interest rates	maturity
Dormitory Authority of the State of New York (DASNY)				
Revenue Bond Series				
1990B-fixed rate	\$ 31,150	\$ 34,275	4.50 to 5.00%	2025
2000A-variable rate/monthly	37,875	40,300	0.78 to 1.29	2029
2000B-variable rate/monthly	52,805	55,720	0.78 to 1.29	2030
2004A&B-variable rate/weekly	65,850	68,750	0.40 to 0.91	2033
2008B&C-fixed rate	109,210	112,235	5.00	2037
2009A-fixed rate	268,155	274,950	4.00 to 5.00	2039
2010A-fixed rate	285,000	285,000	4.00 to 5.00	2040
2016A-fixed rate	121,920	125,850	2.00 to 5.00	2035
Tax-exempt commercial paper	52,890	52,890	0.46 to 0.93	2037
Tompkins County Industrial Development Agency (TCIDA)				
2002A-variable rate/monthly	32,245	34,045	0.78 to 1.29	2030
2008A-fixed rate	59,155	60,885	3.00 to 5.00	2037
Empire State Development	1,500	1,625	-	2029
2009 Taxable-fixed rate	-	250,000	5.45	2017
2007A Taxable commercial paper	83,890	83,890	0.50 to 1.25	-
Hudson Cornell Residential JV LLC	80,949	28,218	2.72 to 3.48	2019
Other	 6,271	 6,502	4.90 to 6.63	2039
Outstanding bonds and notes payable	\$ 1,288,865	\$ 1,515,135		
Unamortized premium and issuance costs	 43,396	 52,233		
Total bonds and notes payable	\$ 1,332,261	\$ 1,567,368		

Debt and related debt service for borrowings by New York State for the construction and renovation of facilities of the Contract Colleges are not included in the consolidated financial statements because they are not liabilities of the University.

Under the DASNY Revenue Bond Series 1990B agreement, this bond series is a general obligation of the University and is secured by a pledge of revenue. The University has not granted a pledge of revenue on other debt.

During the fiscal year ended June 30, 2017, the University redeemed Series 2009 taxable bonds with a maturity date in January 2019. The University incurred a \$18,973 make-whole call premium on an early redemption, reported as non-operating other in the consolidated statement of activities. During the fiscal year ended June 30, 2016, the University restructured the DASNY Series 2000A and Series 2000B bonds and the TCIDA Series 2002A bonds to a ten-year, variable-rate direct purchase with Bank of America Merrill Lynch. The variable rate is calculated using a percentage of LIBOR plus the applicable margin. Additionally, the University issued \$125,850 DASNY Series 2016A fixed-rate bonds to effect a current refunding of DASNY Series 2006A bonds in order to achieve present value savings. The University wrote off \$6,042 of bond premium and \$2,265 of Series 2006 bond issuance costs.

Hudson Cornell Tech LLC, a subsidiary of Hudson Cornell Residential JV LLC (see Note 4B), contracted with Wells Fargo Bank, N.A. for a variable-rate building and equipment loan up to \$105,000. The University has consolidated \$80,949 and \$28,218 of debt attributable to the subsidiary at June 30, 2017 and 2016, respectively. The loan is secured by a security interest in the building and equipment.

The University maintains tax-exempt and taxable commercial paper programs. Tax-exempt commercial paper is used to finance qualified capital projects and equipment purchases for the Ithaca and WCM campuses. Taxable commercial paper is also used for these purposes, and can be used to finance short-term working capital needs. The maximum authorized amount of each commercial paper program is \$200,000.

Scheduled principal and interest payments on bonds and notes for the next five fiscal years and thereafter are shown below:

ANNUAL DEBT S	SERVICE RI	EQUIREMENTS		
Year		Principal	Interest	Total
2018	\$	30,955	\$ 41,205	\$ 72,160
2019		113,304	40,321	153,625
2020		33,714	36,758	70,472
2021		35,266	41,991	77,257
2022		36,949	40,653	77,602
Thereafter		1,038,677	 444,749	 1,483,426

\$ 1,288,865

The University estimates future interest payments on variable-rate debt based on the Securities Industry and Financial Markets Association (SIFMA) rate for tax-exempt debt and the London Interbank Offered Rates (LIBOR) rate for taxable debt.

645,677

\$ 1,934,542

#### **B.** Interest Rate Swaps

Total

The University approved the use of interest rate swaps to mitigate interest rate risk in the debt portfolio. Interest rate swaps are derivative instruments; however, their use by the University is not considered to be hedging activity, based on definitions in generally accepted accounting principles.

Through the use of interest rate swap agreements, the University is exposed to the risk that counterparties will fail to meet their contractual obligations. To mitigate counterparty risk, the University limits swap exposure for each counterparty. Master agreements with counterparties include netting arrangements that permit the University to net amounts due to the counterparty with amounts due from the counterparty. Utilizing netting arrangements reduces the maximum loss in the event of counterparty default.

The University's swap agreements contain a credit-rating-contingent feature in which the counterparties can request collateral on agreements in net liability positions. At June 30, 2017 and 2016, the University did not have collateral on deposit with any counterparty.

The University's interest rate swaps are valued as of June 30 by an independent third party that uses the mid-market levels, as of the close of business, to value each agreement. The valuations provided are derived from proprietary models based upon well-recognized financial principles and estimates about relevant future market conditions and the University's credit worthiness. The University's interest rate swaps are classified as Level 2 in the fair-value hierarchy.

At June 30, 2017, the University had five interest rate swap agreements to exchange variable-rate cash flows for fixed-rate cash flows without the exchange of the underlying principal amount. Net payments or receipts of the swap agreements are recorded as adjustments to the swap interest and change in value of interest rate swaps line in the consolidated statement

of activities. In all agreements in effect at June 30, 2017, the counterparty pays a variable interest rate equal to a percentage of the one-month LIBOR.

The following table provides detailed information on the interest rate swaps at June 30, 2017, with comparative fair values for June 30, 2016. The swaps are reported based on notional amount.

FAIR VALUE OF INTEREST RATE SWAPS IN STATEMENT OF FINANCIAL POSITION

Location		Notional amount	Interest rate	Termination date	Basis	 2017 Level 2 fair value	 2016 Level 2 fair value
Swap interest and cho	ange	in value of intere	st rate swaps				
	\$	34,045	4.52	July 1, 2030	LIBOR	\$ (6,939)	\$ (9,581)
		89,892	3.92	July 1, 2038	LIBOR	(21,289)	(29,407)
		275,000	3.88	July 1, 2040	LIBOR	(95,715)	(129,286)
		192,500	3.48	July 1, 2041	LIBOR	(40,574)	(58,169)
		193,829	3.77	July 1, 2044	LIBOR	(50,735)	(70,260)
Total fair value				•		\$ (215,252)	\$ (296,703)

#### C. Standby Bond Purchase Agreements

The University has a standby bond purchase agreement with BNY Mellon (expiring January 2019) to purchase the DASNY Series 2004 bonds in the event that these bonds cannot be remarketed. In the event that the bonds cannot be remarketed and the agreement is not otherwise renewed, the University will be required to redeem the bonds or refinance the bonds in a different interest rate mode. In the event that the bonds cannot be remarketed and the University did not redeem, the University will have a current obligation to purchase the bonds tendered.

#### D. Lines of Credit

The University maintains two \$100 million lines of credit with annual expiration dates of January 31 and April 1. As of June 30, 2017 and 2016, the University had not borrowed against either line of credit. The University records the working capital lines of credit activity and outstanding balances as other liabilities in the consolidated statement of financial position.

#### 9. LEASES

Although the University generally purchases, rather than leases, machinery and equipment, the University does enter into operating lease agreements for the use of real property. The University has also entered into capital leases for buildings; use of capital leases for equipment is immaterial. Total operating lease expenses were \$35,829 and \$31,284 for the fiscal years ended June 30, 2017 and 2016, respectively. The future annual minimum lease payments in the following table are payments under operating leases expiring at various dates through June 30, 2068, and principal payments under capital leases expiring at various dates through September 30, 2051.

ANNUAL MINIMUM LEASE PAYMENTS

Year	 Capital	 Operating
2018	\$ 5,216	\$ 42,851
2019	4,829	43,355
2020	4,250	42,339
2021	3,803	41,798
2022	3,503	38,154
Thereafter	46,241	436,586
Total minimum lease payments	\$ 67,842	\$ 645,083

#### **10. FUNCTIONAL EXPENSES AND STUDENT AID**

Total expenses by functional categories for the fiscal years ended June 30 are as follows:

#### **FUNCTIONAL EXPENSES**

	2017		2016
Instruction	\$ 867,208	\$	823,090
Research	598,089		594,050
Public service	128,583		123,850
Academic support	292,272		274,152
Student services	1 <i>7</i> 3,896		167,401
Medical services	1,133,964		1,063,601
Institutional support	569,532		548,525
Enterprises and subsidiaries	257,788		265,097
Total expenses	\$ 4,021,332	\$	3,859,766

The expenses for operations and maintenance of facilities, depreciation, and interest related to capital projects are allocated to functional categories based on square footage. The amounts allocated for operations and maintenance were approximately \$150,379 and \$177,241 for the fiscal years ended June 30, 2017 and 2016, respectively.

Student financial assistance is shown as a component of instruction expense unless the assistance is for tuition and mandatory fees. If the assistance is for tuition and mandatory fees, the amounts are recorded as scholarship allowance, which reduces tuition revenue. Total financial assistance amounts classified as instruction expense were \$45,262 and \$46,156 for the fiscal years ended June 30, 2017 and 2016, respectively.

#### 11. NET ASSETS

#### A. General Information

The University's net assets as of June 30 are as follows:

#### SUMMARY OF NET ASSETS

	Unrestricted	Temporarily restricted	Permanently restricted	<b>2017</b> Total	<b>2016</b> Total
Endowment					
True endowment	\$ (32,345)	\$ 1,557,031	\$ 3,030,208	\$ 4,554,894	\$ 3,952,559
Funds functioning as endowment (FFE)	1,427,824	352,801	-	1,780,625	1,631,638
Total true endowment and FFE	\$ 1,395,479	\$ 1,909,832	\$ 3,030,208	\$ 6,335,519	\$ 5,584,197
Funds held by others, perpetual	-	-	180,925	180,925	173,525
Total University endowment	\$ 1,395,479	\$ 1,909,832	\$ 3,211,133	\$ 6,516,444	\$ 5,757,722
Other net assets					
Operations	(306,192)	445,858	-	139,666	118,004
Student loans	5,302	113	48,361	53,776	52,210
Facilities and equipment	2,746,192	225,863	-	2,972,055	2,809,746
Split interest agreements	-	65,809	41,922	107,731	95,314
Funds held by others, other than perpetual	-	28,965	23,392	52,357	67,125
Contributions receivable, net	-	653,506	249,340	902,846	986,322
Long-term accruals	(720,256)	-	-	(720,256)	(847,449)
Total net assets	\$ 3,120,525	\$ 3,329,946	\$ 3,574,148	\$10,024,619	\$ 9,038,994

Unrestricted net asset balances for operations are primarily affected by operating activities and strategic decisions to invest expendable balances in funds functioning as endowment and capital projects. Long-term accruals represent longer term liabilities including the unfunded amount of pension and postretirement benefits, vacation accruals, conditional asset retirement obligations for asbestos remediation, and fair value adjustment on interest rate swaps.

#### **B. Endowment**

The University endowment net assets at June 30 were held in support of the following purposes:

#### SUMMARY OF ENDOWMENT PURPOSE

	 2017	 2016
Academic programs and research	\$ 1,840,470	\$ 1,511,788
Financial aid	1,601,140	1,463,388
Professorships	1,362,084	1,151,134
General purpose and other	1,249,398	1,202,771
Facilities support	103,893	97,691
CU Foundation	 178,534	 157,425
Total true endowment and FFE, end of year	\$ 6,335,519	\$ 5,584,197

Of the endowment assets held at the University, 96 percent was invested in the LTIP at June 30, 2017 and 2016. The LTIP is a mutual-fund-like vehicle used for investing the University's true endowments, funds functioning as endowment, and other funds that are not expected to be expended for at least five years. The University employs a unit method of accounting for the LTIP. Each participating fund enters into and withdraws from the pooled investment account based on monthly unit fair values. Participation in the LTIP using unrestricted funds requires a minimum investment of one hundred thousand dollars and a commitment of at least five years.

At June 30, 2017, 713 of 7,085 true endowment funds invested in the LTIP had a total historic dollar value of \$467,714 and a fair value of \$435,369, resulting in these endowments being underwater by a total of \$32,345. The University holds significant appreciation on endowments to offset these temporary decreases in value. The University has maintained these true endowment funds at their historical book value.

Changes in the endowment net assets, exclusive of funds held in trust by others, for the fiscal years ended June 30 are presented below:

#### SUMMARY OF ENDOWMENT ACTIVITY

	Unrestricted	Temporarily restricted	F	ermanently restricted	<b>2017</b> Total	<b>2016</b> Total
True endowment and FFE, beginning of year	 1,169,610	\$ 1,733,156	\$ 2	2,681,431	\$ 5,584,197	\$ 5,883,517
Investment return						
Net investment income	10,528	30,436		770	41,734	44,230
Net realized and unrealized gain/(loss)	203,032	437,714		740	641,486	(225,517)
Total investment return	\$ 213,560	\$ 468,150	\$	1,510	\$ 683,220	\$ (181,287)
New gifts	936	36,699		349,612	387,247	184,454
Amounts appropriated for expenditure/reinvestment	(83,175)	(236,642)		2,763	(317,054)	(295,331)
Other changes and reclassifications	94,548	(91,531)		(5,108)	(2,091)	(7,156)
Total true endowment and FFE, end of year	\$ 1,395,479	\$ 1,909,832	\$ :	3,030,208	\$ 6,335,519	\$ 5,584,197

#### **12. SELF-INSURANCE**

The University retains self-insurance for property, general liability, student health insurance, and certain health benefits and, for medical malpractice, has an equity interest in a multi-provider captive insurance company.

#### A. Medical Malpractice

The University obtains medical malpractice insurance through MCIC Vermont ("MCIC"). MCIC is a reciprocal risk retention group that provides medical malpractice insurance coverage and risk management services to its subscribers. MCIC is owned by the University, New York-Presbyterian Hospital, and four other institutions of higher education and their respective teaching hospitals. All of WCM's faculty physicians are enrolled in MCIC. The medical malpractice incurred but not reported liability is calculated annually on an actuarial basis.

WCM has recorded medical malpractice liabilities of \$151,006 and \$150,096 at June 30, 2017 and 2016, respectively, as other liabilities in the consolidated statement of financial position. In addition, WCM maintains a reinsurance program with MCIC with anticipated recoveries of \$103,726 and \$102,891, respectively, recorded as accounts receivable (Note 2A).

#### B. Student Health Plan

The University has established a self-funded student health plan under Section 1124 of the New York State Insurance Law ("NYSIL"). The Student Health Plan ("SHP") provides health insurance coverage to students at the University's Ithacabased campuses. The table below presents a summary of SHP operations occurring during the University's fiscal years ended June 30.

#### SUMMARY OF STUDENT HEALTH PLAN OPERATIONS

	July 1 - August 16 orior plan year)	August 17 - June 30 urrent plan year)	<b>2017</b> Fiscal year total	July	1 - August 16 (prior plan year)	August 17 - June 30 urrent plan year)	F	2016 iscal year total
Total premium revenue	\$ 3,693	\$ 26,965	\$ 30,658	\$	3,652	\$ 24,753	\$	28,405
Expenses								
Medical and prescription drug expense	2,976	14,264	17,240		2,843	14,348		1 <i>7,</i> 191
Health center capitation	786	5,299	6,085		463	5,088		5,551
Administrative fees	82	2,387	2,469		358	2,626		2,984
Total expenses	\$ 3,844	\$ 21,950	\$ 25,794	\$	3,664	\$ 22,062	\$	25,726
Net income from health plan operations	\$ (151)	\$ 5,015	\$ 4,864	\$	(12)	\$ 2,691	\$	2,679

The University has established reserves with the amounts necessary to satisfy obligations of the plan. Based on an analysis and recommendation of a qualified actuary, and with the approval of New York State, the reserve for medical claims incurred but not reported ("IBNR") and claims reported but not paid ("RBNP") is maintained at an amount not less than 14.5 percent of expected medical claims and 5 percent of expected pharmacy drug claims. In addition, a separate contingency reserve has been established for the purpose of satisfying unexpected obligations in the event of termination of the plan. The contingency reserve is maintained at an amount not less than 5 percent of the total current plan year premiums and is invested in the University's endowment. NYS requires that the assets of the contingency reserve consist of certain investments of the types specified in Section 1404 of NYSIL. The specified types of investments include U.S. government securities categorized in fair-value hierarchy Level 1, of which the University holds \$42,897 and \$65,622 in its investment portfolio as of June 30, 2017 and 2016 respectively (Note 3B). Premium revenue is billed in advance of the plan year (unearned) and recognized as revenue on a monthly basis as coverage is provided. The changes in the unearned premiums and SHP reserves during the fiscal years ended June 30 are presented below.

#### SUMMARY OF STUDENT HEALTH PLAN UNEARNED PREMIUMS

		20			2016					
		Unearned premiums				Unearned	premiums			
	2	2015-2016 plan year		2016-2017	2	2014-2015	:	2015-2016		
				plan year		plan year		plan year		
Balance as of July 1	\$	3,625	\$	-	\$	3,412	\$	-		
Balance as of June 30		-		2,270		-		3,625		
Net change	\$	(3,625)	\$	2,270	\$	(3,412)	\$	3,625		

#### SUMMARY OF STUDENT HEALTH PLAN RESERVES

	IBNR/RBI	re .	Contingency reserve					
	2017				2017	2016		
Balance as of July 1	\$ 2,500	\$	2,409	\$	1,547	\$	1,374	
Balance as of June 30	3,203		2,500		1,723		1,547	
Net change	\$ 703	\$	91	\$	176	\$	173	

#### **13. CONTINGENT LIABILITIES**

The University is a defendant in various legal actions, some of which are for substantial monetary amounts, that arise out of the normal course of its operations. Although the final outcome of the actions cannot be foreseen, the University's administration is of the opinion that eventual liability, if any, will not have a material effect on the University's financial position.

#### **14. SUBSEQUENT EVENTS**

The University has performed an evaluation of subsequent events through October 25, 2017, the date on which the consolidated financial statements were issued and determined no material impact on the University's consolidated financial statements.

## Cornell University Schedule of Expenditures of Federal Awards Year Ended June 30, 2017

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Student Financial Assistance Cluster								
Department of Education								
Federal Work-Study Program	84.033		\$ 3,269,490	\$ -	-	-	\$ 3,269,490	_
Federal Supplemental Educational Opportunity Grants	84.007		2,691,222		-	<del>-</del>	2,691,222	_
Federal Perkins Loan Program - Outstanding Loans as of July 1, 2016	84.038		48,189,329	-	-	-	48,189,329	-
Federal Perkins Loan Program - New Loans Issued in 2017	84.038		5,445,224	-	-	-	5,445,224	-
Federal Perkins Loan Program - Administrative Cost Allowance	84.038		488,525	-	-	-	488,525	-
Federal Pell Grant Program	84.063		10,154,132	-	-	-	10,154,132	-
Federal Direct Student Loans-Unsubsidized	84.268		44,742,670	-	-	-	44,742,670	-
Federal Direct Student Loans-PLUS	84.268		49,908,210	-	-	-	49,908,210	-
Federal Direct Student Loans-Subsidized	84.268		14,259,598		-	<del>-</del>	14,259,598	
Department of Education Total			179,148,400				179,148,400	
Department of Health and Human Services								
Health Professions Student Loans, Including Primary Care	02.242		5 657 647				5 657 647	
Loans/Loans for Disadvantaged Students - Outstanding Loans as of July 1, 2016	93.342		5,657,647	-	-	-	5,657,647	-
Health Professions Student Loans, Including Primary Care	02.242		472,740				472.740	
Loans/Loans for Disadvantaged Students - New Loans Issued in 2017	93.342				-	<del>-</del>	472,740	
Department of Health and Human Services Total			6,130,387				6,130,387	
Student Financial Assistance Cluster Total			185,278,787				185,278,787	
Research & Development Cluster								
Department of Agriculture								
Department of Agriculture, Other	10.RD	SCG 16 010	-	18,350	New York Farm Viability Institute	SCG 16 010	18,350	-
Department of Agriculture, Other	10.RD	SCB15066	-	115,457	Center For Produce Safety	SCB15066	115,457	-
Agricultural Marketing Service								
Marketing Agreements and Orders	10.155		37,345	_	-	-	37,345	-
Federal-State Marketing Improvement Program	10.156		20,676	_	-	-	20,676	-
Inspection Grading and Standardization	10.162		418,770	-	-	-	418,770	-
Market Protection and Promotion	10.163		· -	31,500	American Sheep Industry Association Inc	12-25-G-0904	31,500	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	249,492	NYS Dept Of Ag & Markets	14-SCBGP-NY-0036	249,492	5,382
Specialty Crop Block Grant Program - Farm Bill	10.170		-	11,738	NYS Dept Of Ag & Markets	16SCBGPNY0030	11,738	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	2,038	University Of California Davis	SCB13063-USDA #12-25-B-1657	2,038	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	82,222	New York Farm Viability Institute	SCB 15 003	82,222	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	50,300	New York Farm Viability Institute	SCG 15 002	50,300	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	22,135	New York Farm Viability Institute	SCG 15 010	22,135	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	51,222	New York Farm Viability Institute	SCG 15 012	51,222	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	54,899	New York Farm Viability Institute	SCG 15 015	54,899	6,660
Specialty Crop Block Grant Program - Farm Bill	10.170		-	74,012	New York Farm Viability Institute	SCG 15 020	74,012	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	36,628	New York Farm Viability Institute	SCG 16 004	36,628	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	2,320	New York Farm Viability Institute	SCG 16 008	2,320	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	31,025	New York Farm Viability Institute	SCG 16 011	31,025	-
Specialty Crop Block Grant Program - Farm Bill	10.170		-	72,040	New York Farm Viability Institute	SCG 16 012	72,040	-

The accompanying notes are an integral part of the Schedule of Expenditures of Federal Awards.

