

# **Yale University**

## **New Haven, Connecticut**

**Entity Identification Number: 06-0646973**

**Report on Federal Financial Assistance Programs in  
Accordance with the OMB Uniform Guidance  
For the Year Ended June 30, 2023**

# Yale University

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**PART I**  
**FINANCIAL STATEMENTS**

# **Yale University**

**Financial Statements**  
**June 30, 2023 and 2022**



## **Report of Independent Auditors**

To the President and Fellows of  
Yale University:

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

#### ***Opinion***

We have audited the accompanying consolidated financial statements of Yale University and its subsidiaries' (the "University"), which comprise the consolidated statements of financial position as of June 30, 2023 and 2022, and the related consolidated statements of activities for the year ended June 30, 2023 and of cash flows for the years ended June 30, 2023 and 2022, including the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the University as of June 30, 2023 and 2022, the changes in its net assets for the year ended June 30, 2023 and its cash flows for the years ended June 30, 2023 and 2022 in accordance with accounting principles generally accepted in the United States of America.

#### ***Basis for Opinion***

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Other Matter***

We previously audited the consolidated statement of financial position as of June 30, 2022 and the related consolidated statements of activities and of cash flows for the year then ended (the statement of activities is not presented herein), and in our report dated October 21, 2022, we expressed an unmodified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying summarized financial information for the year ended June 30, 2022 is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

### ***Responsibilities of Management 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, and for 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.



In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for one year after the date the consolidated financial statements are issued.

### ***Auditors' Responsibilities for the Audit of the Consolidated Financial Statements***

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS and *Government Auditing Standards*, will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with US GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

### ***Supplemental 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, 2023 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 taken as a whole.

#### **Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated October 27, 2023 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters for the year ended June 30, 2023. 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.

*PricewaterhouseCoopers LLP*

Boston, Massachusetts  
October 27, 2023

# Yale University Consolidated Statements of Financial Position

as of June 30, 2023 and 2022 (\$ in thousands)

	2023	2022
Assets:		
Cash and cash equivalents	\$ 845,424	\$ 712,614
Accounts receivable, net	410,200	405,683
Contributions receivable, net	960,379	1,020,493
Notes receivable	84,427	89,912
Investments, at fair value	45,679,156	46,472,072
Right of use assets	272,115	179,645
Other assets	425,957	240,814
Land, buildings and equipment, net of accumulated depreciation	5,747,983	5,598,069
Total assets	\$ 54,425,641	\$ 54,719,302
Liabilities:		
Accounts payable and accrued liabilities	\$ 609,528	\$ 615,340
Advanced payments and other deposits	219,969	194,594
Lease liabilities	351,122	253,081
Other liabilities	1,219,944	1,368,728
Liabilities under split-interest agreements	132,280	130,816
Bonds and notes payable	5,137,633	5,164,430
Liabilities associated with investments	2,027,204	2,298,288
Total liabilities	\$ 9,697,680	\$ 10,025,277
Net Assets:		
Net assets without donor restrictions: Yale University	\$ 9,140,807	\$ 8,592,595
Net assets without donor restrictions: non-controlling interests	3,061	1,621
Total net assets without donor restrictions	9,143,868	8,594,216
Net assets with donor restrictions	35,584,093	36,099,809
Total net assets	\$ 44,727,961	\$ 44,694,025
Total liabilities and net assets	\$ 54,425,641	\$ 54,719,302

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



# Yale University Consolidated Statement of Activities

for the year ended June 30, 2023 with summarized comparative totals for the year ended June 30, 2022 (\$ in thousands)