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Specialty Crop Block Grant Program - Farm Bill	10.170		-	72,963	Center For Produce Safety	16-SCBGP-CA-0035	72,963	18,411
Local Food Promotion Program	10.172			4,933	Buffalo Niagara Medical Campus, Inc.	-	4,933	
Agricultural Marketing Service Subtotal			476,791	849,467			1,326,258	30,453
Agricultural Research Service								
Agricultural Research_Basic and Applied Research	10.001		3,136,147	-	-	-	3,136,147	-
Agricultural Research_Basic and Applied Research	10.001			31,670	U.S. Highbush Blueberry Council	-	31,670	
Agricultural Research Service Subtotal			3,136,147	31,670			3,167,817	-
Animal and Plant Health Inspection Service								
Plant and Animal Disease, Pest Control, and Animal Care	10.025		657,473	-	-	-	657,473	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	17,207	American Public Gardens Association	15-8100-1519-CA	17,207	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	72,511	American Public Gardens Association	16-8100-1519-CA	72,511	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	20,784	NYS Dept Of Ag & Markets	15-8236-0857-CA	20,784	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	56,277	NYS Dept Of Ag & Markets	16-8236-0857-CA	56,277	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	604,601	NYS Dept Of Ag & Markets	C200857	604,601	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	455	Rutgers, The State University Of New Jersey	14-8130-0274-CA	455	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	1,021	Rutgers, The State University Of New Jersey	15-8130-0270-CA	1,021	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	3,420	Rutgers, The State University Of New Jersey	15-8130-0274-CA	3,420	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	323	Rutgers, The State University Of New Jersey	1681300270CA	323	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025			28,299	Rutgers, The State University Of New Jersey	16-8130-0274-CA	28,299	
Animal and Plant Health Inspection Service Subtotal			657,473	804,898			1,462,371	-
Economic Research Service								
Agricultural and Rural Economic Research, Cooperative Agreements								
and Collaborations	10.250		40,877	-	-	-	40,877	-
Agricultural and Rural Economic Research, Cooperative Agreements								
and Collaborations	10.250		-	51,421	University Of Delaware	59-6000-4-0064	51,421	-
Consumer Data and Nutrition Research	10.253		1,097,791		-	-	1,097,791	90,517
Economic Research Service Subtotal			1,138,668	51,421			1,190,089	90,517
Foreign Agricultural Service								
Norman E. Borlaug International Agricultural Science								
and Technology Fellowship	10.777		24,787	_	_	-	24,787	_
Technical Agricultural Assistance	10.960		6,033	_	-	-	6,033	-
Foreign Agricultural Service Subtotal			30,820				30,820	-
Ermont Complex								
Forest Service	10.652		100 500				100 500	
Forestry Research	10.652		128,599	-	-	-	128,599	-
Forest Health Protection	10.680		153,478	10,000	The Cymry Moth Clays The Comed Foundation In-	- 15 DC 11420004 024 1	153,478	-
Forest Health Protection National Fish and Wildlife Foundation	10.680 10.683		-	18,000 28,131	The Gypsy Moth Slow The Spread Foundation Inc. National Fish And Wildlife Foundation	15-DG-11420004-034-1 15-CA-11132422-241	18,000 28,131	-
	10.065		202.055		National PISH And Whome Foundation	15-CA-11152422-241		
Forest Service Subtotal			282,077	46,131			328,208	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
National Institute of Food and Agriculture								
Grants for Agricultural Research, Special Research Grants	10.200		671,678	-	-	-	671,678	395,672
Grants for Agricultural Research, Special Research Grants	10.200		· -	117	University Of Maine	2014-34141-22266	117	· -
Grants for Agricultural Research, Special Research Grants	10.200		_	33,582	University Of Maine	2015-34141-23964	33,582	-
Grants for Agricultural Research, Special Research Grants	10.200		_	24,634	University Of Maine	2016-34141-25708	24,634	_
Grants for Agricultural Research, Special Research Grants	10.200		_	22,975	University Of Maryland College Park	2016-38500-25754	22,975	-
Cooperative Forestry Research	10.202		257,982	-	-	-	257,982	_
Payments to Agricultural Experiment Stations Under the Hatch Act	10.203		7,135,964	-	-	-	7,135,964	-
Animal Health and Disease Research	10.207		119,234	-	-	-	119,234	-
Higher Education ¿ Graduate Fellowships Grant Program	10.210		79,517	-	-	-	79,517	_
Small Business Innovation Research	10.212		46,689	-	-	-	46,689	_
Small Business Innovation Research	10.212			5,384	I2 Air Fluid Innovations	-	5,384	_
Sustainable Agriculture Research and Education	10.215		_	46,115	University Of Maryland College Park	2015-38640-23777	46,115	_
Sustainable Agriculture Research and Education	10.215		_	13,161	University Of Vermont	2012-38640-19543	13,161	2,005
Sustainable Agriculture Research and Education	10.215		_	77,806	University Of Vermont	2013-38640-20895	77,806	_,
Sustainable Agriculture Research and Education	10.215		_	89,950	University Of Vermont	2014-38640-22161	89,950	_
Sustainable Agriculture Research and Education	10.215		_	46,806	University Of Vermont	2015-38640-23777	46,806	_
Sustainable Agriculture Research and Education	10.215		_	32.039	University Of Vermont	2016-38640-25380	32.039	_
Higher Education - Institution Challenge Grants Program	10.217		114,788	52,037	-	-	114,788	64,851
Biotechnology Risk Assessment Research	10.219		56.528	_	_	_	56,528	
Higher Education - Multicultural Scholars Grant Program	10.220		546	_		_	546	_
Secondary and Two-Year Postsecondary Agriculture Education	10.220		540				540	
Challenge Grants	10.226		52,209	_		_	52,209	137
Integrated Programs	10.303		567,966	_		_	567,966	115.005
Homeland Security_Agricultural	10.304		449,654			_	449,654	178,058
Homeland Security_Agricultural	10.304		-	8,708	Purdue University	2012-37620-20217	8,708	170,030
Organic Agriculture Research and Extension Initiative	10.307		1,527,466	5,705	- under Oniversity	-	1,527,466	793,251
Organic Agriculture Research and Extension Initiative	10.307		1,527,400	91,787	Oregon State University	2014-51300-22223	91,787	775,231
Organic Agriculture Research and Extension Initiative	10.307		_	167,949	Washington State University	2015-51300-24155	167,949	_
Organic Agriculture Research and Extension Initiative	10.307			20,960	West Virginia University Research Corporation	2012-51300-24133	20,960	
Specialty Crop Research Initiative	10.307		5.038.346	20,700	West Virginia Oniversity Research Corporation	2012-31300-20320	5.038.346	3,400,633
Specialty Crop Research Initiative	10.309		3,030,340	30,694	Michigan State University	2014-51181-22380	30,694	3,400,033
Specialty Crop Research Initiative	10.309		-	5,415	Michigan State University	2014-51181-22380	5,415	-
Specialty Crop Research Initiative	10.309		-	75,162	Michigan State University	2015-51181-24285	75.162	-
Specialty Crop Research Initiative Specialty Crop Research Initiative	10.309		-	111,992	North Carolina State University	2015-51181-24283	111,992	-
Specialty Crop Research Initiative	10.309		-	125,399	North Carolina State University	2016-51181-25409	125,399	-
Specialty Crop Research Initiative	10.309		-	14,445	University Of California Riverside	2017-70016-26053	14,445	-
Specialty Crop Research Initiative	10.309		-	50.233	University Of Florida	2017-70016-26033	50,233	-
Specialty Crop Research Initiative	10.309		-	129,380	University Of Florida University Of Florida	2014-31181-22377 2015-51181-24312	129.380	-
1 7 1	10.309		-	31,454	University Of Massachusetts Amherst		. ,	-
Specialty Crop Research Initiative	10.309		-	26,310	University Of Massachusetts Amnerst University Of Wisconsin Madison	2011-51181-30673 2012-51181-20001	31,454 26,310	-
Specialty Crop Research Initiative			-				,	20.162
Specialty Crop Research Initiative	10.309		-	73,657	Washington State University	2014-51181-22381	73,657	29,163
Agriculture and Food Research Initiative (AFRI)	10.310		7,919,707	-	-	-	7,919,707	985,686
Agriculture and Food Research Initiative (AFRI)	10.310		-	10,747	Boyce Thompson Institute	2014-67013-21659	10,747	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	774	Boyce Thompson Institute	2015-67013-23281	774	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Agriculture and Food Research Initiative (AFRI)	10.310		-	31,539	Michigan State University	2016-68004-24931	31,539	
Agriculture and Food Research Initiative (AFRI)	10.310		-	(768)	New Jersey Inst. Of Technology	2012-67019-19348	(768)	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	141,527	Ohio State University	2014-67013-32410	141,527	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	13,052	Pennsylvania State University	2011-68004-30057	13,052	_
Agriculture and Food Research Initiative (AFRI)	10.310		-	205,630	Pennsylvania State University	2012-68005-19703	205,630	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	26,210	Pennsylvania State University	2014-67019-21636	26,210	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	17,721	Pennsylvania State University	2015-87015-23177	17,721	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	2,990	Pennsylvania State University	2017-67013-26258	2,990	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	261,283	Rockefeller University	2016-67015-24765	261,283	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	41,654	Texas A&M University	2016-67015-24923	41,654	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	20,401	Tufts University	2016-68006-24744	20,401	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	51,041	University Of Buffalo	2016-6800-324601	51,041	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	(2,647)	University Of California Davis	2011-68002-30029	(2,647)	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	72,638	University Of California Davis	2012-68004-20166	72,638	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	59,445	University Of California Davis	2016-67023-24902	59,445	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	51,532	University Of California Davis	2017-67007-25939	51,532	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	55,626	University Of California Riverside	2011-88004-30154	55,626	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	34,376	University Of California, San Diego	2015-67013-23006	34,376	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	5,602	University Of Massachusetts Amherst	2015-68006-23110	5,602	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	442	University Of Missouri	2011-68006-30815	442	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	43,656	University Of Missouri	2016-57019-25278	43,656	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	16,817	University Of Nebraska	2013-67015-21239	16,817	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	21,314	University Of New Hampshire	2013-67014-21318	21,314	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	1,314	University Of Notre Dame	2015-67013-23289	1,314	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	63,086	University Of Wisconsin Madison	2013-68002-20525	63,086	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	82,805	University Of Wyoming	2011-68004-30074	82,805	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	34,655	Virginia Polytechnic Institute & State University	2015-67003-23485	34,655	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	30,147	University Of Idaho	2015-69004-23634	30,147	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	6,289	Montana State Univ	2015-68006-22850	6,289	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	48,830	U Of Georgia Research Foundation	2016-67013-24608	48,830	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	9,105	Colorado State University	2013-68004-25322	9,105	-
Agriculture and Food Research Initiative (AFRI)	10.310		-	6,096	Archbold Expeditions	2016-67019-249881	6,096	-
Beginning Farmer and Rancher Development Program	10.311		197,500	-	-	-	197,500	2,000
Farm Business Management and Benchmarking Competitive								
Grants Program	10.319		101,497	-	-	-	101,497	72,707
Crop Protection and Pest Management Competitive Grants Program	10.329		375,767	_	-	-	375,767	88,927
Crop Protection and Pest Management Competitive Grants Program	10.329		-	36,612	Rutgers, The State University Of New Jersey	2015-70006-24152	36,612	-
Crop Protection and Pest Management Competitive Grants Program	10.329		_	2,097	University Of Florida	2015-70006-24165	2,097	_
Crop Protection and Pest Management Competitive Grants Program	10.329		_	6,962	University Of Maryland College Park	2015-70006-24277	6,962	_
Crop Protection and Pest Management Competitive Grants Program	10.329		_	1,494	University Of Vermont	2016-70006-25830	1,494	_
Alfalfa and Forage Research Program	10.330		152,128	-,	=	-	152,128	87,843
Alfalfa and Forage Research Program	10.330		-	13,954	University Of California Davis	2014-70005-22552	13,954	
Cooperative Extension Service	10.500		382,755		- · · · · · · · · · · · · · · · · · · ·	-	382.755	_
Cooperative Extension Service	10.500		-	14,866	University Of Vermont	2013-47001-20896	14,866	_
National Institute of Food and Agriculture Subtotal			25.247.921	2,897,028	•		28.144.949	6.215,938
			,_,_,1	_,0,,,020			=0,1 ,, , , ,	-,-10,750

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Natural Resources Conservation Service								
Soil and Water Conservation	10.902		9,513	-	-	-	9,513	-
Soil and Water Conservation	10.902		-	50,289	IUP Research Institute	68-7482-15-501	50,289	-
Soil Survey	10.903		47,271	-	-	-	47,271	-
Environmental Quality Incentives Program	10.912		262,847	-	-	-	262,847	21,957
Environmental Quality Incentives Program	10.912		-	49,828	North Carolina State University	69-3A75-13-231	49,828	-
Environmental Quality Incentives Program	10.912		-	9,505	Pennsylvania State University	68-3A75-12-226	9,505	-
Conservation Stewardship Program	10.924		19,392		-	-	19,392	
Natural Resources Conservation Service Subtotal			339,023	109,622			448,645	21,957
Rural Business-Cooperative Service								
Rural Economic Development Loans and Grants	10.854		-	3,774	Slic Network Solutions	150945334	3,774	-
The Office of the Chief Economist								
Agricultural Market and Economic Research	10.290		128,088	-	-	-	128,088	-
Department of Agriculture Total			31,437,008	4,927,818			36,364,826	6,358,865
Department of Commerce								
National Institute of Standards and Technology (NIST)								
Measurement and Engineering Research and Standards	11.609		205,465	-	-	-	205,465	-
National Oceanic and Atmospheric Administration (NOAA)								
Integrated Ocean Observing System (IOOS)	11.012		-	16,550	Great Lakes Observing System	NA11NOS0120041	16,550	-
Sea Grant Support	11.417		-	141,119	New York Sea Grant Institute, Stony Brook	NA14OAR4170069	141,119	-
Sea Grant Support	11.417		-	93,605	Woods Hole Oceanographic Institute	NA14OAR4170074	93,605	-
Climate and Atmospheric Research National Oceanic and Atmospheric Administration (NOAA)	11.431		12,279	-	-	-	12,279	-
Cooperative Institutes	11.432			157,025	Woods Hole Oceanographic Institute	NA14OAR4320158	157,025	
1	11.432		12.270		woods Hole Oceanographic histitute	NA14OAR4320138	420,578	
National Oceanic and Atmospheric Administration (NOAA) Subtotal			12,279	408,299				
Department of Commerce Total			217,744	408,299			626,043	
Department of Defense								
Department of Defense, Other	12.RD	N66001-12-C-2009	686,375	-	-	-	686,375	-
Department of Defense, Other	12.RD	FA-9302-14-C0002	-	25,685	Coherent Technologies, Inc.	FA-9302-14-C0002	25,685	-
Department of Defense, Other	12.RD	GSO4TO9DBCOO 17	-	14,752	Engility LLC	GSO4TO9DBCOO 17	14,752	-
Department of Defense, Other	12.RD	HDTRA1-13-C-0003	-	280,745	Flir Systems	HDTRA1-13-C-0003	280,745	-
Department of Defense, Other	12.RD	FA8650-14-C-7402	-	329,512	Honeywell Inc	FA8650-14-C-7402	329,512	-
Department of Defense, Other	12.RD	W911NF-15-C-0236	-	143,021	International Business Machines	W911NF-15-C-0236	143,021	-
Department of Defense, Other	12.RD	SBIR N08-006, DO 0007	-	23,500	Magee Technologies LLC	SBIR N08-006, DO 0007	23,500	-
Department of Defense, Other	12.RD	W911NF-09-2-0053	-	133,350	Raytheon Company	W911NF-09-2-0053	133,350	-
Department of Defense, Other	12.RD	W911NF-14-C-0089	-	247,058	Raytheon Company	W911NF-14-C-0089	247,058	-
Department of Defense, Other	12.RD	FA8650-11-D-5801	-	69,776	UES Inc.	FA8650-11-D-5801	69,776	-
Department of Defense, Other	12.RD	W911QY-15-C-0026	-	209,244	University Of California, Santa Barbara	W911QY-15-C-0026	209,244	-
Department of Defense, Other	12.RD	W912HQ-12-C-0073	-	158,480	University Of Notre Dame	W912HQ-12-C-0073	158,480	-
Department of Defense, Other	12.RD	FA8650-15-M-5005	-	38	Carrera Bioscience Inc.	FA8650-15-M-5005	38	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Department of Defense, Other	12.RD	78547	-	28,902	Lionano Inc.	-	28,902	
Department of Defense, Other	12.RD	W15QKN17C0005	-	7,317	Lionano Inc.	W15QKN17C0005	7,317	-
Department of Defense, Other	12.RD	W81XWH-16-C-0082	-	24,927	Vitascan Technolgies Inc.	W81XWH-16-C-0082	24,927	-
Department of Defense, Other	12.RD	FA8702-15-D-0001	-	61,342	Lincoln Lab, Mit	FA8702-15-D-0001	61,342	-
Department of Defense, Other	12.RD	W911NF-12-C-0044	-	143,280	Invincea Inc.	W911NF-12-C-0044	143,280	-
Department of Defense, Other	12.RD	HR0011-16-C-0047	-	112,297	SRI International	HR0011-16-C-0047	112,297	-
Department of Defense, Other	12.RD	D16PC0000	-	827,629	Baylor College Of Medicine	D16PC0000	827,629	-
Advanced Research Projects Agency								
Research and Technology Development	12.910		1,986,746	-	-	-	1,986,746	218,335
Research and Technology Development	12.910		-	101,720	Raytheon Company	HR0011-14-C-0009	101,720	-
Research and Technology Development	12.910		-	32,219	Sydor Instruments	HDTRA 1-16-P-0019	32,219	-
Research and Technology Development	12.910		-	97,860	University Of California Berkeley	N66001-15-C-4066	97,860	-
Research and Technology Development	12.910		-	253,232	University Of California, San Diego	HR0011-16-C-0037	253,232	-
Research and Technology Development	12.910		-	75,040	University Of Illinois At Urbana-Champaign	2013-MA-2385	75,040	-
Research and Technology Development	12.910		-	31,590	University Of Notre Dame	2013-KJ-2480	31,590	-
Research and Technology Development Research and Technology Development	12.910 12.910		-	897,422 45,820	University Of Notre Dame Virginia Polytechnic Institute & State University	2013-MA-2383 D17AC00003	897,422 45,820	-
	12.910		1,006,746		Virginia Polytechnic institute & State University	D1/AC00003		210.225
Advanced Research Projects Agency Subtotal			1,986,746	1,534,903			3,521,649	218,335
Defense Threat Reduction Agency								
Scientific Research - Combating Weapons of Mass Destruction	12.351		-	230,326	Northwestern University	HDTRA1-15-1-0052	230,326	-
Scientific Research - Combating Weapons of Mass Destruction	12.351		-	121,958	University System Of Maryland	HDTRA1-13-1-0037	121,958	
Defense Threat Reduction Agency Subtotal			-	352,284			352,284	-
Department of the Air Force, Materiel Command								
Air Force Defense Research Sciences Program	12.800		4,884,098	-	-	-	4,884,098	1,220,889
Air Force Defense Research Sciences Program	12.800		-	3,449	Massachusetts Institute Of Technology	FA9550-13-1-0159	3,449	-
Air Force Defense Research Sciences Program	12.800		-	216,942	Massachusetts Institute Of Technology	FA9550-15-1-0038	216,942	-
Air Force Defense Research Sciences Program	12.800		-	251,398	Princeton University	FA9550-16-1-0046	251,398	-
Air Force Defense Research Sciences Program	12.800		-	403,812	Stanford University	29182900-51677-B	403,812	-
Air Force Defense Research Sciences Program	12.800		-	16,325	University Of Texas At Austin	FA9550-15-1-0075	16,325	-
Air Force Defense Research Sciences Program	12.800		<u> </u>	86,000	Griffiss Institute	FA8750-15-3-6000	86,000	
Department of the Air Force, Materiel Command Subtotal			4,884,098	977,926			5,862,024	1,220,889

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Department of the Army, Office of the Chief of Engineers								
Aquatic Plant Control	12.100		-	115,617	University Of Hawaii	W912HQ-14-C-0017	115,617	-
Department of the Navy, Office of the Chief of Naval Research								
Basic and Applied Scientific Research	12.300		5,615,391	_	-	-	5,615,391	1,143,499
Basic and Applied Scientific Research	12.300		-	7,087	Binghamton University	N00014-15-1-1270	7,087	-
Basic and Applied Scientific Research	12.300		-	106,695	Duke University	N00014-13-1-0561	106,695	-
Basic and Applied Scientific Research	12.300		-	241,918	Georgia State University	N00014-13-1-0649	241,918	-
Basic and Applied Scientific Research	12.300		-	60,959	International Personnel Protection Inc.	41756-16-C-4511	60,959	-
Basic and Applied Scientific Research	12.300		-	37,628	New York University	FA8750-14-2-0236	37,628	-
Basic and Applied Scientific Research	12.300		-	20,090	Oregon State University	N00014-15-1-2297	20,090	-
Basic and Applied Scientific Research	12.300		-	255,736	Stanford University	N00014-14-1-0551	255,736	-
Basic and Applied Scientific Research	12.300		-	85,738	Stanford University	N00014-15-1-2827	85,738	-
Basic and Applied Scientific Research	12.300		-	89,767	University Of California, Santa Barbara	N00014-16-1-2233	89,767	-
Basic and Applied Scientific Research	12.300		-	68,744	University Of California, Santa Barbara	N00014-16-1-2982	68,744	-
Basic and Applied Scientific Research	12.300		-	305,342	University Of Notre Dame	N00014-16-1-2686	305,342	-
Basic and Applied Scientific Research	12.300		-	20,090	University Of St. Andrews	N00014-15-1-2142	20,090	-
Basic and Applied Scientific Research	12.300			6,346	University Of Texas Arlington	NO0014-16-1-2140	6,346	
Department of the Navy, Office of the Chief of Naval Research Subtotal			5,615,391	1,306,140			6,921,531	1,143,499
National Security Agency								
Mathematical Sciences Grants Program	12.901		33,529	-	-	-	33,529	-
Information Security Grants	12.902			42,374	Carnegie-Mellon University	H98230-14-C-0140	42,374	
National Security Agency Subtotal			33,529	42,374			75,903	_
Office of the Secretary of Defense								
Basic, Applied, and Advanced Research in Science and Engineering	12.630		135,078	-	-	-	135,078	-
U.S. Army Materiel Command								
Basic Scientific Research	12.431		6,085,565	_	-	-	6,085,565	2,558,340
Basic Scientific Research	12.431		-	(6,650)	Clemson University	W911NF-12-1-0332	(6,650)	-
Basic Scientific Research	12.431		-	347,916	Georgia Institute Of Technology	W911NF-15-1-0609	347,916	_
Basic Scientific Research	12.431		-	7,210	Massachusetts Institute Of Technology	W911NF-11-1-0202	7,210	-
Basic Scientific Research	12.431		-	117,295	Tufts University	W911F-16-1-0095	117,295	_
Basic Scientific Research	12.431		-	328,592	University Of Chicago	W911NF-14-1-0003	328,592	_
Basic Scientific Research	12.431			107,947	University Of Pennsylvania	W911NF-12-1-0509	107,947	
U.S. Army Materiel Command Subtotal			6,085,565	902,310			6,987,875	2,558,340

		Additional Award				D Th	T-4-1	D14-
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Identifying Number	Total Expenditures	Passed to Sub-Recipients
U.S. Army Medical Command	12 420		6.506.502				6.506.502	604.557
Military Medical Research and Development	12.420		6,586,503	10.050	-	-	6,586,503	604,557
Military Medical Research and Development	12.420		-	19,858	Columbia University	W81XWH-13-1-01	19,858	-
Military Medical Research and Development	12.420		-	5,494	Memorial Sloan Kettering Cancer Center	W81XWH-16-1-03	5,494	-
Military Medical Research and Development	12.420		-	24,746	New York University	NYU W81XWH15-2-0036	24,746	-
Military Medical Research and Development	12.420		-	121,744	New York University	W81XWH15-2-0036(	121,744	-
Military Medical Research and Development	12.420		-	23,361	University Of Michigan	W81XWH-14-1-0466	23,361	-
Military Medical Research and Development	12.420		-	22,329	Cedars Sinai Medical Center	W81XWH-16-1-0397	22,329	-
Military Medical Research and Development	12.420		-	83,334	University Of Alabama - Birmngham	W81XWH-15-1-0705	83,334	24,316
Military Medical Research and Development	12.420		-	76,178	University Of Vermont & State Agricultural College	W81XWH-14-1-0199(	76,178	-
Military Medical Research and Development	12.420		-	(132,437)	Massachusetts Eye And Ear Infirmary	W81XWH-12-2-01	(132,437)	-
Military Medical Research and Development	12.420		-	(31,863)	New York Presbyterian Hospital	NYPH W81XWH-10-1-086	(31,863)	-
Military Medical Research and Development	12.420			(20,647)	University Of California, San Diego	W81XWH-12-2-00	(20,647)	
U.S. Army Medical Command Subtotal			6,586,503	192,097			6,778,600	628,873
Department of Defense Total			26,013,285	8,264,506			34,277,791	5,769,936
Department of the Interior								
Department of the Interior, Other	15.RD	F15PX02409	141	-	-	-	141	-
Bureau of Ocean Energy Management								
Bureau of Ocean Energy Management (BOEM) Environmental Studies (ES)	15.423		482,800	_	-	-	482,800	_
Bureau of Ocean Energy Management (BOEM) Environmental Studies (ES)	15.423		-	428,148	University System Of Maryland	14-14-1916	428,148	_
Bureau of Ocean Energy Management (BOEM) Environmental Studies (ES)	15.423		_	117,714	University System Of Maryland	14-17-2241BOEM	117,714	_
Bureau of Ocean Energy Management Subtotal			482,800	545,862			1,028,662	_
First our LWELFIEL Country								
Fish and Wildlife Service	15.510		4.550				4.550	
Rhinoceros and Tiger Conservation Fund	15.619		4,669	-	-	-	4,669	-
African Elephant Conservation Fund	15.620		55,416	-	-	-	55,416	-
Invasive Species	15.652		8,939	-	-	-	8,939	-
Migratory Bird Monitoring, Assessment and Conservation	15.655		721		-	-	721	
Fish and Wildlife Service Subtotal			69,745	-			69,745	-

## Schedule of Expenditures of Federal Awards Year Ended June 30, 2017

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
National Park Service				<u> </u>	<u> </u>	• 5	Î	-
National Center for Preservation Technology and Training	15.923		47,689	-	-	-	47,689	-
Natural Resource Stewardship	15.944		-	17,443	The Wildlife Conservation Society	P14AC01473	17,443	-
Cooperative Research and Training Programs, Resources of the								
National Park System	15.945		100,199		-	-	100,199	
National Park Service Subtotal			147,888	17,443			165,331	-
U.S. Geological Survey								
Assistance to State Water Resources Research Institutes	15.805		59,308	-	-	-	59,308	37,008
U.S. Geological Survey_ Research and Data Collection	15.808		51,534	-	-	-	51,534	-
Cooperative Research Units	15.812		136,005	-	-	-	136,005	-
National Climate Change and Wildlife Science Center	15.820		300,067		-	-	300,067	200,403
U.S. Geological Survey Subtotal			546,914	-			546,914	237,411
Department of the Interior Total			1,247,488	563,305			1,810,793	237,411
Department of Justice								
Department of Justice, Other	16.RD	2014-BJ-CX-K043	48,241	-	-	-	48,241	-
Department of Justice, Other	16.RD	DJJ13-C-2442(ROS		38,710	University Of Southern California	DJJ13-C-2442(ROS	38,710	
Department of Justice Total			48,241	38,710			86,951	·
Department of Labor Departmental Management								
Department of Labor Chief Evaluation Office	17.791		86,383		-	-	86,383	
Department of State Under Secretary of Public Diplomacy and Public Affairs								
Public Diplomacy Programs	19.040		48,000		-	-	48,000	
Department of Transportation Office of the Secretary (OST) Administration Secretariate								
University Transportation Centers Program	20.701		18,407	-	-	-	18,407	5,357
University Transportation Centers Program	20.701		-	80,162	City University Of New York	C030794 & DTRT13-G-UTC32	80,162	-
University Transportation Centers Program	20.701			51,817	City University Of New York	DTRT13-G-UTC32	51,817	
Department of Transportation Total			18,407	131,979			150,386	5,357

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
National Aeronautics and Space Administration								
National Aeronautics and Space Administration, Other	43.RD	NNG17FC90C	310,136	-	-	-	310,136	-
National Aeronautics and Space Administration, Other	43.RD	NNL15AA10C	354,511	-	-	-	354,511	-
National Aeronautics and Space Administration, Other	43.RD	1530822 (JP59)	-	8,203	Applied Physics Laboratory	1530822 (JP59)	8,203	-
National Aeronautics and Space Administration, Other	43.RD	NNG07EK00C	-	7,812	Arizona State University	NNG07EK00C	7,812	-
National Aeronautics and Space Administration, Other	43.RD	NNN13D496T	-	65,927	Arizona State University	NNN13D496T	65,927	-
National Aeronautics and Space Administration, Other	43.RD	1525402	-	56,162	Jet Propulsion Laboratory	1525402	56,162	-
National Aeronautics and Space Administration, Other	43.RD	1536803	-	31,749	Jet Propulsion Laboratory	1536803	31,749	-
National Aeronautics and Space Administration, Other	43.RD	1538669	-	6,614	Jet Propulsion Laboratory	1538669	6,614	-
National Aeronautics and Space Administration, Other	43.RD	1557993	-	22,487	Jet Propulsion Laboratory	1557993	22,487	-
National Aeronautics and Space Administration, Other	43.RD	1565090	-	19,975	Jet Propulsion Laboratory	1565090	19,975	-
National Aeronautics and Space Administration, Other	43.RD	1565245	-	57,740	Jet Propulsion Laboratory	1565245	57,740	-
National Aeronautics and Space Administration, Other	43.RD	NAS7-03001	-	40,416	Jet Propulsion Laboratory	NAS7-03001	40,416	-
National Aeronautics and Space Administration, Other	43.RD	NM0710846	-	72,076	Jet Propulsion Laboratory	NM0710846	72,076	-
National Aeronautics and Space Administration, Other	43.RD	NM0711123	-	956,732	Jet Propulsion Laboratory	NM0711123	956,732	123,022
National Aeronautics and Space Administration, Other	43.RD	NM071112312	-	173,926	Jet Propulsion Laboratory	NM071112312	173,926	-
National Aeronautics and Space Administration, Other	43.RD	NMO711043	-	28,519	Jet Propulsion Laboratory	NMO711043	28,519	-
National Aeronautics and Space Administration, Other	43.RD	NNN12AA01C	-	1,247,576	Jet Propulsion Laboratory	NNN12AA01C	1,247,576	539,992
National Aeronautics and Space Administration, Other	43.RD	NMO710846	-	142,484	Malin Space Science Systems	NMO710846	142,484	-
National Aeronautics and Space Administration, Other	43.RD	NAS5-26555	-	29,411	Space Telescope Science Inst.	NAS5-26555	29,411	-
National Aeronautics and Space Administration, Other	43.RD	NAS2-97001	-	56,753	Universities Space Research Assoc	NAS2-97001	56,753	-
National Aeronautics and Space Administration, Other	43.RD	1272218	-	2	University Of Arizona	1272218	2	-
Science	43.001		4,917,522	-	-	-	4,917,522	1,140,931
Science	43.001		-	22,162	Applied Physics Laboratory	NNX15AM57G	22,162	-
Science	43.001		-	195,658	Dartmouth College	NNX14AH07G	195,658	-
Science	43.001		-	50,183	Gats Inc.	NNX14AN51G	50,183	-
Science	43.001		-	(811)	Jet Propulsion Laboratory	NMO710782	(811)	(811)
Science	43.001		-	16,954	Malin Space Science Systems	16-0693	16,954	-
Science	43.001		-	3,848	Malin Space Science Systems	NMO710947	3,848	-
Science	43.001		-	19,066	Smithsonian Astrophysical Observatory	NAS8-03060	19,066	-
Science	43.001		-	125,651	Southwest Research Institute	NNM06AA75C	125,651	-
Science	43.001		-	7,947	Texas A&M University	NNX14AD52G	7,947	-
Science	43.001		-	73,375	Universities Space Research Assoc	NAS2-97001	73,375	-
Science	43.001		-	16,516	Universities Space Research Assoc	NNX13AQ46G	16,516	-
Science	43.001		-	7,937	University Of Virginia	NNX13AG38G	7,937	-
Aeronautics	43.002		291,545	-	-	-	291,545	-
Exploration	43.003		123,067	-	-	-	123,067	-
Space Operations	43.007		50,071	-	-	-	50,071	-
Education	43.008		982,006	-	-	-	982,006	481,545
Education	43.008		-	65,007	National Space Grant Foundation	NNX13AE43A	65,007	-
Cross Agency Support	43.009		232,247	-	-	-	232,247	-
Space Technology	43.012		436,433		-	-	436,433	
National Aeronautics and Space Administration Total			7,697,538	3,628,057			11,325,595	2,284,679