	Without Donor Restrictions	With Donor Restrictions	2023	2022
Operating				
<i>Revenues and releases:</i>				
Net tuition, room and board	\$ 458,307	\$ -	\$ 458,307	\$ 461,513
Grant and contract income, primarily for research and training	1,038,268	-	1,038,268	962,088
Medical services income	1,421,914	-	1,421,914	1,327,268
Contributions	18,666	115,338	134,004	232,582
Allocation of endowment spending from financial capital	497,194	1,255,181	1,752,375	1,568,442
Other investment income	74,580	7,331	81,911	69,731
Other income	216,895	92	216,987	188,495
Total revenues	3,725,824	1,377,942	5,103,766	4,810,119
Net assets released from restrictions	1,294,808	(1,294,808)	-	-
Total revenues and releases	\$ 5,020,632	\$ 83,134	\$ 5,103,766	\$ 4,810,119
<i>Expenses:</i>				
Salaries and wages	\$ 2,328,136	\$ -	\$ 2,328,136	\$ 2,114,898
Employee benefits	744,823	-	744,823	759,791
Depreciation, amortization and interest	441,202	-	441,202	407,795
Other operating expenditures	1,422,107	-	1,422,107	1,257,816
Total expenses	4,936,268	-	4,936,268	4,540,300
Increase in net assets from operating activities	84,364	83,134	167,498	269,819
Non-operating				
Contributions	8,316	317,143	325,459	381,535
Total endowment return	74,969	683,715	758,684	265,880
Allocation of endowment spending to operations	(311,275)	(1,441,100)	(1,752,375)	(1,568,442)
Other investment income	197,955	740	198,695	501,857
Change in funding status of defined benefit plans	289,684	-	289,684	503,181
Other increases	37,433	7,418	44,851	47,369
Net assets released from restrictions	166,766	(166,766)	-	-
Increase (decrease) in net assets from non-operating activities	463,848	(598,850)	(135,002)	131,380
Total increase (decrease) in net assets - Yale University	548,212	(515,716)	32,496	401,199
Change in non-controlling interests	1,440	-	1,440	842
Total increase (decrease) in net assets	549,652	(515,716)	33,936	402,041
Net assets, beginning of year	8,594,216	36,099,809	44,694,025	44,291,984
Net assets, end of year	\$ 9,143,868	\$ 35,584,093	\$ 44,727,961	\$ 44,694,025

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

# Yale University Consolidated Statements of Cash Flows

for the years ended June 30, 2023 and 2022 (\$ in thousands)

	2023	2022
Operating activities:		
Change in net assets	\$ 33,936	\$ 402,041
Adjustments to reconcile change in net assets to net cash used in operating activities:		
Depreciation and amortization	349,607	340,039
Realized and unrealized gain on other investments	(169,278)	(512,958)
Net endowment investment (gain) loss	(319,868)	106,046
Change in non-controlling interests	(1,440)	(842)
Change in funding status of defined benefit plans	(289,684)	(503,181)
Non-operating contributions	(325,459)	(381,535)
Contributed securities	(52,815)	(118,421)
Proceeds from sale of donated securities	13,881	44,640
Other adjustments	25,891	(9,898)
Changes in assets and liabilities that (use) provide cash:		
Accounts receivable	(4,517)	(7,709)
Contributions receivable	19,907	3,962
Other operating assets	84,364	(1,435)
Accounts payable and accrued expenses	(22,142)	(191,042)
Advances under grants and contracts and other deposits	25,375	20,116
Other liabilities	(112,029)	94,516
Net cash used in operating activities	(744,271)	(715,661)
Investing activities:		
Student loans repaid	12,380	12,021
Student loans granted	(6,946)	(5,578)
Purchases related to capitalized software costs and other assets	(44,727)	(26,560)
Proceeds from sales and maturities of investments	7,895,758	10,593,403
Purchases of investments	(6,853,674)	(10,189,985)
Purchases of land, buildings and equipment	(471,490)	(424,953)
Net cash provided by (used in) investing activities	531,301	(41,652)
Financing activities:		
Proceeds from restricted contributions	365,666	554,497
Proceeds from sale of contributed securities restricted for endowment	38,934	73,781
Contributions received for split-interest agreements	8,104	9,027
Payments made under split-interest agreements	(15,905)	(15,840)
Repayments of long-term debt	(19,313)	(16,489)
Repayments to the Federal government for student loans	(2,040)	(2,858)
Net cash provided by financing activities	375,446	602,118
Net increase (decrease) in cash and cash equivalents	162,476	(155,195)
Cash and cash equivalents, beginning of year	775,982	931,177
Cash and cash equivalents, end of year	\$ 938,458	\$ 775,982