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
National Science Foundation								
National Science Foundation, Other	47.RD	1257284	270,492	-	-	-	270,492	-
National Science Foundation, Other	47.RD	83580	8,330	_	-	-	8,330	_
National Science Foundation, Other	47.RD	CU 2015-16(KRIEGER)	(2,480)	_	-	-	(2,480)	_
National Science Foundation, Other	47.RD	79847	-	203	University Of Texas System	-	203	_
National Science Foundation, Other	47.RD	MC 2015-2016	_	7,590	Mayo Clinic	MC 2015-2016	7,590	_
National Science Foundation, Other	47.RD	MC 2016-2017	_	78,943	Mayo Clinic	MC 2016-2017	78.943	_
National Science Foundation, Other	47.RD	BOMBYX TECH: NSF 101	_	1,619	Bombyx Technologies	BOMBYX TECH: NSF 101	1,619	_
Engineering Grants	47.041		9,961,670	-,	-	-	9,961,670	354,453
Engineering Grants	47.041		,,,o1,o.o	51,368	Columbia University	EFMA-1641100	51,368	-
Engineering Grants	47.041		_	54,157	Norfolk State University	DGE-0986188	54,157	_
Engineering Grants	47.041		_	15,321	Texas A&M University	EFRI-1240478	15.321	_
Engineering Grants	47.041		_	25,581	University Of California Berkeley	CCF-0424422	25.581	_
Engineering Grants	47.041			204,798	University Of California, Los Angeles	EEC-1160504	204,798	
Engineering Grants	47.041			125,732	University Of Delaware	1331269	125,732	
Engineering Grants	47.041		-	501,993	University Of Notre Dame	EFRI-1433490	501.993	-
Engineering Grants	47.041		-	195,144	University Of Pennsylvania	EFRI-1331583	195,144	-
Engineering Grants	47.041		-	21,544	University Of Southern California	ECCS-1411244	21,544	-
Engineering Grants Engineering Grants	47.041		-	22,746	Washington University In St. Louis	WU-16-392	22,746	-
Engineering Grants Engineering Grants	47.041 47.041		-	9,185	Zymtronix Catalytic Systems, Inc.	1456279	9.185	-
Mathematical and Physical Sciences	47.041		40.663.829	9,183	Zymuonix Catalytic Systems, Inc.	1430279	40,663,829	912.688
Mathematical and Physical Sciences  Mathematical and Physical Sciences			40,003,829	(627)	- TY	- DMD 1205600	-,,-	912,088
	47.049		-	(627)	Howard University	DMR-1205608 PHY-1419008	(627)	-
Mathematical and Physical Sciences	47.049		-	65,914	Johns Hopkins University		65,914	-
Mathematical and Physical Sciences	47.049		-	51,633	Norfolk State University	DMR-1205457	51,633	-
Mathematical and Physical Sciences	47.049		-	78,815	Pennsylvania State University	DMR-1420620	78,815	-
Mathematical and Physical Sciences	47.049		-	114,693	Princeton University	AST-1440226	114,693	-
Mathematical and Physical Sciences	47.049		-	945,167	Princeton University	PHY-1120138	945,167	-
Mathematical and Physical Sciences	47.049		-	607,544	Princeton University	SUB0000175	607,544	-
Mathematical and Physical Sciences	47.049		-	(361)	SUNY Stony Brook	DMR-1344267	(361)	-
Mathematical and Physical Sciences	47.049		-	2,430	University Of Illinois At Urbana-Champaign	DMR-1307354	2,430	-
Mathematical and Physical Sciences	47.049		-	903,994	University Of Minnesota	CHE-1413862	903,994	-
Mathematical and Physical Sciences	47.049		-	26,547	University Of Nebraska	PHY-1343486	26,547	-
Mathematical and Physical Sciences	47.049		-	438,686	University Of Wisconsin System	PHY-1430284	438,686	-
Mathematical and Physical Sciences	47.049		-	215,971	Natl Radio Astronomy Observ	AST-0836064	215,971	57,269
Mathematical and Physical Sciences	47.049		-	18,640	Natl Radio Astronomy Observ	AST-1519126	18,640	-
Geosciences	47.050		4,051,080	-	-	-	4,051,080	1,410,476
Geosciences	47.050		-	79,712	Boston University	OCE-1260424	79,712	-
Geosciences	47.050		-	11,767	City University Of New York	ICER-1615560	11,767	-
Geosciences	47.050		-	35,574	Columbia University	EAR-1110921	35,574	-
Geosciences	47.050		-	3,748	Ohio State University	PLR-1249631	3,748	-
Geosciences	47.050		-	140,517	Pennsylvania State University	GEO-1240507	140,517	-
Geosciences	47.050		-	111,533	Stanford University	OCE-1434325	111,533	-
Geosciences	47.050		-	1,920	University Of Minnesota	PLR-1559691	1,920	-
Geosciences	47.050		-	24,000	University Of Southern California	EAR-1033462	24,000	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Computer and Information Science and Engineering	47.070		16,049,049	-	-	-	16,049,049	1,205,957
Computer and Information Science and Engineering	47.070		· · · · · ·	140,901	Arizona State University	1320065	140,901	- · · · · -
Computer and Information Science and Engineering	47.070		-	38,958	Carnegie-Mellon University	1563887	38,958	-
Computer and Information Science and Engineering	47.070		-	1,356	Clemson University	IIS-1527165	1,356	-
Computer and Information Science and Engineering	47.070		-	16,415	Computing Research Association	1136966	16,415	-
Computer and Information Science and Engineering	47.070		-	234,518	Stanford University	IIS-1139161	234,518	-
Computer and Information Science and Engineering	47.070		-	6,617	University Of California Davis	CNS-1321115	6,617	-
Computer and Information Science and Engineering	47.070		-	39,746	University Of California Riverside	1330110	39,746	-
Computer and Information Science and Engineering	47.070		-	416,520	University Of Illinois At Urbana-Champaign	ACI-1548562	416,520	-
Computer and Information Science and Engineering	47.070		-	112,590	University Of Illinois At Urbana-Champaign	OCI-1053575	112,590	-
Computer and Information Science and Engineering	47.070		-	56,704	University Of Maryland College Park	1514261	56,704	-
Computer and Information Science and Engineering	47.070		-	34,096	University Of North Carolina Chapel Hill	1639268	34,096	-
Computer and Information Science and Engineering	47.070		-	318,149	University Of North Carolina Chapel Hill	CNS-1330599	318,149	-
Computer and Information Science and Engineering	47.070		-	261,208	University Of Wisconsin System	CNS-1330308	261,208	-
Computer and Information Science and Engineering	47.070		-	13,797	Indiana University	ACI-1445604	13,797	-
Computer and Information Science and Engineering	47.070		-	64,850	University Of California, Davis	IIS-1208218	64,850	-
Biological Sciences	47.074		15,934,914	-	=	-	15,934,914	4,332,060
Biological Sciences	47.074		-	2,330	Auburn University	DEB-1023403	2,330	-
Biological Sciences	47.074		-	31,718	Boyce Thompson Institute	1645256	31,718	-
Biological Sciences	47.074		-	38,097	Boyce Thompson Institute	IOS-1354421	38,097	-
Biological Sciences	47.074		-	176,814	Boyce Thompson Institute	IOS-1546625	176,814	-
Biological Sciences	47.074		-	122,124	Cary Institute Of Ecosystem Studies	1633026	122,124	-
Biological Sciences	47.074		-	17,835	Cary Institute Of Ecosystem Studies	1637685	17,835	-
Biological Sciences	47.074		-	244,278	Donald Danforth Plant Science Center	23020-С	244,278	-
Biological Sciences	47.074		-	4,294	Iowa State University	IOS-1238189 (KSU #S13031)	4,294	-
Biological Sciences	47.074		-	172,900	Iowa State University	IOS-1339348	172,900	-
Biological Sciences	47.074		-	36,323	Kansas State University	1543958	36,323	-
Biological Sciences	47.074		-	68,631	Kansas State University	IOS-1238187	68,631	-
Biological Sciences	47.074		-	49,631	Michigan State University	IOS-1546657	49,631	-
Biological Sciences	47.074		-	58,915	Northwestern University	MCB-1650040	58,915	-
Biological Sciences	47.074		-	85,742	University Of Arizona	IOS-1457092	85,742	-
Biological Sciences	47.074		-	267,705	University Of Buffalo	DBI1231306	267,705	-
Biological Sciences	47.074		-	53,775	University Of California Riverside	IOS-1027542	53,775	-
Biological Sciences	47.074		-	316,261	University Of California, San Diego	1444507	316,261	-
Biological Sciences	47.074		-	90,580	University Of Delaware	1127076	90,580	-
Biological Sciences	47.074		-	121,249	University Of Missouri	IOS-1456047	121,249	-
Biological Sciences	47.074		-	221,997	University Of North Carolina Chapel Hill	IOS-1343020	221,997	-
Biological Sciences	47.074		-	19,807	Yale University	IOS-1127017	19,807	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Social, Behavioral, and Economic Sciences	47.075		1,478,775	-	-	-	1,478,775	212,273
Social, Behavioral, and Economic Sciences	47.075		-	14,431	George Washington University	CNS-1421373	14,431	<u>-</u>
Social, Behavioral, and Economic Sciences	47.075		-	2,908	University Of California Berkeley	1650589	2,908	-
Social, Behavioral, and Economic Sciences	47.075		-	12,050	University Of Rochester	BCS-1228261	12,050	-
Education and Human Resources	47.076		9,671,060	-	-	-	9,671,060	208,302
Education and Human Resources	47.076		-	12,514	Rochester Inst Of Technology	HRD-1127955	12,514	-
Education and Human Resources	47.076		-	31,966	Stanford University	DUE-1611482	31,966	-
Education and Human Resources	47.076		-	68,475	Syracuse University	HRD-1202480	68,475	-
Education and Human Resources	47.076		-	13,052	Tuskegee University	HRD-1137681	13,052	-
Education and Human Resources	47.076		-	18,884	University Of Rochester	HRD-1649228	18,884	-
Education and Human Resources	47.076		-	26,950	University Of Wisconsin Madison	DUE-1231286	26,950	-
Education and Human Resources	47.076		-	2,795	Western Kentucky University	DRL-1223908	2,795	-
Polar Programs	47.078		-	9,801	Ohio State University	ARC-1111882	9,801	-
Office of International Science and Engineering	47.079		93,057	-	=	-	93,057	-
Office of International Science and Engineering	47.079		-	7,990	CRDF Global	OISE-9531011	7,990	-
Office of Cyberinfrastructure	47.080		-	237,115	University Of Texas At Austin	OCI-1134872	237,115	-
Trans-NSF Recovery Act Reasearch Support	47.082		(566)		-	-	(566)	
National Science Foundation Total			98,179,210	9,610,103			107,789,313	8,693,478
Environmental Protection Agency								
Office of Research and Development (ORD)								
Science To Achieve Results (STAR) Research Program	66.509		4.756	_	-	-	4.756	4,769
Science To Achieve Results (STAR) Fellowship Program	66.514		38,009	-	-	-	38,009	· -
P3 Award: National Student Design Competition for Sustainability	66.516		22,716	-	-	-	22,716	_
Office of Research and Development (ORD) Subtotal			65,481				65,481	4,769
Office of Water								
Great Lakes Program	66.469		756,318				756,318	163,975
Great Lakes Program	66.469		750,516	39,929	Minnesota Department Of Health	00E01283	39,929	103,973
ē	00.409		756 219		Willinesota Department of Treatm	00E01283		162.075
Office of Water Subtotal			756,318	39,929			796,247	163,975
Environmental Protection Agency Total			821,799	39,929			861,728	168,744
Department of Energy								
Department of Energy, Other	81.RD	65603	-	99,026	Arizona State University	-	99,026	-
Department of Energy, Other	81.RD	DE-AC05-76RL01830	-	28,243	Battelle-Pacific Northwest	DE-AC05-76RL01830	28,243	-
Department of Energy, Other	81.RD	325933	-	1,126	Brookhaven National Lab	325933	1,126	-
Department of Energy, Other	81.RD	DE-AC02-98CH10886	-	3,820,869	Brookhaven National Lab	DE-AC02-98CH10886	3,820,869	(23,729)
Department of Energy, Other	81.RD	DE-AC02-07CH11359	-	23,643	Fermi National Accelerator Laboratory	DE-AC02-07CH11359	23,643	-
Department of Energy, Other	81.RD	PO 604463; PO 615223	-	78,903	Fermi National Accelerator Laboratory	PO 604463; PO 615223	78,903	-

		Additional						
		Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Department of Energy, Other	81.RD	DE-AC02-05CH11231	-	199,330	Lawrence Berkeley National Laboratory	DE-AC02-05CH11231	199,330	-
Department of Energy, Other	81.RD	68946_CLW	-	121	Radiabeam Technologies	68946_CLW	121	-
Department of Energy, Other	81.RD	DE-AC04-94AL85000	-	25,694	Sandia Laboratories	DE-AC04-94AL85000	25,694	-
Department of Energy, Other	81.RD	DE-AC02-76SF00515	-	123,072	Slac National Accelerator Laboratory	DE-AC02-76SF00515	123,072	-
Department of Energy, Other	81.RD	DE-AR0000445	-	158,528	University Of Notre Dame	DE-AR0000445	158,528	-
Department of Energy, Other	81.RD	DE-AC05-00OR22725	-	134,012	UT-Battelle LLC	DE-AC05-00OR22725	134,012	-
Department of Energy, Other	81.RD	DE-AC07-05ID14517	-	35,315	Idaho National Laboratory	DE-AC07-05ID14517	35,315	-
Department of Energy, Other	81.RD	DE-AC52-07NA27344	-	72,814	Lawrence Livermore National Laboratory	DE-AC52-07NA27344	72,814	-
Department of Energy, Other	81.RD	DE-AC05-76RL01830	-	5,579	Pacific Northwest National Laboratory	DE-AC05-76RL01830	5,579	-
Office of Science Financial Assistance Program	81.049		7,157,013	-	-	-	7,157,013	167,853
Office of Science Financial Assistance Program	81.049		-	131,941	Faraday Technology Inc.	DE-SC0011235	131,941	-
Office of Science Financial Assistance Program	81.049		-	108,457	Faraday Technology Inc.	DE-SC0011342	108,457	-
Office of Science Financial Assistance Program	81.049		-	3,777	Iowa State University	DE-SC0016438	3,777	-
Office of Science Financial Assistance Program	81.049		-	78,448	Kitware Inc	DE-SC001135	78,448	-
Office of Science Financial Assistance Program	81.049		-	63,265	Pennsylvania State University	26487740-49105-B	63,265	-
Office of Science Financial Assistance Program	81.049		-	113,822	Sydor Instruments	DE-SC0013234	113,822	-
Office of Science Financial Assistance Program	81.049		-	29,720	Sydor Instruments	DE-SC0017139	29,720	-
Office of Science Financial Assistance Program	81.049		-	83,188	University Of Minnesota	DE-SC0008688	83,188	-
Office of Science Financial Assistance Program	81.049		-	188,419	The Carnegie Institution For Science	DE-SC0001057	188,419	-
Renewable Energy Research and Development	81.087		202,590	-	-	-	202,590	-
Renewable Energy Research and Development	81.087		-	79,431	Duke University	323-0271	79,431	-
Stewardship Science Grant Program	81.112		2,217,856	-	-	-	2,217,856	763,672
Advanced Research Projects Agency - Energy	81.135		2,633,312	-	-	-	2,633,312	883,660
Advanced Research Projects Agency - Energy	81.135		-	53,467	Syracuse University	DE-AR0000526	53,467	-
Advanced Research Projects Agency - Energy	81.135		-	199,108	University Of Illinois At Urbana-Champaign	DE-AR0000598	199,108	-
Advanced Research Projects Agency - Energy	81.135		-	226,755	University Of Illinois At Urbana-Champaign	DE-AR0000661	226,755	-
Advanced Research Projects Agency - Energy	81.135		-	125,288	University Of Illinois At Urbana-Champaign	DE-AR0000714	125,288	-
Advanced Research Projects Agency - Energy	81.135		-	72,581	Eaton (Us) LLC	DE-AR0000703	72,581	-
Department of Energy Total			12,210,771	6,363,942			18,574,713	1,791,456
Department of Education								
Institute of Education Sciences								
Education Research, Development and Dissemination	84.305		202,740	-	-	-	202,740	-
Office of Postsecondary Education								
Overseas Programs - Doctoral Dissertation Research Abroad	84.022		91,694	-	-	-	91,694	-
Graduate Assistance in Areas of National Need	84.200		168,134		-	-	168,134	
Office of Postsecondary Education Subtotal			259,828	-			259,828	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Office of Special Education and Rehabilitative Services								
Rehabilitation Services Vocational Rehabilitation Grants to States	84.126		-	112,651	NYS Dept Of Education	016-038	112,651	-
Promoting Readiness of Minors in Supplemental Security Income	84.418		-	45,481	Research Foundation For Mental Hygiene Inc.	H418P1130011	45,481	-
Promoting Readiness of Minors in Supplemental Security Income	84.418		-	4,365,859	Research Foundation For Mental Hygiene Inc.	H418P130011	4,365,859	1,967,601
Office of Special Education and Rehabilitative Services Subtotal		_	-	4,523,991	,,		4,523,991	1,967,601
Department of Education Total		_	462,568	4,523,991			4,986,559	1,967,601
Department of Health and Human Services								
Department of Health and Human Services, Other	93.RD	80898	162,310	-	-	-	162,310	-
Department of Health and Human Services, Other	93.RD	52905566	70,155	-	-	-	70,155	-
Department of Health and Human Services, Other	93.RD	52945904	15,858	-	-	-	15,858	-
Department of Health and Human Services, Other	93.RD	52994400	(14,399)	-	-	-	(14,399)	-
Department of Health and Human Services, Other	93.RD	14-1908	121,777	-	-	-	121,777	-
Department of Health and Human Services, Other	93.RD	200-2016-91970	77,004	-	-	-	77,004	-
Department of Health and Human Services, Other	93.RD	HHSN26100005	(2,478)	-	-	-	(2,478)	-
Department of Health and Human Services, Other	93.RD	HHSN2612012000181 Ta	(28,308)	_	-	-	(28,308)	_
Department of Health and Human Services, Other	93.RD	HHSP233201550076A	823,012	_	-	-	823.012	_
Department of Health and Human Services, Other	93.RD	ITHACA 200-2016-9197	23,168	_	-	-	23,168	_
Department of Health and Human Services, Other	93.RD	HHSN2628200900017C	-	7,538	Columbia University	HHSN2628200900017C	7,538	_
Department of Health and Human Services, Other	93.RD	HHSN2628200900017C(C	_	17.836	Columbia University	HHSN2628200900017C(C	17.836	_
Department of Health and Human Services, Other	93.RD	52988744	_	21,691	Johns Hopkins University	52988744	21,691	_
Department of Health and Human Services, Other	93.RD	52944500	_	(96,044)	Rockefeller University	52944500	(96,044)	_
Department of Health and Human Services, Other	93.RD	NYS C024180	_	(49,226)	Rockefeller University	NYS C024180	(49,226)	_
Department of Health and Human Services, Other	93.RD	U10CA37447	_	182	University Of Chicago	U10CA37447	182	_
Department of Health and Human Services, Other	93.RD	HHSN272201000043C (U	_	(8,563)	University Of Florida	HHSN272201000043C (U	(8,563)	_
Department of Health and Human Services, Other	93.RD	HHSN268200900	_	(26,648)	University Of Michigan	HHSN268200900	(26,648)	_
Department of Health and Human Services, Other	93.RD	U19AG024904	_	50	University Of Southern California	U19AG024904	50	_
Department of Health and Human Services, Other	93.RD	1R44TR001326-01A1	_	213,777	Hesperos LLC	1R44TR001326-01A1	213,777	_
Department of Health and Human Services, Other	93.RD	90EJGS0009-01-00	_	27,988	Commonwealth Of Massachusetts	90EJGS0009-01-00	27,988	_
Department of Health and Human Services, Other	93.RD	ICR #M38-CO-065-0910	_	4.083	Institute For Clinical Research	ICR #M38-CO-065-0910	4.083	_
Department of Health and Human Services, Other	93.RD	ICR M38CO0650910-4(G	_	11,553	Institute For Clinical Research	ICR M38CO0650910-4(G	11,553	_
Department of Health and Human Services, Other	93.RD	M38-CO-065-0910-4(Fl	_	(5,460)	Institute For Clinical Research	M38-CO-065-0910-4(Fl	(5,460)	_
Department of Health and Human Services, Other	93.RD	UM1AI068641	_	(642)	Institute For Clinical Research	UM1AI068641	(642)	_
Department of Health and Human Services, Other	93.RD	HHSN261201700005C	_	28,831	Youv Labs, Inc.	HHSN261201700005C	28.831	_
Department of Health and Human Services, Other	93.RD	CCI 200-2009-28537 (	_	8,986	Carter Consulting Inc.	CCI 200-2009-28537 (	8,986	_
Department of Health and Human Services, Other	93.RD	HHSN268200900016	_	26,638	University Of North Carolina	HHSN268200900016	26,638	_
Department of Health and Human Services, Other	93.RD	1-312-0212746-50	_	6,078	Research Triangle Institute	1-312-0212746-50	6.078	_
Department of Health and Human Services, Other	93.RD	U01NS026835	_	26,020	The Emmes Corporation	U01NS026835	26,020	_
Department of Health and Human Services, Other	93.RD	N01CN35159	_	(1,144)	University Of Texas, Md Anderson Cancer Center	N01CN35159	(1,144)	_
Department of Health and Human Services, Other	93.RD	HHSN261201200034I(DA	_	2,012	University Of Texas, Md Anderson Center  University Of Texas, Md Anderson Center	HHSN261201200034I(DA	2,012	_
Department of Health and Human Services, Other	93.RD	UTXMDACC #HHSN261201	_	1,224	University Of Texas, Md Anderson Center	UTXMDACC #HHSN261201	1,224	_
Department of Health and Human Services, Other	93.RD	N02CM97024	_	3,342	Calgb Foundation	N02CM97024	3.342	_
Department of Health and Human Services, Other	93.RD	U01NS038384	_	1,083	Rutgers, The State University Of New Jersey	U01NS038384	1.083	_
Department of Health and Human Services, Other	93.RD	SSS CRB-DCR01-S-09-0	_	(3,360)	Social And Scientific Systems	SSS CRB-DCR01-S-09-0	(3,360)	_
Department of Fleatur and Fluman Services, Outer	93.KD	555 CKD-DCK01-5-09-0	-	(3,300)	Social Para Scientific Systems	333 CKD-DCK01-3-07-0	(3,300)	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Administration for Children and Families								
Head Start	93.600		16,378	-	-	-	16,378	-
Social Services Research and Demonstration	93.647		29,428	-	-	-	29,428	-
Social Services Block Grant	93.667		<u>-</u>	962,836	Aging In New York Fund	ANYF C130065(SIREY)	962,836	99,908
Administration for Children and Families Subtotal			45,806	962,836			1,008,642	99,908
Administration for Community Living								
ACL National Institute on Disability, Independent Living, and								
Rehabilitation Research	93.433		800,984	-	-	-	800,984	-
Agency for Healthcare Research and Quality								
National Research Service Awards_Health Services Research Training	93.225		427,237	-	-	-	427,237	-
Research on Healthcare Costs, Quality and Outcomes	93.226		322,058	-	-	-	322,058	-
Research on Healthcare Costs, Quality and Outcomes	93.226		-	248,930	Columbia University	R01HS022903	248,930	-
Research on Healthcare Costs, Quality and Outcomes	93.226		-	16,877	Columbia University	R01HS024915	16,877	-
Research on Healthcare Costs, Quality and Outcomes	93.226		-	(1)	NYC Dohmh	R18HS018275	(1)	-
Research on Healthcare Costs, Quality and Outcomes	93.226		-	8,140	Albert Einstein College	R01HS024432	8,140	-
Research on Healthcare Costs, Quality and Outcomes	93.226		-	18,750	University Of Alabama - Birmngham	000413884-011	18,750	-
Research on Healthcare Costs, Quality and Outcomes	93.226			9,981	The George Washington University	R01HS021734	9,981	
Agency for Healthcare Research and Quality Subtotal			749,295	302,677			1,051,972	-
Centers for Disease Control and Prevention								
Global AIDS	93.067		-	30,194	Les Centres Gheskio	U2GGH000545	30,194	-
Global AIDS	93.067		-	63,911	Les Centres Gheskio	U2GGH001924	63,911	-
Global AIDS	93.067		-	37,762	Les Centres Gheskio	U2GGH001969	37,762	-
Chronic Diseases: Research, Control, and Prevention	93.068		301,267	-	-	-	301,267	158,597
Blood Disorder Program: Prevention, Surveillance, and Research	93.080		-	28,581	Icahn School Of Medicine At Mount Sinai	U27DD001155	28,581	-
Prevention of Disease, Disability, and Death by Infectious Diseases	93.084		1,351	-	-	-	1,351	-
Injury Prevention and Control Research and State and								
Community Based Programs	93.136		-	176,905	Health Research Inc	1U01CE002834-01	176,905	-
Centers for Disease Control and Prevention_Investigations and								
Technical Assistance	93.283		-	204,465	University Of South Carolina	5U01DD001007-05	204,465	152,521
Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	93.323			142,071	Health Research Inc	3U50CK00042302S1	142,071	
Centers for Disease Control and Prevention Subtotal			302,618	683,889			986,507	311,118
Centers for Medicare and Medicaid Services								
Health Care Innovation Awards (HCIA)	93.610		-	153,203	Fund For Public Health In New York Inc.	C1CMS331330	153,203	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Food and Drug Administration								
Food and Drug Administration_Research	93.103		1,105,662	-	-	-	1,105,662	294,170
Food and Drug Administration_Research	93.103		-	14,135	University Of Vermont	R01FD005686	14,135	-
Food and Drug Administration_Research	93.103		-	30,009	National Farmers Union Foundation	1U01FD005770	30,009	-
Food and Drug Administration Subtotal			1,105,662	44,144			1,149,806	294,170
Health Resources and Services Administration								
Maternal and Child Health Federal Consolidated Programs	93.110		110,013	-	-	-	110,013	-
Maternal and Child Health Federal Consolidated Programs	93.110		-	23,713	Icahn School Of Medicine At Mount Sinai	5H3MC24048	23,713	-
Maternal and Child Health Federal Consolidated Programs	93.110		-	2,868	Icahn School Of Medicine At Mount Sinai	H30MC00019	2,868	-
Maternal and Child Health Federal Consolidated Programs	93.110		-	4,010	Icahn School Of Medicine At Mount Sinai	H30MC24048	4,010	-
HIV-Related Training and Technical Assistance	93.145		-	265,878	Columbia University	U10HA29291	265,878	-
Health Resources and Services Administration Subtotal			110,013	296,469			406,482	-
National Institutes of Health								
Family Smoking Prevention and Tobacco Control Act								
Regulatory Research	93.077		1,773,678	-	-	-	1,773,678	158,047
Environmental Health	93.113		848,150	-	-	-	848,150	90,198
Environmental Health	93.113		-	30,985	Binghamton University	1R15ES022828-01	30,985	-
Environmental Health	93.113		-	26,075	Stanford University	1R21ES023371-01	26,075	-
Environmental Health	93.113		-	43,931	University Of California, Santa Cruz	1R01ES018990-01	43,931	-
Oral Diseases and Disorders Research	93.121		936,641	-	-	-	936,641	-
Oral Diseases and Disorders Research	93.121		-	3,670	Jan Biotech Inc	1R43DE025437-01	3,670	-
Oral Diseases and Disorders Research	93.121		-	23,796	University Of Pittsburgh	5R01DE0022055-04	23,796	-
Human Genome Research	93.172		517,381	-	-	-	517,381	71,258
Human Genome Research	93.172		-	89,510	Yale University	1R01HG008126-01A1	89,510	-
Human Genome Research	93.172		-	259,587	Yale University	R01HG008126	259,587	-
Research Related to Deafness and Communication Disorders	93.173		277,328	-	-	-	277,328	858
Research Related to Deafness and Communication Disorders	93.173		-	33,922	Binghamton University	R01DC006914	33,922	-
Research Related to Deafness and Communication Disorders	93.173		-	3,512	Binghamton University	R01DC06914	3,512	-
Research Related to Deafness and Communication Disorders	93.173		-	235,690	Stowers Institute For Medical Research	5R01DC014701-02	235,690	-
Research Related to Deafness and Communication Disorders	93.173		-	199,232	University Of Chicago	R01DC014367	199,232	-
Research and Training in Complementary and Integrative Health	93.213		360,416	-	-	-	360,416	-
Mental Health Research Grants	93.242		8,294,036	-	-	-	8,294,036	1,047,506
Mental Health Research Grants	93.242		-	18,494	Dartmouth College	5R01MH103148-03	18,494	-
Mental Health Research Grants	93.242		-	3,229	Memorial Sloan Kettering Cancer Center	R21MH095378	3,229	-
Mental Health Research Grants	93.242		-	4,267	University Of Pittsburgh	U01MH062565	4,267	-
Mental Health Research Grants	93.242		-	80,660	Wayne State University	R01MH099557	80,660	-
Mental Health Research Grants	93.242		-	125,308	Exocytronics LLC	1R43MH109212-01A1	125,308	-
Mental Health Research Grants	93.242		-	100,704	University Of Washington	R61MH110509	100,704	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Mental Health Research Grants	93.242		-	40,652	New York University School Of Medicine	R01MH105506	40,652	-
Mental Health Research Grants	93.242		-	26,288	Centre For Addiction And Mental Health	R01MH099167	26,288	-
Mental Health Research Grants	93.242		-	11,623	University Of Texas, Health Science Center	R21MH110110	11,623	-
Mental Health Research Grants	93.242		-	40,550	Icahn School Of Medicine At Mount Sinai	R01MH101479	40,550	-
Mental Health Research Grants	93.242		_	79,590	Icahn School Of Medicine At Mount Sinai	R01MH95807	79,590	-
Mental Health Research Grants	93.242		-	92,110	Research Fdn For Mental Hygiene Riverview Center	RMH054137F	92,110	-
Mental Health Research Grants	93.242		-	544	Research Fdn For Mental Hygiene Riverview Center	RMH085921A	544	-
Mental Health Research Grants	93.242		_	12,820	Research Fdn For Mental Hygiene Riverview Center	RMH099388A	12,820	-
Mental Health Research Grants	93.242		-	236,710	The Florida State University	R01MH104423	236,710	-
Alcohol Research Programs	93.273		599,331	-	· ·	-	599,331	118,533
Alcohol Research Programs	93.273		-	2,243	University Of North Carolina	UAA021908B	2,243	-
Alcohol Research Programs	93.273		_	21,909	Research Fdn For Mental Hygiene Riverview Center	R01AA023163	21,909	-
Drug Abuse and Addiction Research Programs	93.279		5,398,992	-	-	-	5,398,992	1,523,500
Drug Abuse and Addiction Research Programs	93.279		- · · · · -	131,355	Columbia University	R01DA035280	131,355	-
Drug Abuse and Addiction Research Programs	93.279		-	35,027	Columbia University	R01DA043130	35,027	-
Drug Abuse and Addiction Research Programs	93.279		-	(1)	Columbia University	R01DA17293	(1)	-
Drug Abuse and Addiction Research Programs	93.279		-	2,785	University Of California, Los Angeles	R21DA038163	2,785	-
Drug Abuse and Addiction Research Programs	93.279		-	754	Yale University	R21DA038048	754	-
Drug Abuse and Addiction Research Programs	93.279		-	44,577	National Development And Research Inst	R01DA041298	44,577	-
Drug Abuse and Addiction Research Programs	93.279		-	13,080	National Bureau Of Economic Research	R01DA039968	13,080	-
Drug Abuse and Addiction Research Programs	93.279		-	15,161	National Bureau Of Economic Research	RDA039968A	15,161	-
Drug Abuse and Addiction Research Programs	93.279		-	41,801	Vanderbilt University	RDA035263A	41,801	-
Drug Abuse and Addiction Research Programs	93.279		-	68,201	University Of Miami	UG1DA013720	68,201	-
Drug Abuse and Addiction Research Programs	93.279		_	54,166	Albert Einstein College	R01DA034086	54,166	-
Drug Abuse and Addiction Research Programs	93.279		-	35,605	Mediomics, LLC	R43DA042468	35,605	-
Drug Abuse and Addiction Research Programs	93.279		_	43,858	Simon Fraser University	R01DA041747	43,858	-
Mental Health National Research Service Awards for Research Training	93.282		17,009	-	<u>.</u>	-	17,009	-
Discovery and Applied Research for Technological Innovations to								
Improve Human Health	93.286		3,354,575	-	-	-	3,354,575	683,604
Discovery and Applied Research for Technological Innovations to								
Improve Human Health	93.286		_	37,277	University Of Memphis	5U54EB020404-03	37,277	_
Discovery and Applied Research for Technological Innovations to					, ,			
Improve Human Health	93.286		-	273,331	The University Of Kansas	P41EB20594	273,331	-
Discovery and Applied Research for Technological Innovations to					•			
Improve Human Health	93.286		-	(14,425)	National Institute Of Biomedical Imaging And Bioengineering	P41EB20594	(14,425)	-
Minority Health and Health Disparities Research	93.307		473,185	-	-	-	473,185	181,946
Minority Health and Health Disparities Research	93.307		-	25,421	University Of Virginia	7R01MD007702-03	25,421	-
Trans-NIH Research Support	93.310		4,185,520	-	-	-	4,185,520	62,857
Trans-NIH Research Support	93.310		- · · · · -	263,011	Boyce Thompson Institute	-	263,011	· -
Trans-NIH Research Support	93.310		_	727,072	Columbia University	UG3OD023183	727,072	_
Trans-NIH Research Support	93.310		-	1,435	Memorial Sloan Kettering Cancer Center	DP2OD008440	1,435	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Trans-NIH Research Support	93.310		-	66,162	Northwestern University	DP2GM110838	66,162	-
Trans-NIH Research Support	93.310		-	237,032	Rockefeller University	UH3TR000933	237,032	-
Trans-NIH Research Support	93.310		-	218,752	President And Fellows Of Harvard College	R01EB018659	218,752	_
Trans-NIH Research Support	93.310		_	5,152	Icahn School Of Medicine At Mount Sinai	R25EB020393	5,152	-
National Center for Advancing Translational Sciences	93.350		8,537,639		-	-	8,537,639	2,288,174
National Center for Advancing Translational Sciences	93.350		· · · · -	2,893	University Of Rochester	5UL1TR000042-10	2,893	· · · · · -
Research Infrastructure Programs	93.351		5,634,701		-	-	5,634,701	26,204
Nursing Research	93.361		23,030	-	-	-	23,030	· -
Nursing Research	93.361		´ -	53	New York University School Of Medicine	R01NR10730	53	_
National Center for Research Resources	93.389		42,831	-	-	-	42,831	-
Cancer Cause and Prevention Research	93.393		1,603,089	-	-	-	1,603,089	206,480
Cancer Cause and Prevention Research	93.393		-	33,955	Columbia University	R01CA200795	33,955	-
Cancer Cause and Prevention Research	93,393		_	24,274	Columbia University	R01CA205028	24,274	_
Cancer Cause and Prevention Research	93.393		_	15,116	Memorial Sloan Kettering Cancer Center	R03CA193986	15,116	_
Cancer Cause and Prevention Research	93.393		_	9,121	Memorial Sloan Kettering Cancer Center	R21CA2020793	9,121	_
Cancer Cause and Prevention Research	93,393		_	88,445	University Of Rochester	R01CA168387	88,445	_
Cancer Cause and Prevention Research	93.393		_	19,839	University Of Utah	R01CA164944	19,839	_
Cancer Cause and Prevention Research	93.393		_	2,909	University Of Illinois At Chicago	U01CA154248	2,909	_
Cancer Cause and Prevention Research	93,393		_	160,605	Mayo Clinic	U01CA195568	160,605	_
Cancer Cause and Prevention Research	93.393		_	(31,649)	New York University School Of Medicine	R01AG035137	(31,649)	_
Cancer Cause and Prevention Research	93.393		_	18,660	New York University School Of Medicine	R01CA187060	18,660	_
Cancer Cause and Prevention Research	93,393		_	37,932	Mayo Clinic Arizona	P01CA77839	37,932	_
Cancer Cause and Prevention Research	93.393		_	35,895	University Of Texas, Md Anderson Center	R01CA207216	35,895	_
Cancer Detection and Diagnosis Research	93.394		2,619,752	-	-	-	2,619,752	128,298
Cancer Detection and Diagnosis Research	93.394		-,,	121,340	Memorial Sloan Kettering Cancer Center	5R01 CA161280-04	121,340	
Cancer Detection and Diagnosis Research	93.394		_	112,569	Memorial Sloan Kettering Cancer Center	BD516009	112,569	_
Cancer Detection and Diagnosis Research	93.394		_	45,249	University Of California, San Diego	5U01CA199792-02	45,249	_
Cancer Detection and Diagnosis Research	93,394		_	(6,699)	University Of Michigan	U01CA111275	(6,699)	_
Cancer Detection and Diagnosis Research	93.394		_	6,731	The Broad Institute	U24CA210978	6,731	_
Cancer Detection and Diagnosis Research	93.394		_	84,476	University Of Colorado	U01CA157715	84,476	_
Cancer Detection and Diagnosis Research	93.394		_	(62,606)	University Of Texas, Health Science Center	U01CA86402	(62,606)	_
Cancer Detection and Diagnosis Research	93.394		_	40,555	Research Fdn Of The SUNY - Brockport	R01CA195506	40,555	_
Cancer Detection and Diagnosis Research	93.394		_	136,576	Icahn School Of Medicine At Mount Sinai	R01CA163772	136,576	_
Cancer Detection and Diagnosis Research	93.394		_	8,500	JBS Science, Inc.	R44CA165312	8,500	_
Cancer Detection and Diagnosis Research	93.394		_	10,307	American College Of Radiology Imaging Network	CA80098	10.307	_
Cancer Treatment Research	93.395		5,809,135		- -	-	5,809,135	620,771
Cancer Treatment Research	93,395		-	9,979	Children's Hospital Of Philadelphia	U10CA180886	9,979	-
Cancer Treatment Research	93.395		_	9,803	Children's Hospital Of Philadelphia	UCA180886A	9,803	_
Cancer Treatment Research	93.395		_	333	Children's Hospital Of Philadelphia	UCA189955A	333	_
Cancer Treatment Research	93.395		_	320,495	University Of California, Los Angeles	U01CA121947	320,495	_
Cancer Treatment Research	93.395		_	9,000	University Of California, Los Angeles	UCA121947C	9,000	-
Cancer Treatment Research	93.395		_	185,647	University Of California, Los Angeles	UM1CA121947	185,647	_
Cancer Treatment Research	93.395		_	43,178	University Of Chicago	U10CA31946	43.178	-
Cancel Treatment Resourch	75.575			13,170	om. cish, of cincugo	0100101740	13,176	

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Cancer Treatment Research	93.395		-	(275)	University Of Massachusetts	R01CA164311	(275)	-
Cancer Treatment Research	93.395		-	46,937	University Of Michigan	RCA207272A	46,937	-
Cancer Treatment Research	93.395		-	74,830	Teamedon International, LLC	RCA203172A	74,830	-
Cancer Treatment Research	93.395		-	(1,341)	Ohio State Medical Center	R01CA102031	(1,341)	-
Cancer Treatment Research	93.395		-	198,762	Dana-Farber Cancer Institute, Inc.	R01CA182736	198,762	-
Cancer Treatment Research	93.395		-	27,178	Dana-Farber Cancer Institute, Inc.	R01CA197329	27,178	-
Cancer Treatment Research	93.395		-	152,763	Montefiore Medical Center	U01CA180827	152,763	-
Cancer Treatment Research	93.395		-	(21,705)	The Emmes Corporation	52986510	(21,705)	-
Cancer Treatment Research	93.395		-	26,109	The Emmes Corporation	U01CA121947	26,109	-
Cancer Treatment Research	93.395		-	22,596	Icahn School Of Medicine At Mount Sinai	P01CA108671	22,596	-
Cancer Treatment Research	93.395		-	153,464	City Of Hope Beckman Research Institute	R01CA102031	153,464	-
Cancer Treatment Research	93.395		-	12,055	City Of Hope Beckman Research Institute	RCA102031D	12,055	-
Cancer Treatment Research	93.395		-	10,787	The Medical College Of Wisconsin	R01CA184798	10,787	-
Cancer Biology Research	93.396		6,079,199	-	-	-	6,079,199	506,042
Cancer Biology Research	93.396		-	29,930	Columbia University	R01CA173636	29,930	-
Cancer Biology Research	93.396		-	146,148	Memorial Sloan Kettering Cancer Center	RCA195787A	146,148	-
Cancer Biology Research	93.396		-	20,501	University Of Montreal	R01CA098571	20,501	-
Cancer Biology Research	93.396		-	11,476	Dana-Farber Cancer Institute, Inc.	U01CA162148	11,476	-
Cancer Biology Research	93.396		-	339,898	Methodist Hospital Research Institute	UCA188388A	339,898	-
Cancer Biology Research	93.396		-	177,805	Brigham And Women'S Hospital	P01CA120964	177,805	-
Cancer Biology Research	93.396		-	197,365	University Of Texas, Md Anderson Center	P01CA117969	197,365	-
Cancer Biology Research	93.396		-	395,860	Trustees Of The University Of Pennsylvania	R01CA198089	395,860	-
Cancer Centers Support Grants	93.397		1,291,698	-	-	-	1,291,698	92,815
Cancer Centers Support Grants	93.397		-	4,165	Columbia University	P50CA092629	4,165	-
Cancer Centers Support Grants	93.397		-	558,182	Memorial Sloan Kettering Cancer Center	1U54CA199081-01	558,182	-
Cancer Centers Support Grants	93.397		-	12,169	Memorial Sloan Kettering Cancer Center	P30CA008748	12,169	-
Cancer Centers Support Grants	93.397		-	169,334	Memorial Sloan Kettering Cancer Center	P50CA172012	169,334	-
Cancer Centers Support Grants	93.397		-	108,811	Memorial Sloan Kettering Cancer Center	P50CA192937	108,811	-
Cancer Centers Support Grants	93.397		-	(295,339)	Memorial Sloan Kettering Cancer Center	U54CA163167	(295,339)	-
Cancer Centers Support Grants	93.397		-	24,259	University Of Michigan	P50CA186786	24,259	-
Cancer Centers Support Grants	93.397		-	63,902	Roswell Park Cancer Institute	3P30CA016056-39S5	63,902	-
Cancer Centers Support Grants	93.397		-	18,948	University Of Nebraska Medical Center	U54CA163120	18,948	-
Cancer Centers Support Grants	93.397		-	13,884	Fred Huchinson Cancer Research Center	U54CA163167	13,884	-
Cancer Centers Support Grants	93.397		-	106,612	Sarcoma Alliance For Research Through Collaboration	U24CA168512	106,612	-
Cancer Centers Support Grants	93.397		-	31,633	Children's Hospital Los Angeles	U54CA163117	31,633	-
Cancer Research Manpower	93.398		1,579,045	-	-	-	1,579,045	-
Trans-NIH Recovery Act Research Support	93.701		(16,811)	-	-	-	(16,811)	-
Trans-NIH Recovery Act Research Support	93.701		-	(169,802)	Cold Spring Harbor Laboratory	RC2HL101846	(169,802)	-
Trans-NIH Recovery Act Research Support	93.701		-	(13,292)	University Of Florida	U24RR29822	(13,292)	-
Cardiovascular Diseases Research	93.837		11,043,769	-	-	-	11,043,769	1,376,609
Cardiovascular Diseases Research	93.837		-	2,019	Columbia University	R01HL113136	2,019	-
Cardiovascular Diseases Research	93.837		-	(4,371)	Columbia University	U01HL68290	(4,371)	-
Cardiovascular Diseases Research	93.837		-	219,637	New York University	U01HL105907	219,637	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Cardiovascular Diseases Research	93.837		-	68,791	Research Triangle Institute International	1R21HL125574-01	68,791	-
Cardiovascular Diseases Research	93.837		_	19,057	University Of Pittsburgh	5R01HL122144-02	19,057	-
Cardiovascular Diseases Research	93.837		-	26,291	University Of Pittsburgh	5R01HL122144-03	26,291	-
Cardiovascular Diseases Research	93.837		-	6,799	University Of Rochester	U01HL096607	6,799	-
Cardiovascular Diseases Research	93.837		_	14,003	Children's Hospital Boston	R35HL135821	14,003	-
Cardiovascular Diseases Research	93.837		-	20,301	Children's Hospital Boston	RHL135821A	20,301	-
Cardiovascular Diseases Research	93.837		_	50,132	Albert Einstein College	R33HL120782	50,132	-
Cardiovascular Diseases Research	93.837		-	383,346	University Of Alabama - Birmngham	UH2HL130691	383,346	-
Cardiovascular Diseases Research	93.837		-	9,927	University Of Kansas Medical Center	R01HL129875	9,927	-
Cardiovascular Diseases Research	93.837		-	1,728	University Of Kansas Medical Center	R56HL129875	1,728	-
Cardiovascular Diseases Research	93.837		-	12,233	University Of Iowa	P01HL84207	12,233	-
Cardiovascular Diseases Research	93.837		-	89,236	Massachusetts General Hospital	RHL123336A	89,236	-
Cardiovascular Diseases Research	93.837		-	30,974	Massachusetts General Hospital	U01HL123336	30,974	-
Cardiovascular Diseases Research	93.837		-	25,986	Icon Clinical Research, LLC	U01HL117006	25,986	-
Cardiovascular Diseases Research	93.837		-	13,212	Icahn School Of Medicine At Mount Sinai	U01HL136297	13,212	-
Cardiovascular Diseases Research	93.837		-	18,231	Washington University	P20HL113444	18,231	-
Cardiovascular Diseases Research	93.837		-	1,892	University Of Maryland	U01HL099997	1,892	-
Cardiovascular Diseases Research	93.837		_	14,932	Trustees Of The University Of Pennsylvania	U54HL177798	14,932	-
Lung Diseases Research	93.838		7,284,215	-	-	-	7,284,215	1,690,578
Lung Diseases Research	93.838		-	3,694	Beth Israel Deaconess Medical Center	5R01HL111430-04	3,694	-
Lung Diseases Research	93.838		_	150,827	Columbia University	U01HL125218	150,827	-
Lung Diseases Research	93.838		-	(34)	University Of Michigan	R01HL114447	(34)	-
Lung Diseases Research	93.838		_	154,677	University Of Michigan	R01HL122438	154,677	-
Lung Diseases Research	93.838		-	858	University Of North Carolina Chapel Hill	5R01HL122711-03	858	-
Lung Diseases Research	93.838		_	57,218	University Of Virginia	R01HL131565	57,218	-
Lung Diseases Research	93.838		_	6,373	Cleveland Clinic	U01HL125177	6,373	-
Lung Diseases Research	93.838		-	(339)	Brigham And Women'S Hospital	P01HL105339	(339)	-
Blood Diseases and Resources Research	93.839		1,501,560	-	-	-	1,501,560	-
Blood Diseases and Resources Research	93.839		-	90,762	University Of Florida	R01HL131093	90,762	-
Blood Diseases and Resources Research	93.839		-	2,937	New England Research Institutes	U01HL65238	2,937	-
Blood Diseases and Resources Research	93.839		-	21,922	University Of Washington	U01HL088476	21,922	-
Blood Diseases and Resources Research	93.839		_	182,327	Fred Huchinson Cancer Research Center	R01HL115128	182,327	-
Blood Diseases and Resources Research	93.839		-	22,424	Washington University	U01HL116383	22,424	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		1,697,595	-	-	-	1,697,595	90,086
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		-	40,536	Articulate Biomedical LLC	1 R41 AR 068183 - 01	40,536	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		-	137,759	Columbia University	5R01AR065023-03	137,759	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		_	468	Hospital For Special Surgery	1 R21AR071534-01	468	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		-	128,156	Hospital For Special Surgery	5R01 AR041325-24	128,156	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		_	5,878	Mount Sinai School Of Medicine	R01AR068579	5,878	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		_	19,347	Northwestern University	R21AR69867	19,347	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		-	9,380	University Of California Davis	5R01AR043052-14	9,380	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		-	53,577	University Of Massachusetts	R01AR68983	53,577	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		-	11,786	Mount Sinai Hospital	1R01AR069537-01	11,786	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		7,502,386	-	-	-	7,502,386	618,027