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

# Yale University

## Notes to Consolidated Financial Statements

### 1. Significant Accounting Policies

#### **a. General**

Yale University ("Yale" or the "university") is a private, not-for-profit institution of higher education located in New Haven, Connecticut. The university is governed by the Yale Corporation (the "Corporation" or the board of trustees), a body comprised of the President, ten appointed Successor Trustees, six elected Alumni Fellows, and the Governor and Lieutenant Governor of Connecticut, who are board members *ex officio*.

The university provides educational services primarily to students and trainees at the undergraduate, graduate and postdoctoral levels, and performs research, training and other services under grants, contracts and other similar agreements with agencies of the federal government and other sponsoring organizations. The university's academic organization includes Yale College, the Graduate School of Arts and Sciences, thirteen professional schools and a variety of research institutions and museums. The largest professional school is the Yale School of Medicine, which conducts medical services in support of its teaching and research missions.

#### **b. Basis of Presentation**

The consolidated financial statements of the university include the accounts of academic and administrative departments of the university, and affiliated organizations which are required to be consolidated under the applicable accounting guidance.

The university measures aggregate net assets and net asset activity based on the absence or existence of donor-imposed restrictions. Net assets are reported as without donor restrictions and with donor restrictions and serve as the foundation of the accompanying consolidated financial statements. Brief definitions of the two net asset classes are presented below:

*Net Assets Without Donor Restrictions* - Net assets derived from tuition and other institutional resources that are not subject to explicit donor-imposed restrictions. Net assets without donor restrictions also include board-designated funds functioning as endowment.

*Net Assets With Donor Restrictions* - Net assets that are subject to explicit donor-imposed restrictions on the expenditure of contributions, including those given to be maintained in perpetuity; income and gains on contributed assets subject to donor-imposed restrictions not yet appropriated for spending by the Corporation and student loan funds. In addition, net assets with donor restrictions include restricted contributions from donors classified as funds functioning as endowment. Restrictions include support of specific schools or departments of the university, for professorships, research, faculty support, scholarships and fellowships, library and art museums, building construction and other purposes. When time and purpose restrictions expire, net assets with donor restrictions are reclassified to net assets without donor restrictions.

*Measure of Operations* - The university's measure of operations as presented in the consolidated statement of activities includes revenue from tuition (net of certain scholarships and fellowships) and fees, grants and contracts, medical services, contributions for operating programs, other investment income, the allocation of endowment spending for operations and other income. Operating expenses are reported on the consolidated statement of activities by natural classification.

The university's non-operating activity within the consolidated statement of activities includes contributions to the university's endowment and for building construction and renovation, investment returns and other activities related to endowment, unrealized gains and losses on interest rate swaps and long-term benefit plan obligation funding changes.

*Liquidity* - The university's financial assets available within one year of the date of the consolidated statement of financial position for general expenditure as of June 30 are as follows, in thousands of dollars:

	2023	2022
Total assets, at year end	\$ 54,425,641	\$ 54,719,302
Less nonfinancial assets:		
Land, buildings and equipment, net of accumulated depreciation	5,747,983	5,598,069
Other assets	425,957	240,814
Right of use assets	272,115	179,645
Financial assets, at year end	47,979,586	48,700,774
Less those unavailable for general expenditure within one year due to contractual or donor-imposed restrictions:		
Restricted by donor with time or purpose restrictions	855,395	914,040
Subject to appropriation and satisfaction of donor restrictions including board-designated endowments	42,273,707	43,255,859
Other long-term notes receivable	84,427	89,912
Financial assets available to meet cash needs for general expenditures within one year	\$ 4,766,057	\$ 4,440,963