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	87,315	Beth Israel Deaconess Medical Center	R01DK098002	87,315	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	11,966	Columbia University	P30DK063608	11,966	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	(360)	Columbia University	R01DK097399	(360)	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	(124,998)	Columbia University	U01DK066667	(124,998)	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	38,954	Columbia University	U54DK104309	38,954	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	3,496	University Of Utah	R01DK93151	3,496	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	39,149	Albert Einstein College	UC4DK101108	39,149	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	4,920	Case Western Reserve University	DP3DK101074	4,920	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	8,752	Case Western Reserve University	DP3DK104438	8,752	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	231,946	Case Western Reserve University	U01DK094157	231,946	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	6,374	Texas Biomedical Research Institute	R01DK110096	6,374	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	2,662	Brigham And Women'S Hospital	R01DK108438	2,662	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	72,669	Icahn School Of Medicine At Mount Sinai	P01DK072201	72,669	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		-	21,302	Brigham Young Unniversity	R21DK99619	21,302	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		15,903,223	-	-	-	15,903,223	1,454,473
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	1,186	Beth Israel Deaconess Medical Center	U01NS074425	1,186	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	2,941	Columbia University	R01NS100850	2,941	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	13,392	Columbia University	U10NS077267	13,392	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	222,886	Columbia University	U10NS086728	222,886	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	13,998	Johns Hopkins University	U01NS080824	13,998	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	129,389	Memorial Sloan Kettering Cancer Center	R01NS099270	129,389	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	46,612	Northwestern University	U01NS80818	46,612	10,540
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	298,051	Rockefeller University	R01NS097184	298,051	-
Extramural Research Programs in the Neurosciences and						T		
Neurological Disorders	93.853		-	890	Rockefeller University	R01NS34389	890	-
Extramural Research Programs in the Neurosciences and						T-0.13700 -= 1-0		
Neurological Disorders	93.853		-	24,379	University Of California San Francisco	R01NS067420	24,379	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	183,598	University Of Pennsylvania	R01NS093120	183,598	-
Extramural Research Programs in the Neurosciences and	02.052			50 15 ·	The second of	500134000005 10	50 ·=·	
Neurological Disorders	93.853		-	52,474	University Of Pittsburgh	5R01NS032385-19	52,474	-
Extramural Research Programs in the Neurosciences and	02.052			107.252	V 1 V 1	NG005126	107.252	
Neurological Disorders	93.853		-	197,263	Yale University	NS085136	197,263	-
Extramural Research Programs in the Neurosciences and	02.052			10.71	m 1 II : :	TD01NG00011 c 05	10.51.6	
Neurological Disorders	93.853		-	19,716	Temple University	7R01NS082116-05	19,716	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	4,985	Mayo Clinic	U01NS080168	4,985	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	12,225	Ohio State Medical Center	R01LM11116	12,225	-
Extramural Research Programs in the Neurosciences and	02.952			21.426	Managharatta Caramal III amital	1101NG094405	21.426	20.822
Neurological Disorders Extramural Research Programs in the Neurosciences and	93.853		-	21,426	Massachusetts General Hospital	U01NS084495	21,426	20,822
Neurological Disorders	93.853			1,967	Massachusetts General Hospital	U01NS090259	1,967	_
Extramural Research Programs in the Neurosciences and	93.833		-	1,907	Wassachuseus General Hospital	001113090239	1,907	-
Neurological Disorders	93.853		_	7,352	University Of Cincinnati	U01NS092076	7.352	_
Extramural Research Programs in the Neurosciences and	75.055			7,552	cin reisity of cinemian	001110092070	7,552	
Neurological Disorders	93.853		-	1,626	Harvard Medical School	U01NS082329	1,626	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	434,347	Brigham And Women'S Hospital	UM1AI068636	434,347	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	41,203	Icahn School Of Medicine At Mount Sinai	R01NS060809	41,203	-
Extramural Research Programs in the Neurosciences and								
Neurological Disorders	93.853		-	185,841	Icahn School Of Medicine At Mount Sinai	R01NS084486	185,841	-
Extramural Research Programs in the Neurosciences and	02.052			221 766	Wy 1' c II' c	D01NG000024	221 766	
Neurological Disorders Extramural Research Programs in the Neurosciences and	93.853		-	221,766	Washington University	R01NS090934	221,766	-
Neurological Disorders	93,853			144,480	Washington University	R01NS092653	144.480	
Extramural Research Programs in the Neurosciences and	93.833		-	144,460	washington University	R01NS092033	144,460	-
Neurological Disorders	93.853		_	11,395	Kennedy Krieger, Inc.	K12NS098482	11,395	_
Extramural Research Programs in the Neurosciences and	75.055			11,555	Remiedy Rifeger, inc.	1112113090102	11,575	
Neurological Disorders	93.853		-	29,457	Regents Of The University Of Minnesota	U54NS065768	29,457	-
Allergy and Infectious Diseases Research	93.855		28,430,046	· -	-	-	28,430,046	6,440,555
Allergy and Infectious Diseases Research	93.855		-	(386)	Columbia University	P01AI106697	(386)	-
Allergy and Infectious Diseases Research	93.855		-	381,104	Columbia University	PAI106697B	381,104	-
Allergy and Infectious Diseases Research	93.855		-	181,201	Columbia University	R01AI119762	181,201	-
Allergy and Infectious Diseases Research	93.855		-	(21,613)	Columbia University	R33AI098654	(21,613)	-
Allergy and Infectious Diseases Research	93.855		-	(89,252)	Columbia University	U54AI57158	(89,252)	-
Allergy and Infectious Diseases Research	93.855		-	113,459	Duke University	R01AI125416	113,459	-
Allergy and Infectious Diseases Research	93.855		-	447	Duke University	U19AI56363	447	-
Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	93.855 93.855		-	1,138 12,776	Jan Biotech Inc	1R41AI116358-01A1 UM1AI068632	1,138 12.776	-
Allergy and Infectious Diseases Research  Allergy and Infectious Diseases Research	93.855		-	12,776	Johns Hopkins University Johns Hopkins University	UM1AI08632 UM1AI68632	12,776	-
Allergy and Infectious Diseases Research	93.855		-	149,423	Michigan State University	U19AI089683-04	149,423	
Allergy and Infectious Diseases Research	93.855		_	19,467	New York University	R33AI098654	19,467	_
Allergy and Infectious Diseases Research	93.855		-	151,087	Princeton University	R21AI117213	151.087	_
Allergy and Infectious Diseases Research	93.855		-	56,510	Rockefeller University	U01AI18536	56,510	-
Allergy and Infectious Diseases Research	93.855		-	23,047	University Of Cape Town	R21AI115993-01	23,047	-
Allergy and Infectious Diseases Research	93.855		-	100,562	University Of Massachusetts Medical School	1R21AI111173-02	100,562	-
Allergy and Infectious Diseases Research	93.855		-	78,981	University Of Miami School Of Medicine	R01AI091521	78,981	-
Allergy and Infectious Diseases Research	93.855		-	69,241	University Of Michigan	R01AI119446	69,241	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Allergy and Infectious Diseases Research	93.855		-	40,629	University Of Pennsylvania	R01AI082292	40,629	-
Allergy and Infectious Diseases Research	93.855		-	26,712	University Of Rochester Medical Center	5P30AI079498-08	26,712	-
Allergy and Infectious Diseases Research	93.855		-	13,592	Wayne State University	R01AI119446	13,592	-
Allergy and Infectious Diseases Research	93.855		-	38,311	Imperial College Of London	1R21AI118593-01A1	38,311	-
Allergy and Infectious Diseases Research	93.855		-	25,151	Harvard University	1R01AI124165	25,151	-
Allergy and Infectious Diseases Research	93.855		-	(31,587)	Les Centres Gheskio	U01AI058257	(31,587)	-
Allergy and Infectious Diseases Research	93.855		-	23,230	Les Centres Gheskio	U01AI58257	23,230	-
Allergy and Infectious Diseases Research	93.855		-	5,128	Les Centres Gheskio	U01AI69421	5,128	-
Allergy and Infectious Diseases Research	93.855		-	502,969	Les Centres Gheskio	UM1AI069421	502,969	-
Allergy and Infectious Diseases Research	93.855		-	130,318	Children's Hospital Boston	R01AI099204	130,318	-
Allergy and Infectious Diseases Research	93.855		-	6,969	Institute For Clinical Research	U01AI068641	6,969	-
Allergy and Infectious Diseases Research	93.855		-	439,680	Family Health International	HPTN-MGA-WEILL-01	439,680	211,745
Allergy and Infectious Diseases Research	93.855		-	524,417	Family Health International	UM1AI068619	524,417	496,808
Allergy and Infectious Diseases Research	93.855		-	54,798	Family Health International	UM1AI6861	54,798	-
Allergy and Infectious Diseases Research	93.855		-	908,612	Family Health International	UM1AI68619	908,612	902,229
Allergy and Infectious Diseases Research	93.855		-	117,892	Texas A&M	AI121689	117,892	-
Allergy and Infectious Diseases Research	93.855		-	(9,477)	Vanderbilt University	U01AI69923	(9,477)	-
Allergy and Infectious Diseases Research	93.855		-	58,691	Fundação De Apoio A Pesquisa E A Extens	PAI030639G	58,691	-
Allergy and Infectious Diseases Research	93.855		-	39,347	Albert Einstein College	U01AI035004	39,347	-
Allergy and Infectious Diseases Research	93.855		-	40,363	Vanderbilt University Medical Center	U01AI069923	40,363	21,066
Allergy and Infectious Diseases Research	93.855		-	11,491	Vanderbilt University Medical Center	U01AI69923	11,491	1,928
Allergy and Infectious Diseases Research	93.855		-	69,358	Boston Medical Center	U19AI111276	69,358	-
Allergy and Infectious Diseases Research	93.855		-	65,234	Oregon Health And Science University	UAI095776A	65,234	-
Allergy and Infectious Diseases Research	93.855		-	161,956	The Research Institute Of Mcgill University Health Centre	R01AI124349	161,956	-
Allergy and Infectious Diseases Research	93.855		-	888,010	President And Fellows Of Harvard College	U19AI107774	888,010	-
Allergy and Infectious Diseases Research	93.855		-	52,506	Massachusetts General Hospital	R01AI042006	52,506	-
Allergy and Infectious Diseases Research	93.855		-	244,409	Brigham And Women'S Hospital	UAI068636C	244,409	-
Allergy and Infectious Diseases Research	93.855		-	232,340	Brigham And Women'S Hospital	UM1AI068636	232,340	-
Allergy and Infectious Diseases Research	93.855		-	109,373	University Of Maryland	R01AI121146	109,373	-
Allergy and Infectious Diseases Research	93.855		-	59,413	Biovinc, LLC	R43AI125060	59,413	-
Allergy and Infectious Diseases Research	93.855		-	2,211	Scripps Research Institute	UM1AI00663	2,211	-
Allergy and Infectious Diseases Research	93.855		-	39,168	Rutgers, The State University Of New Jersey	R01AI106398	39,168	-
Allergy and Infectious Diseases Research	93.855		-	28,503	Rutgers, The State University Of New Jersey	R33AI111647	28,503	-
Allergy and Infectious Diseases Research	93.855		-	201,370	Research Fdn Of The SUNY - Buffalo	R01AI111990	201,370	-
Allergy and Infectious Diseases Research	93.855		-	4,442	Social And Scientific Systems	SSS #BRS-ACURE-Q-06-	4,442	-
Allergy and Infectious Diseases Research	93.855		-	(1,274)	Social And Scientific Systems	U01AI68636	(1,274)	-
Microbiology and Infectious Diseases Research	93.856		-	218,727	Mount Sinai School Of Medicine	HHSN272201400008C	218,727	-
Microbiology and Infectious Diseases Research	93.856		-	158,017	University Of Rochester	HHSN272201400005C	158,017	-
Biomedical Research and Research Training	93.859		33,842,298	-	-	-	33,842,298	1,009,345
Biomedical Research and Research Training	93.859		-	19,082	Children's Hospital Of Philadelphia	5R01GM108716-04	19,082	-
Biomedical Research and Research Training	93.859		-	54,647	Cold Spring Harbor Laboratory	5R01GM102192-05	54,647	-
Biomedical Research and Research Training	93.859		-	70,710	Cold Spring Harbor Laboratory	R01GM102192	70,710	-
Biomedical Research and Research Training	93.859		-	29,568	Glycobia Inc.	2R44GM093483-02	29,568	-
Biomedical Research and Research Training	93.859		-	(554)	Iowa State University	5R01GM098861	(554)	-

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Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Biomedical Research and Research Training	93.859		-	291,088	Memorial Sloan Kettering Cancer Center	R01GM052470	291,088	-
Biomedical Research and Research Training	93.859		-	62,797	Memorial Sloan Kettering Cancer Center	R01GM120570	62,797	-
Biomedical Research and Research Training	93.859		-	3,782	University Of Arizona	1R01GM116113-01A1	3,782	-
Biomedical Research and Research Training	93.859		-	72,629	University Of Chicago	R01GM105933	72,629	-
Biomedical Research and Research Training	93.859		-	69,535	University Of Chicago	U54GM087519	69,535	-
Biomedical Research and Research Training	93.859		-	122,133	University Of Chicago	UGM087519B	122,133	-
Biomedical Research and Research Training	93.859		-	73,057	University Of Massachusetts	5R01GM110394-04	73,057	-
Biomedical Research and Research Training	93.859		-	190,405	University Of Michigan	R01GM103961	190,405	-
Biomedical Research and Research Training	93.859		-	(689)	University Of Minnesota	5R01GM059604-14	(689)	-
Biomedical Research and Research Training	93.859		-	3,794	University Of Pennsylvania	R37GM053256	3,794	-
Biomedical Research and Research Training	93.859		-	1,302	University Of Rochester	R01GM101023	1,302	-
Biomedical Research and Research Training	93.859		-	97,418	University Of Utah	R01GM064664	97,418	-
Biomedical Research and Research Training	93.859		-	16,393	Virginia Polytechnic Institute & State University	5R01GM099450-04	16,393	-
Biomedical Research and Research Training	93.859		-	83,801	Virginia Polytechnic Institute & State University	R01GM105245	83,801	-
Biomedical Research and Research Training	93.859		-	19,341	Washington University In St. Louis	R01BM108811	19,341	-
Biomedical Research and Research Training	93.859		-	57,495	Yale University	P01GM56550	57,495	-
Biomedical Research and Research Training	93.859		-	43,336	Yale University	R01GM116654	43,336	-
Biomedical Research and Research Training	93.859		-	135,280	Tetragenetics Inc.	1R44GM116236-01A1	135,280	-
Biomedical Research and Research Training	93.859		-	(17,851)	Vanderbilt University	R01GM103859	(17,851)	-
Biomedical Research and Research Training	93.859		-	235,233	Vanderbilt University Medical Center	R01GM103859	235,233	-
Biomedical Research and Research Training	93.859		-	83,939	University Of Colorado	R01GM111902	83,939	-
Biomedical Research and Research Training	93.859		-	24,660	Tufts Medical Center	R01GM04221	24,660	-
Child Health and Human Development Extramural Research	93.865		8,545,821	-	-	-	8,545,821	418,764
Child Health and Human Development Extramural Research	93.865		-	130,393	Columbia University	P01HD080642	130,393	-
Child Health and Human Development Extramural Research	93.865		-	8,008	Columbia University	R01HD067287	8,008	-
Child Health and Human Development Extramural Research	93.865		-	137,049	Duke University	U01HD073984	137,049	-
Child Health and Human Development Extramural Research	93.865		-	73,529	Johns Hopkins University	R01HD074542	73,529	-
Child Health and Human Development Extramural Research	93.865		-	171,749	Johns Hopkins University	R01HD81929	171,749	-
Child Health and Human Development Extramural Research	93.865		-	8,512	Johns Hopkins University	U54HD070725-05	8,512	-
Child Health and Human Development Extramural Research	93.865		-	233,797	University Of California, Los Angeles	R01HD073975	233,797	-
Child Health and Human Development Extramural Research	93.865		-	48,878	University Of Michigan	1R01HD088506-01	48,878	-
Child Health and Human Development Extramural Research	93.865		-	138,926	University Of Texas Medical Branch	5P2CHD065702-07	138,926	-
Child Health and Human Development Extramural Research	93.865		-	4,805	University Of Oklahoma	R01HD074579	4,805	-
Child Health and Human Development Extramural Research	93.865		-	35,828	New York University School Of Medicine	R01HD076914	35,828	-
Child Health and Human Development Extramural Research	93.865		-	8,452	Washington University	R01HD78641	8,452	-
Child Health and Human Development Extramural Research	93.865		-	54,163	Washington University	U01HD079065	54,163	-
Child Health and Human Development Extramural Research	93.865		-	(168,515)	University Of California, San Francisco	52936800	(168,515)	-
Child Health and Human Development Extramural Research	93.865		-	83,680	University Of California, San Francisco	K12HD#	83,680	-
Child Health and Human Development Extramural Research	93.865		-	84,107	University Of California, San Francisco	K12HD849	84,107	-
Child Health and Human Development Extramural Research	93.865		4 700 077	48,730	University Of California, San Francisco	R01HD043997	48,730	154 445
Aging Research	93.866		4,789,977	- 162	Colombia Hairraita	- P21 A C04 C702	4,789,977	154,445
Aging Research	93.866		-	6,162	Columbia University	R21AG046703	6,162	-
Aging Research	93.866		-	(68)	Columbia University	R21AG048408	(68)	-

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Aging Research	93.866		-	60,375	University Of Massachusetts	R21AG042701	60,375	-
Aging Research	93.866		-	(7,617)	University Of Michigan	R01AG047932	(7,617)	-
Aging Research	93.866		-	2,275	University Of Southern California Winifred Masterson Burke Medical	U19AG010483	2,275	-
Aging Research	93.866		-	117,024	Research Institute	2P01AG14930-15A1	117,024	-
Aging Research	93.866		-	31,495	National Research Opinion Center	1R01AG050605-01A1	31,495	-
Aging Research	93.866		-	49,692	Albert Einstein College	R01AG052286	49,692	-
Aging Research	93.866		-	(24,229)	University Of Washington	P01AG001751	(24,229)	-
Aging Research	93.866		-	81,274	New York University School Of Medicine	R01AG13616	81,274	-
Aging Research	93.866		-	821,685	Winifred Masterson Burke Medical Research Institute	P01AG014930	821,685	110,000
Aging Research	93.866		-	76,007	Brown University	R01AG047180	76,007	-
Aging Research	93.866		-	14,743	W.M. Burke Medical Research Institute	R01NS077897	14,743	-
Aging Research	93.866		-	91,334	University Of California, San Diego	U19AG010483	91,334	-
Vision Research	93.867		3,270,062	-	-	-	3,270,062	292,161
Vision Research	93.867		-	38,712	University Of Virginia	R01EY024327	38,712	-
International Research and Research Training	93.989		854,103	-	-	-	854,103	384,160
International Research and Research Training	93.989		-	187,320	Vanderbilt University Medical Center	R25TW009337	187,320	117,181
International Research and Research Training	93.989			54,093	Kilimanjaro Christian Medical College	D43TW010138	54,093	
National Institutes of Health Subtotal			184,904,605	24,460,529			209,365,134	23,628,613
Office of Minority Health								
Family and Community Violence Prevention Program	93.910		-	52,397	Lutheran Family Health Centers	-	52,397	-
Office of the Secretary								
Policy Research and Evaluation Grants	93.239		-	2,015	University Of California Davis	5H79AE000100-05	2,015	-
Teenage Pregnancy Prevention Program	93.297			39,957	Oswego County	1 TP1AH000086-01-00	39,957	
Office of the Secretary Subtotal			-	41,972			41,972	-
Department of Health and Human Services Total			189,267,082	27,215,941			216,483,023	24,333,809
Department of Homeland Security Science and Technology (S&T)								
Centers for Homeland Security	97.061			47,114	University Of North Carolina Chapel Hill	2015-ST-061-ND0001-01	47,114	
Agency for International Development								
Agency for International Development, Other	98.RD	206766	-	14,674	Purdue University	206766	14,674	-
Agency for International Development, Other	98.RD	207495	-	43,590	Purdue University	207495	43,590	-
Agency for International Development, Other	98.RD	208452	-	9,670	Purdue University	208452	9,670	-
Agency for International Development, Other	98.RD	209673	-	23,624	Purdue University	209673	23,624	-
Agency for International Development, Other	98.RD	16258	-	40,846	University Of California Davis	16258	40,846	-
USAID Foreign Assistance for Programs Overseas	98.001		2,420,106	-	-	-	2,420,106	1,778,035

## Schedule of Expenditures of Federal Awards Year Ended June 30, 2017

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
USAID Foreign Assistance for Programs Overseas USAID Foreign Assistance for Programs Overseas	98.001 98.001		-	140,882 5,425	Kansas State University Kansas State University	AID-OAA-A-13-00051 AID-OAA-LA-16-00003	140,882 5,425	-
USAID Foreign Assistance for Programs Overseas	98.001		-	585	Michigan State University	RC102095-M1002	585	-
USAID Foreign Assistance for Programs Overseas Global Development Alliance	98.001 98.011		-	112,986 67,982	University Of California Davis International Food Policy Rsch Inst	AID-OAA-A-14-00021 AID-OAA-A-14-00022	112,986 67,982	50,000
USAID Development Partnerships for University Cooperation			-	ŕ	•		,	-
and Development	98.012			10,211	University Of Florida	AIDECGA000700001	10,211	- 1.020.025
Agency for International Development Total			2,420,106	470,475			2,890,581	1,828,035
Total Research & Development Cluster			370,175,630	66,234,169			436,409,799	53,439,371
SNAP Cluster Department of Agriculture								
State Administrative Matching Grants for the Supplemental Nutrition Assistance Program	10.561		-	50,021	NYS Office Of Temporary And Disability Assistance	C021243	50,021	_
SNAP Cluster Total			_	50,021			50,021	-
Foreign Food Aid Donation Cluster								
Department of Agriculture Food for Progress	10.606		1,555				1,555	
Foreign Food Aid Donation Cluster Total	10.000		1,555		-	-	1,555	
Fish and Wildlife Cluster			1,333			•	1,333	
Department of the Interior								
•					SUNY College Of Environmental Science			
Wildlife Restoration and Basic Hunter Education	15.611			64,748	And Forestry	66287	64,748	29,408
Fish and Wildlife Cluster Total				64,748			64,748	29,408
Highway Planning and Construction Cluster Department of Transportation			-	-				
Highway Planning and Construction	20,205		_	20,045	City University Of New York	55606-03-25	20,045	_
Highway Planning and Construction	20.205		-	71,451	City University Of New York	C030793	71,451	34,171
Highway Planning and Construction	20.205		-	16,151	City University Of New York	C030794	16,151	-
Highway Planning and Construction	20.205			201,647	City University Of New York	C030794 & DTRT13-G-UTC32	201,647	-
Department of Transportation Total				309,294			309,294	34,171
Highway Planning and Construction Cluster Total				309,294			309,294	34,171
Highway Safety Cluster Department of Transportation								
State and Community Highway Safety	20.600			27,163	NYS Dept Of Motor Vehicles	HS1-2017	27,163	
Highway Safety Cluster Total				27,163			27,163	
TRIO Cluster Department of Education			-	-				
TRIO_Upward Bound	84.047		273,509	-	-	-	273,509	-
TRIO_McNair Post-Baccalaureate Achievement	84.217		205,669		-	-	205,669	
Department of Education Total			479,178				479,178	
TRIO Cluster Total			479,178				479,178	

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
TANF Cluster								
Department of Health and Human Services								
Temporary Assistance for Needy Families	93.558 93.558		-	82,631 397	NYS Office Of Children And Family Services NYS Office Of Children And Family Services	C026550 C026767	82,631 397	-
Temporary Assistance for Needy Families Temporary Assistance for Needy Families	93.558		-	213,728	NYS Office Of Children And Family Services	C026767 C027777	213.728	-
Department of Health and Human Services Total	73.336			296,756	1V15 Office of Children And Laminy Services	C027777	296,756	•
TANF Cluster Total				296,756			296,756	· <del></del>
				290,730			290,730	· <del></del>
CCDF Cluster Department of Health and Human Services								
Child Care and Development Block Grant	93.575		_	4,837	NYS Office Of Children And Family Services	C027959	4,837	_
CCDF Cluster Total	75.575			4,837	1415 Office of Children And Laminy Services	2021737	4.837	
			<u>-</u>	4,037			4,637	· <del></del>
Medicaid Cluster Department of Health and Human Services								
Medical Assistance Program	93.778		_	686	NYS Office Of Children And Family Services	C027959	686	_
Medicaid Cluster Total	75.770			686	1415 Office of Children Find Family Services	0021737	686	_
								· <del></del>
Other Awards Department of Agriculture								
Department of Agriculture					Northeast Organic Farming Association			
Department of Agriculture, Other	10.U01	79297	_	24,609	Of New York	-	24,609	-
Agricultural Research_Basic and Applied Research	10.001		11,834	-	-	-	11,834	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		381,071	-	-	-	381,071	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025		-	147,224	NYS Dept Of Ag & Markets	13-9636-1268CA	147,224	-
Plant and Animal Disease, Pest Control, and Animal Care	10.025			(1)	NYS Dept Of Ag & Markets	AGM01-4271	(1)	
			381,071	147,223			528,294	
Marketing Agreements and Orders	10.155		41,304	-	-	-	41,304	-
Market Protection and Promotion	10.163		987,383	-	-	-	987,383	105,719
Specialty Crop Block Grant Program - Farm Bill	10.170		-	1,449	NYS Dept Of Ag & Markets	T200838	1,449	-
Local Food Promotion Program	10.172		32,904	-	-	-	32,904	-
Local Food Promotion Program	10.172			13,094	Cornell Cooperative Extension Of Erie County	-	13,094	
			32,904	13,094			45,998	
Grants for Agricultural Research, Special Research Grants	10.200		-	91,775	Auburn University	2015-48770-24368	91,775	-
Sustainable Agriculture Research and Education	10.215		-	532	Ulster County Cooperative Extension	2013-38640-20895	532	-
Sustainable Agriculture Research and Education	10.215		-	19,615	University Of Massachusetts Amherst	2015-38640-23777	19,615	-
Sustainable Agriculture Research and Education	10.215		-	22,132	University Of Vermont	2013-38640-20895	22,132	-
Sustainable Agriculture Research and Education Sustainable Agriculture Research and Education	10.215 10.215		-	19,446	University Of Vermont University Of Vermont	2014-38640-22161 2015-38640-23777	19,446 26,357	8,986
Sustainable Agriculture Research and Education  Sustainable Agriculture Research and Education	10.215		-	26,357 81,420	University Of Vermont	2015-38640-23777	81,420	_
Sustainable rightenaute research and Education	10.213			169,502	om resity of vermont	2010-30040-23300	169.502	8.986
History Education Lastitution Chair	10.017			109,302				0,960
Higher Education - Institution Challenge Grants Program	10.217 10.303		92,005	-	-	-	92,005 40.601	24.846
Integrated Programs	10.303		40,601	-	-	-	40,601	24,846

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Homeland Security_Agricultural	10.304		19,765	-	-	-	19,765	-
Agriculture and Food Research Initiative (AFRI)	10.310		719	_	-	-	719	_
Agriculture and Food Research Initiative (AFRI)	10.310		-	5,352	Kansas State University	2017-67007-25932	5,352	-
Agriculture and Food Research Initiative (AFRI)	10.310		_	46,840	North Carolina State University	2015-68004-23179	46,840	_
Agriculture and Food Research Initiative (AFRI)	10.310			163,325	University Of Nebraska	2011-67003-30206	163,325	
			719	215,517			216,236	
National Food Safety Training, Education, Extension, Outreach, and					Northeast Organic Farming Association			
Technical Assistance Competitive Grants Program	10.328		-	30,291	Of New York	-	30,291	-
Crop Protection and Pest Management Competitive Grants Program	10.329		1,312,053	-	-	-	1,312,053	187,636
Crop Insurance Education in Targeted States	10.458		251,708	-	-	-	251,708	-
Cooperative Extension Service	10.500		12,038,348	-	-	-	12,038,348	180,511
Cooperative Extension Service	10.500		-	6,042	Ulster County Cooperative Extension	-	6,042	-
Cooperative Extension Service	10.500		-	5,465	University Of Delaware	2015-49200-24225	5,465	-
Cooperative Extension Service	10.500			43,627	University Of Illinois At Urbana-Champaign	2014-48770-22587	43,627	
			12,038,348	55,134			12,093,482	180,511
Team Nutrition Grants	10.574		-	1,256	Nevada Department Of Agriculture	FNS-CNTN-16-NV	1,256	-
Emerging Markets Program	10.603		331,415	-	-	-	331,415	-
Soil Survey	10.903		7,174	-	-	-	7,174	-
Agricultural Statistics Reports	10.950		328,613		-	-	328,613	
Department of Agriculture Total			15,876,897	749,850			16,626,747	507,698
Department of Commerce								
Department of Commerce, Other	11.U01	0090-FY16-IPA-0016	512,318	-	-	-	512,318	-
Department of Commerce, Other	11.U02	0093FY150009	36,171	-	-	-	36,171	-
Department of Commerce, Other	11.U03	EA133C-11-CQ-0010	-	8,569	The Association Of State Floodplain Managers	EA133C-11-CQ-0010	8,569	-
Cluster Grants	11.020		212,004	-	-	-	212,004	-
NOAA Mission-Related Education Awards	11.008		-	9,631	Brooklyn College	49929B	9,631	-
Sea Grant Support	11.417		54,740	-		-	54,740	-
Sea Grant Support	11.417		-	959,948	New York Sea Grant Institute, Stony Brook	NA14OAR4170069	959,948	-
Sea Grant Support	11.417		-	5,002	Sea Grant Program, University Of Wisconsin	NA14OAR4170092	5,002	-
Sea Grant Support	11.417			1,071	Sea Grant Program, University Of Wisconsin	NAR120AR4170111	1,071	
			54,740	966,021			1,020,761	
Department of Commerce Total			815,233	984,221			1,799,454	
Department of Housing and Urban Development	14 1101	DU200DD 16 D 0017	1.000				1.000	
Department of Housing and Urban Development, Other	14.U01	DU208PD-16-P-0017	1,800	-	·	-	1,800	-
Department of the Interior								
· · · · · · · · · · · · · · · · · · ·					Oswego County Soil And Water			
Great Lakes Restoration	15.662		-	33,331	Conservation District	F15AP00737	33,331	-
Assistance to State Water Resources Research Institutes	15.805			54,865	Illinois/Indiana Sea Grant	G16AP00001	54,865	
Department of the Interior Total				88,196			88,196	
Department of Justice								
Juvenile Mentoring Program	16.726		-	338,296	National 4-H Council	2015-JU-FX-0015	338,296	211,828
Juvenile Mentoring Program	16.726			10,208	National 4-H Council	2016-JU-FX-0022	10,208	
Department of Justice Total			-	348,504			348,504	211,828
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		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number	Expenditures	Sub-Recipients
Department of State								
Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	19.010		-	24,747	Institute Of International Education	S-ECAGD-15-CA-1017	24,747	-
Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	19.010			255,129	Institute Of International Education	S-ECAGD-16-CA-1014	255,129	-
			-	279,876			279,876	-
Investing in People in The Middle East and North Africa	19.021			41,145	International Research And Exchanges Board	SIZ-100-11GR052	41,145	
Department of State Total				321,021			321,021	
Department of the Treasury								
Department of the Treasury, Other	21.U01	78796	59,041	-	-	-	59,041	-
General Services Administration General Services Administration, Other	39.U01	OX2798	8,500				8,500	
	39.001	UX2/98	8,500	-	-	-	8,500	-
National Endowment for the Arts Promotion of the Arts_Grants to Organizations and Individuals	45.024		(254)				(254)	
Promotion of the Humanities Division of Preservation and Access	45.149		93.154	-	- -	- -	93.154	-
Promotion of the Humanities_Professional Development	45.163		56,095	-	-	-	56,095	-
Promotion of the Humanities_Office of Digital Humanities	45.169		66,624	-	-	-	66,624	-
National Leadership Grants	45.312		90,300		-	-	90,300	
National Endowment for the Arts Total			305,919				305,919	
Environmental Protection Agency								
Environmental Protection Agency, Other	66.U01	78829	-	(5,628)	Pennsylvania State University	-	(5,628)	-
National Estuary Program	66.456		136,520	-	- C - WOOM	- GL 00E01000	136,520	-
Great Lakes Program Solid Waste Management Assistance Grants	66.469 66.808		18.369	17,232	Sea Grant U Of Minnesota	GL-00E01900	17,232 18,369	-
National Environmental Education Training Program	66.950		1,895,430	-		-	1,895,430	1,326,262
Environmental Protection Agency Total	00.750		2,050,319	11,604			2,061,923	1,326,262
Nuclear Regulatory Commission			2,000,019	11,00			2,001,525	1,020,202
Nuclear Regulatory Commission, Other	77.U01	NRC-HQ-12-C-37-0039	99,434	-	-	-	99,434	_
Department of Energy							,	
Department of Energy, Other	81.U01	DE-AC02-98CH10886	-	108,335	Brookhaven National Lab	DE-AC02-98CH10886	108,335	-
Department of Education Department of Education, Other	84.U01	015-047		616,661	NYS Dept Of Education	015-047	616,661	_
National Resource Centers Program for Foreign Language and	64.001	013-047	-	010,001	N 13 Dept Of Education	013-047	010,001	-
Area Studies or Foreign Language and International Studies Program								
and Foreign Language and Area Studies Fellowship Program	84.015		1,222,449	-	-	-	1,222,449	318,178
Overseas Programs - Group Projects Abroad	84.021		16,089	-	-	-	16,089	-
Rehabilitation Services_Vocational Rehabilitation Grants to States	84.126		-	335,526	NYS Dept Of Education	-	335,526	-
Rehabilitation Services_Vocational Rehabilitation Grants to States	84.126		-	55,330	NYS Dept Of Education	MOU#015-012	55,330	-
Rehabilitation Services_Vocational Rehabilitation Grants to States	84.126			515	NYS Office Of Children And Family Services	C027959	515	
				391,371			391,371	
Rehabilitation Training_Continuing Education	84.264		-	96,632	Institute For Educational Leadership	H264H150006	96,632	-
College Access Challenge Grant Program	84.378			4,116	NYS Dept Of Correctional Services	T161350	4,116	
Department of Education Total			1,238,538	1,108,780			2,347,318	318,178

		Additional Award				Pass-Through Entity	Total	Passed to
Federal Program	CFDA	Identification	Direct	Pass-Through	Pass-Through Entity	Identifying Number		Sub-Recipients
National Archives and Records Administration								
National Historical Publications and Records Grants	89.003		104,131		-	-	104,131	
National Archives and Records Administration Total			104,131				104,131	-
Department of Health and Human Services								
Guardianship Assistance	93.090		-	22	NYS Office Of Children And Family Services	C027959	22	-
Food and Drug Administration_Research ACL National Institute on Disability, Independent Living,	93.103		53,099	-	-	-	53,099	-
and Rehabilitation Research	93,433		996,854	_	_	_	996,854	_
Pregnancy Assistance Fund Program	93.500		-	170,556	Health Research Inc	6SP1AH000025-03-02	170,556	_
Developmental Disabilities Basic Support and Advocacy Grants	93.630		_	5,336	Developmental Disabilities Planning Cncl	-	5,336	_
Developmental Disabilities Basic Support and Advocacy Grants	93.630		_	52,775	NYS Developmental Disabilities Planning Council	C024311	52,775	_
Developmental Disabilities Basic Support and Advocacy Grants	93.630		-	275,744	NYS Developmental Disabilities Planning Council	C024312	275,744	98,136
Developmental Disabilities Basic Support and Advocacy Grants	93.630		-	44,375	NYS Developmental Disabilities Planning Council	C024321	44,375	- ·
Developmental Disabilities Basic Support and Advocacy Grants	93.630			18,477	NYS Developmental Disabilities Planning Council	C024324	18,477	-
				396,707			396,707	98,136
Foster Care_Title IV-E	93.658		-	63,326	NYS Office Of Children And Family Services	C027777	63,326	-
Foster Care_Title IV-E	93.658			2,709	NYS Office Of Children And Family Services	C027959	2,709	
				66,035			66,035	
Adoption Assistance	93.659		-	372,045	NYS Office Of Children And Family Services	C027777	372,045	-
Maternal and Child Health Services Block Grant to the States	93.994			940,112	NYS Dept Of Health	C028219	940,112	117,168
Department of Health and Human Services Total			1,049,953	1,945,477			2,995,430	215,304
Corporation for National and Community Service								
Volunteers in Service to America	94.013		19,000	-	-	-	19,000	-
Agency for International Development	00.001		077.620				055 620	027.124
USAID Foreign Assistance for Programs Overseas  Social Security Administration	98.001		975,628	-	-	-	975,628	927,134
Social Security Administration Social Security - Work Incentives Planning and Assistance Program	96.008			97,871	NYS Office Of Temporary And Disability Assistance		97,871	
Social Security - Work Incentives Flaming and Assistance Program  Social Security - Work Incentives Planning and Assistance Program	96.008		-	217,395	NYS Office Of Temporary And Disability Assistance	C021242	217,395	-
Social Security Administration Total			-	315,266			315,266	-
Total Other Awards			22,604,393	5,981,254			28,585,647	3,506,404
Total Federal Award Expenditures			\$ 578,539,543	\$ 72,968,928			\$ 651,508,471	\$ 57,009,354

## Cornell University Notes to the Schedule of Expenditures of Federal Awards June 30, 2017

## 1. Significant Accounting Policies

The accompanying schedule of expenditures of federal awards includes the federal grant activity of Cornell University (the "University") and is presented on the accrual basis of accounting. Negative amounts represent current year adjustments of amounts reported in prior years. CFDA and pass-through entity numbers are included when available. The information in the schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Awards (Uniform Guidance). Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of, the basis consolidated financial statements.

### 2. Facilities and Administrative Costs

The University applies its predetermined approved facilities and administrative rate ("F&A") when charging indirect costs to federal awards rather than the 10% de minimis cost rate as described in Section 200.414 of the Uniform Guidance.

**Ithaca Campus:** F&A cost rates for the Ithaca campus have been finalized through fiscal year 2021 as predetermined rates pursuant to the Department of Health and Human Services (DHHS) rate agreement dated January 20, 2017. Provisional rates have been established for fiscal year 2022 and beyond.

**Weill Cornell Medicine:** F&A cost rates for Weill Cornell Medicine (WCM) have been finalized through fiscal year 2020 as predetermined rates pursuant to the DHHS rate agreement dated June 16, 2016. Provisional rates have been established for fiscal year 2021 and beyond.

### 3. Student Loan Programs

The federal student loan programs are administered directly by the University and balances and transactions relating to these programs are included in the University's consolidated financial statements. Included within the Schedule of Expenditures of Federal Awards are loan beginning balances, new loans and administrative cost allowance from the Perkins Loan Program and Health Professions Student Loans. Included below are the loan balances for the year ended June 30, 2017.

	CFDA	Amount
	Number	Outstanding
Federal Perkins Loan Program	84.038	43,944,885
Health Professions Student Loan Program, including		
Primary Care Loans and Loans for Disadvantaged Students	93.342	5,176,147
Grand Total		49,121,032



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

To the Board of Trustees Cornell University

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the consolidated financial statements of Cornell University (the "University"), which comprise the consolidated statement of financial position as of June 30, 2017, and the related consolidated statements of activities and of cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated October 25, 2017.