The university has \$4,766.1 million of financial assets that are available within one year of the date of the 2023 consolidated statement of financial position to meet cash needs for general expenditure consisting of cash of \$845.4 million, accounts receivable of \$410.2 million, contributions receivable of \$105.0 million, and short-term investments of \$3,405.5 million. In addition to these available financial assets, a significant portion of the university's annual expenditures will be funded by current year operating revenues including tuition, grant and contract income and medical services income. The university has a policy to structure its financial assets to be available as its general expenditures, liabilities, and other obligations come due. As part of its liquidity management, the university invests cash in excess of daily requirements in various short-term investments, including U.S. government instruments.

Additionally, the university has board-designated funds of \$7,052.7 million. Although the university does not intend to spend from this endowment, other than amounts appropriated for general expenditure as part of its annual budget approval and appropriation process, amounts from its board-designated funds could be made available if necessary. However, both the board-designated funds and

donor-restricted endowments contain investments with lock-up provisions that would reduce the total investments that could be made available, as described in Note 2.

**c. Cash and Cash Equivalents**

Cash and cash equivalents are recorded at cost, which approximates fair value due to their short-term nature and include institutional money market funds and similar temporary investments with maturities of three months or less at the time of purchase. Cash and short-term investments awaiting investment in the long-term investment pool are reported as investments and totaled \$1,210.2 million and \$1,556.3 million at June 30, 2023 and 2022, respectively. Short-term investments included in the long-term investment pool which may otherwise qualify as cash equivalents under the university's policy are accounted for as investments by policy and are accordingly not included within these cash disclosures.

Supplemental disclosures of cash flow information include the following, in thousands of dollars:

	2023	2022
Cash paid during the year for interest	\$ 119,350	\$ 166,862
Noncash investing activities:		
Land, buildings and equipment purchases payable to vendor	\$ 61,359	\$ 46,148

The following table summarizes supplemental cash flow information related to leases for the year ended June 30, in thousands of dollars:

	2023	2022
Cash paid for amounts included in measurement of liabilities:		
Operating cash flows from financing leases	\$ 7,462	\$ 7,719
Operating cash flows from operating leases	12,165	9,798
Financing cash flows from financing leases	8,366	6,691
Non-cash lease related items:		
ROU assets obtained in exchange for new and remeasured financing liabilities	\$ 120,137	\$ -
ROU assets obtained in exchange for new and remeasured operating liabilities	3,237	20,572

The following table provides a reconciliation of amounts reported within the consolidated statements of financial position that sum to the total of the amount shown in the consolidated statement of cash flows for the years ended June 30, in thousands of dollars:

	2023	2022
Cash and cash equivalents	\$ 845,424	\$ 712,614
Cash included in investments, at fair value	93,034	63,368
Total cash and cash equivalents shown in the consolidated statements of cash flows	\$ 938,458	\$ 775,982

#### **d. Investments**

*Fair Value* - The university's investments are recorded in the consolidated financial statements at fair value.

Fair value is a market-based measurement based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering assumptions, a three-tier fair value hierarchy has been established which categorizes the inputs used in measuring fair value. The hierarchy of inputs used to measure fair value and the primary methodologies used by the university to measure fair value include:

- *Level 1* - Quoted prices for identical assets and liabilities in active markets. Market price data is generally obtained from relevant exchange or dealer markets.
- *Level 2* - Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable.
- *Level 3* - Unobservable inputs for which there is little or no market data, requiring the university to develop its own assumptions.

Assets and liabilities measured at fair value are determined based on the following valuation techniques:

- *Market approach* - Prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities; and/or
- *Income approach* - Techniques to convert future amounts to a single present amount based on market expectations, including present value techniques and option-pricing models.