## Internal Control Over Financial Reporting

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

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

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



## **Compliance and Other Matters**

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

## Purpose of this Report

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

October 25, 2017



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

To the Board of Trustees Cornell University

### Report on Compliance for Each Major Federal Program

We have audited Cornell University's (the "University") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2017. The University's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

### Management's Responsibility

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

## Auditors' Responsibility

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

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

### Opinion on Each Major Federal Program

In our opinion, the 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 June 30, 2017.

#### Other Matters

The results of our auditing procedures disclosed instances of noncompliance, which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying schedule of findings and questioned costs as items 2017-001, 2017-002, 2017-003, and 2017-004. Our opinion on each major federal program is not modified with respect to these matters.



The University's response to the noncompliance findings identified in our audit is described in the accompanying schedule of findings and questioned costs and management's views and corrective action plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

## **Report on Internal Control Over Compliance**

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

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, 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 and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we identified certain deficiencies in internal control over compliance, as described in the accompanying schedule of findings and questioned costs as items 2017-003 and 2017-004, that we consider to be significant deficiencies.

The University's response to the internal control over compliance findings identified in our audit is described in the accompanying schedule of findings and questioned costs and management's views and corrective action plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

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.

February 12, 2018

Pricewaterhouse Coopers UP

# Cornell University Schedule of Findings and Questioned Costs Year Ended June 30, 2017

## Section I – Summary of Auditor's Results

Financial Statements						
Type of auditor's report issued:	Unmodified					
Internal control over financial reporting:						
• Material weakness(es) identified?		Yes	X	_ No		
• Significant deficiency(ies) identified that are not considered to be material weaknesses?		_ Yes	X	_ None reported		
• Noncompliance material to financial statements noted?		_ Yes	X	_ No		
Federal Awards						
Internal control over major programs:						
• Material weakness(es) identified?		Yes	X	No		
<ul> <li>Significant deficiency(ies) identified that are not considered to be material weaknesses?</li> </ul>	X	Yes		None reported		
Type of auditor's report issued on compliance for major programs:		Unm	odified			
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	X	_ Yes		_ No		
Identification of major programs:						
CFDA Number(s) or Grantor ID No.	Name of Federal Program or Cluster					
Various	Student Financial Assistance Cluster					
98.001				relopment – USAID ams Overseas		
Dollar threshold used to distinguish between Type A and Type B programs:		\$ 3,0	00,000			
Auditee qualified as low-risk auditee?	X	Yes		No		

## Cornell University Schedule of Findings and Questioned Costs Year Ended June 30, 2017

Section II – Financial Statement Findings

None noted in the current year

## **Schedule of Findings and Questioned Costs**

Year Ended June 30, 2017

### Section III - Federal Award Findings and Questioned Costs

### 2017 - 001 - Non-Compliance with Master Promissory Note Requirements prior to Disbursement

Grantor: U.S. Department of Education

Program Name: Student Financial Assistance Cluster

Award Name: Federal Perkins Loan Program

**Award Year:** Fiscal Year 2017 **Award Number:** Not applicable

CFDA Number: 84.038

#### Criteria:

In accordance with 34 CFR section 674.16, a school must ensure that a master promissory note is signed by each Federal Perkins Loan student borrower prior to making the first disbursement.

#### **Condition:**

We reviewed a sample of 34 students who were disbursed Federal Perkins Loans. One student from the Law School of the 34 did not have evidence of an executed master promissory note prior to disbursement. The University disbursed a total of \$8,000 of Federal Perkins Loans to this student during the 2017 fiscal year. This student first received Federal Perkins Loans in the fall semester of 2014.

#### **Questioned Costs:**

\$8,000

#### Cause:

The student's electronic file was manually updated to note that the Perkins master promissory note was completed. However, there was no evidence of a Perkins master promissory note maintained by the University.

### **Effect:**

The Federal Perkins Loan disbursements to a student without completion of the master promissory note may have resulted in that student not having sufficient loan program information. Further, the student may not have agreed to the terms and conditions, including the responsibility of repayment.

### **Recommendation:**

We recommend the University ensure individuals involved in the process receive additional training to help ensure there is a better understanding of the process to manually document master promissory notes and maintain the existence of supporting documentation. In addition, the University should develop a level of review over all manual changes to the student's electronic file to ensure they are appropriately updated based on the existence of supporting documentation.

### Management's Response:

## **Schedule of Findings and Questioned Costs**

Year Ended June 30, 2017

## 2017 – 002 – Non-Compliance with Borrower Data Transmission and Reconciliation (Direct Loan) Requirements

Grantor: U.S. Department of Education

Program Name: Student Financial Assistance Cluster

**Award Name:** Federal Direct Loan Program

**Award Year:** Fiscal Year 2017 **Award Number:** Not applicable

CFDA Number: 84.268

#### Criteria:

In accordance with 34 CFR section 685.300(b)(5), on a monthly basis, an institution is required to reconcile institutional records with Direct Loan funds received from the U.S. Department of Education, Secretary of Education ("Secretary"), and Direct Loan disbursement records submitted to and accepted by the Secretary through the Common Origination and Disbursement ("COD") system.

#### **Condition:**

We reviewed a sample of three monthly Direct Loan reconciliations. Two of the three reconciliations were not performed on a timely basis, between two to four months after the month in which the institution was to reconcile the records.

### **Questioned Costs:**

None

### Cause:

The individual responsible for performing the Direct Loan reconciliations on a monthly basis retired at the end of February and the University did not reassign responsibilities until June.

### **Effect:**

Untimely monthly Direct Loan reconciliations may have resulted in inaccurate Direct Loan disbursement records.

### **Recommendation:**

We recommend the University develop a formal plan to reassign roles and responsibilities upon departure of an employee. We recommend the University ensure individuals responsible for the process receive training to help ensure there is a better understanding of the process to reconcile institutional records on a monthly basis in a timely manner. In addition, the University should develop a level of review of these reconciliations to ensure they are prepared accurately and in a timely manner.

## Management's Response:

## **Schedule of Findings and Questioned Costs**

Year Ended June 30, 2017

### 2017 - 003 - Non-Compliance with Return of Title IV Requirements - Significant Deficiency

Grantor: U.S. Department of Education

**Program Name:** Student Financial Assistance Cluster

Award Names: Federal Supplemental Education Opportunity Grants, Federal Pell Grant Program and Federal

Direct Loan Program

**Award Year:** Fiscal Year 2017 **Award Number:** Not applicable

CFDA Numbers: 84.007, 84.063 and 84.268

#### Criteria:

In accordance with 34 CFR section 668.22 (a) (1), when a recipient of Title IV grant or loan assistance withdraws from an institution during a payment period or period of enrollment in which the recipient began attendance, the institution must determine the amount of the Title IV grant or loan assistance that the student earned as of the student's withdrawal date. In accordance with 34 CFR section 668.173(b), returns of Title IV funds are required to be returned to the U.S. Department of Education (ED) as soon as possible, but no later than 45 days after the date the institution determines that the student withdrew.

#### **Condition:**

Out of a total population of 429 students who withdrew from the University and received Title IV funding, we examined a sample of 40 students.

We noted five instances (two in Law School and three in Undergraduate) in which the calculation of unearned funds to be returned was incorrect. The calculations excluded the 5 day consecutive Thanksgiving break which resulted in an over return of funds to the ED. Management identified the error towards the end of the fall semester, corrected the calculation and contacted students to have the portion over returned disbursed to their account. As the error was not identified by management in a timely manner, funds were not accurately calculated and returned within 45 days in accordance with 34 CFR section 668.173(b).

### **Questioned Costs:**

\$653, overpayment to the ED

### Cause:

Cornell University changed the academic calendar to extend the Thanksgiving break to 5 days. This change was not communicated to the University's Financial Aid office. The change was identified by the Financial Aid office in December at which time management reviewed all fall student withdrawals, made corrections to the calculations, and contacted students to notify them of additional aid available to be disbursed should they chose to accept.

#### **Effect:**

An inaccurate amount of funds were returned to the ED and the student received less aid than was earned.

#### **Recommendation:**

We recommend the Office of the University Registrar and the Financial Aid office establish communications on a regular basis and jointly review the academic calendar to ensure the semester dates, inclusive of any breaks, are accurately determined for purposes of calculating the return of Title IV funds.

### Management's Response:

## **Schedule of Findings and Questioned Costs**

Year Ended June 30, 2017

## 2017 – 004 – Non-Compliance with Timely and Accurate Student Enrollment Change Submissions to the National Student Loan Data System (NSLDS) – Significant Deficiency

Grantor: U.S. Department of Education

Program Name: Student Financial Assistance Cluster

Award Names: Federal Supplemental Education Opportunity Grants, Federal Perkins Loan Program, Federal Pell

Grant Program and Federal Direct Loan Program

**Award Year:** Fiscal Year 2017 **Award Number:** Not applicable

**CFDA Numbers:** 84.007, 84.038, 84.063 and 84.268

#### Criteria:

In accordance with 34 CFR sections 674.19(f), 685.309(b), and 690.83(b)(2), "upon receipt of an enrollment report from the Secretary (U.S. Department of Education, Secretary of Education), a school must update all information included in the report and return the report to the Secretary, in the manner and format prescribed by the Secretary and within the timeframe prescribed by the Secretary. Unless it expects to submit its next updated enrollment report to the Secretary within the next 60 days, a school must notify the Secretary within 30 days after the date the school discovers that a loan under Title IV of the Act was made to or on behalf of a student who was enrolled or accepted for enrollment at the school, and the student has ceased to be enrolled on at least a half-time basis or failed to enroll on at least a half-time basis for the period for which the loan was intended."

#### **Condition:**

We reviewed a sample of 60 students from the Ithaca campus who had a status change during the fiscal year. Of the 60 students requiring notification of the enrollment change to NSLDS, six students (one in Graduate School and five in Undergraduate) were reported to NSLDS either inaccurately or untimely. Of the six students, two students were input using incorrect effective dates of withdrawal which resulted in students not being reported to NSLDS within the required timeframe. Four students had accurate effective dates, however, they were not reported to NSLDS within the required timeframe. The reporting occurred from 61 days to 200 days after the institution determined date. This is a repeat finding of the prior year, 2016-003.

#### **Questioned Costs:**

None

### Cause:

As part of the prior year corrective action plan, the University has implemented a formal policy and level of review over determining effective dates for NSLDS for all in-term withdrawals through the Office of the University Registrar. However, for two of the six students, determining the effective date for newly admitted students who have never attended was not appropriately communicated to all individuals involved in the process. As a result, inaccurate effective dates were entered within the student's electronic file, which is utilized for reporting to NSLDS.

The University reports enrollment changes to NSLDS on a bi-monthly basis. However, the reports provided to NSLDS for reporting did not include data on all students, specifically those who were not enrolled or were on leave of absence in the semester prior to graduating, or the withdrawal was processed after the end of the term. As a result, four of the six students' status change were not timely reported to NSLDS.

### **Effect:**

A student's enrollment status determines eligibility for in-school status, deferment, and grace periods, as well as for the payment of interest subsidies all of which are negatively impacted by inaccurate and late reporting.

## Cornell University Schedule of Findings and Questioned Costs Year Ended June 30, 2017

### **Recommendation:**

We recommend the University communicate its formal policy and provide adequate training to the individuals responsible for updating the student's electronic file to ensure dates are reported accurately to NSLDS.

In addition, we recommend the University ensure the reporting to NSLDS includes all students with status changes during the bi-monthly period. For status changes that are processed towards the end of the term, we recommend the University extend its enrollment reporting to ensue all end of term status changes are reported timely to NSLDS.

### Management's Response:

## **Schedule of Status of Prior Audit Findings**

Year Ended June 30, 2017

### 2016-001 - Non-Compliance with Requirements Prior to Disbursement

Grantor: U.S. Department of Education

Program Name: Student Financial Assistance Cluster

Award Name: Federal Direct Loan Program

**Award Year:** Fiscal Year 2016 **Award Number:** Not applicable

CFDA Number: 84.268

#### **Condition:**

PwC reviewed a sample of 60 students who were disbursed Federal Direct Loans. One student of the 60 did not have evidence of completing entrance counseling prior to disbursement. This was a repeat of prior year finding, 2015-001.

#### **Status:**

As of September 2016, the Office of Financial Aid and Student Employment utilizes the entrance counseling functionality in PeopleSoft in which entrance counseling information from the U.S. Department of Education's Common Origination and Disbursements (COD) system is inputted. This process eliminates the risk of manual updates to a student's electronic file to meet entrance counseling requirements. Based on results of PwC's audit procedures performed, no reportable findings were noted during the current year audit.

### 2016-002 - Non-Compliance with Requirements for Verification

**Grantor:** U.S. Department of Education

**Program Name:** Student Financial Assistance Cluster

Award Names: Federal Supplemental Education Opportunity Grants, Federal Work-Study Program, Federal

Perkins Loan Program, Federal Pell Grant Program and Federal Direct Loan Program

**Award Year:** Fiscal Year 2016 **Award Number:** Not applicable

**CFDA Numbers:** 84.007, 84.033, 84.038, 84.063 and 84.268

## **Condition:**

PwC reviewed a sample of 25 students who were selected for verification at the Ithaca campus. Of the 25 students, two student files did not include the required documentation for verification. One student file was missing the parent's IRS transcript and one student file was missing the student's non-filing statement or IRS transcript.

#### **Status:**

Based on the corrective action plan, management at the Ithaca campus performed a secondary review of a random sample of the 2016-17 student files selected for federal verification. However, based on the results of the random sample performed, in February 2017, it was determined that all student files selected for federal verification for the school year would require a second level of review for all students. As a result, the corrective action plan was in progress during the fiscal year and not completed until September 2017. Based on results of PwC's audit procedures performed, testing a sample of 40 student files selected for federal verification, no reportable findings were noted during the current year audit.

## **Schedule of Status of Prior Audit Findings**

Year Ended June 30, 2017

2016-003 - Non-Compliance with Timely and Accurate Student Enrollment Change Submissions to the National Student Loan Data System (NSLDS)

**Grantor:** U.S. Department of Education

Program Name: Student Financial Assistance Cluster

Award Names: Federal Supplemental Education Opportunity Grants, Federal Perkins Loan Program, Federal Pell

Grant Program and Federal Direct Loan Program

**Award Year:** Fiscal Year 2016 **Award Number:** Not applicable

**CFDA Numbers:** 84.007, 84.038, 84.063 and 84.268

#### **Condition:**

PwC reviewed a sample of 60 students from the Ithaca campus who graduated or withdrew from the University either prior to or after the student began attendance. Of the 60 students requiring notification of the enrollment change to NSLDS, seven students were reported to NSLDS either inaccurately or untimely. Of the seven students, four students were input using incorrect effective dates of withdrawal which resulted in students not being reported to NSLDS within the required timeframe. One student was reported using an incorrect effective date and status as withdrawn when the student had graduated. In addition, two students which had accurate effective dates were not reported to NSLDS within the required timeframe. The reporting occurred from 65 to 66 days after the effective date. This was a repeat of prior year finding, 2015-004.

#### **Status:**

A formal policy has been implemented and level of review has been established over determining effective dates for NSLDS reporting through the Office of the University Registrar. However, this is a repeat finding in 2017 because current year testing identified that individuals were not adequately trained with the new policy and reports to NSLDS did not include all students with status changes resulting in untimely reporting. See current year finding 2017-004.



Division of Financial Affairs William Sibert University Controller 341 Pine Tree Road Ithaca, New York 14850-2820 t. 607.254.8975 f. 607.255.0327 william.sibert@cornell.edu

## Management Views and Corrective Action Plan Year Ended June 30, 2017

The following findings were noted during the audit of Federal programs in accordance with 2 CFR 200. Management of Cornell University agrees with these findings and proposes the following Corrective Action Plans:

## 2017 – 001 – Non-Compliance with Master Promissory Note Requirements prior to Disbursement

### **Corrective Action Plan:**

Management agrees with the importance of ensuring that a promissory note is signed by each Federal Perkins Loan student borrower prior to making the first disbursement. The automated process now implemented requires that students complete promissory notes prior to disbursement. The record of the student impacted had been incorrectly updated manually by a staff member who is no longer employed at Cornell University.

- Effective September 2016, Direct Loan Master Promissory Note processing is handled through the financial aid management system (PeopleSoft) and no longer allows for manual changes to student records.
- Management will review all 2017-18 Federal Perkins Loans by the end of January 2018 to confirm that the promissory note was completed and on file in the student's record prior to disbursement.
- With the termination of the Perkins loan program as of September 30, 2017, processing of Perkins
  Loan promissory notes will no longer be an issue. Should the program be reinstated, additional
  staff training will be provided as well as continued monitoring of Federal Perkins Loan promissory
  note completion.

Responsible individuals: Director of Financial Aid and Student Employment

Associate Vice Provost for Enrollment

## 2017 – 002 – Non-Compliance with Borrower Data Transmission and Reconciliation (Direct Loan) Requirements

## **Corrective Action Plan:**

Management agrees with the importance of timely reconciliation of institutional records with Direct Loan funds received from the U.S. Department of Education. The Office of Financial Aid and Student Employment (FASE) reviewed staffing responsibilities when the previous staff member responsible

for reconciling departed in mid-2017. During this period of review and transition, FASE determined the need to elevate responsibility for reconciliation of Title IV accounts, as follows:

- Effective July 2017, the Associate Director of Compliance and Regulation became the responsible staff member for Title IV account reconciliation.
- Effective July 2017, the Deputy Director became the responsible staff person for ensuring this is done on a monthly basis and accurately.

Responsible individuals: Director of Financial Aid and Student Employment

Associate Vice Provost for Enrollment

## 2017 – 003 – Non-Compliance with Return of Title IV Requirements

### **Corrective Action Plan:**

Management agrees with the need to continue to monitor our Return of Title IV funds process to ensure the calculations reflect changes in the academic calendar and the correct amount of Title IV aid is returned. In addition to conducting a second review of all Return of Title IV calculations, management has undertaken the following actions:

- Prior to the start of the 2017-18 academic year, FASE staff involved in Return of Title IV funds
  calculations met to review the Academic Calendar as published in the Courses of Study 2017-2018
  Guide to determine if there were any changes to the length of scheduled breaks. This calendar
  review will occur annually.
- University holidays impacting students are available on the Academic Calendar page of the Cornell University Website, <a href="http://www.cornell.edu/academics/calendar/">http://www.cornell.edu/academics/calendar/</a>. When a school/college has student holidays that differ from the university Academic Calendar, the Office of the University Registrar (OUR) now collects those dates from schools/colleges and documents them on the "Term Start and End Date" document. The document is stored on SharePoint and is accessible to FASE.
- As part of the evaluation of the PeopleSoft Student Information System (SIS) configuration to
  address programs and classes that do not follow "traditional" 15-week semesters, OUR will
  evaluate the feasibility of maintaining all university holiday dates in the PeopleSoft SIS. If
  feasible this will be implemented for the 2018-19 academic year.

Responsible individuals: Director of Financial Aid and Student Employment

Associate Vice Provost for Enrollment

University Registrar

## 2017 – 004 – Non-Compliance with Timely and Accurate Student Enrollment Change Submissions to the National Student Loan Data System (NSLDS)

### Corrective Action Plan:

Management agrees that timely and accurate reporting of enrollment changes to NSLDS is critical to maintaining compliance.

- The Office of the University Registrar (OUR) will create NSC/NSLDS business process documentation by February 1, 2018, and will ensure those involved in the processing of such records have a full and detailed understanding of reporting processes and requirements. In addition by February 1, 2018 OUR will document the criteria and programming logic for the NSC enrollment file, which feeds the NSLDS.
- Effective with the Spring 2018 semester OUR will extend the NSC enrollment reporting to two weeks after the end of the term. Extending the NSC reporting timeframe will allow OUR to report students whose enrollment status changes after the semester ends, thereby increasing the timeliness of reporting to the NSC and NSLDS.
- OUR will update the "Withdrawal Date Process" document by February 1, 2018 to reiterate and clarify the withdrawal effective date for new students who do not enroll. The importance of the date will be emphasized in the College Registrar training sessions.
- OUR will develop a PeopleSoft query that will allow us to proactively identify students whose degrees were posted to a semester in which they were on Leave of Absence, and students whose degrees are posted after the end of the NSC enrollment period. Beginning February 1, 2018, the query will be run monthly and will encompass the prior two degree dates. OUR will manually update NSLDS in the event that a student's change of status occurs after the end of the NSC reporting period. OUR will lead the assessment and, if determined to be feasible, the implementation of a policy to address the enrollment status of students who fail to graduate.

Responsible individual:

University Registrar

Signed,

William Sibert

University Controller