The fair value of publicly traded fixed income and equity securities is based upon quoted market prices and exchange rates, if applicable. The fair value of direct real estate investments is determined from periodic valuations prepared by independent appraisers.

Investments are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investments, it is at least reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect the amounts reported in the university's consolidated financial statements.

*Derivatives* - Derivative financial instruments in the investment portfolio include interest rate swaps which are recorded at fair value with the resulting gain or loss recognized in the consolidated statement of activities.

*Resell and Repurchase Agreements* - Cash paid relating to resell agreements is generally collateralized by federal agency and foreign debt securities. The university takes possession of the underlying collateral and monitors the value of the underlying collateral to the amount due under the agreement. Cash received under repurchase agreements is collateralized by investments in asset-backed securities,

corporate debt, federal agency debt, and foreign debt securities. Collateral fair value is monitored to the amounts due under the agreements.

*Management Fees* - The university records the cost of managing its endowment portfolio as a decrease in non-operating activity as a component of total endowment return within the applicable net asset class in the consolidated statement of activities. Management fees consist of the internal costs of the university's Investments Office (the "Investments Office"), outside custodian fees, and fees for external investment managers and general partners.

*Total Return* - The university invests its endowment portfolio and allocates the related earnings for expenditure in accordance with the total return concept. A distribution of endowment return that is independent of the cash yield and appreciation of investments earned during the year is provided for program support. The university has adopted a current endowment spending policy in accordance with the Uniform Prudent Management of Institutional Funds Act ("UPMIFA") as adopted in the State of Connecticut, designed specifically to stabilize annual spending levels and to preserve the real value of the endowment portfolio over time. The spending policy attempts to achieve these two objectives by using a long-term targeted spending rate combined with a smoothing rule, which adjusts spending gradually to changes in the endowment's fair value. An administrative charge is assessed against the funds when distributed.

To the extent that a donor-restricted endowment fund falls below its historic dollar value a deficit would exist, and it would be reported as a reduction of net assets with donor restrictions. Spending from an endowment fund in a deficit position would continue under the spending policy so long as the fund's value is more than 70% of its historical dollar value. At June 30, 2023, there were 323 endowment funds in a deficit position totaling \$14.0 million in aggregate, the fair value of which totaled \$512.8 million with a corresponding historic dollar value of \$526.8 million. At June 30, 2022, there were 174 endowment funds in a deficit position totaling \$5.1 million in aggregate, the fair value of which totaled \$214.1 million with a corresponding historic dollar value of \$219.2 million.

The university uses a long-term targeted spending rate of 5.25%. The spending amount is calculated using 80% of the previous year's spending and 20% of the targeted long-term spending rate applied to the fair value at the start of the prior year. The spending amount determined by the formula is adjusted for inflation and taxes and constrained so that the calculated rate is at least 4.0% and not more than 6.5% of the endowment's fair value as of the start of the prior year. The actual rate of spending for 2023 and 2022, when measured against the previous year's June 30<sup>th</sup> endowment fair value, was 4.3% and 3.8%, respectively.

The university determines the expected return on endowment investments with the objective of producing a return exceeding the sum of inflation and the target spending rate. Asset allocation is the key factor driving expected return. Yale's asset allocation policy combines tested theory and informed market judgment to balance investment risks with the need for high returns. Both the need to provide resources for current operations and the desire to preserve the purchasing power of assets lead the endowment to be weighted toward equity investments.

The university manages the majority of its endowment in its Long-Term Investment Pool (the "Pool"). The Pool is unitized and allows for efficient investment among a diverse group of funds with

varying restricted purposes. In addition to university funds, the Pool includes assets of affiliated entities where the university has established investment management agreements.

**e. Leases**

At the inception of an arrangement, the university determines if an arrangement is, or contains, a lease based on the unique facts and circumstances present in that arrangement. Lease classification, recognition, and measurement are then determined as of the lease commencement date. For arrangements that contain a lease, the university (i) identifies lease and non-lease components, (ii) determines the consideration in the contract, (iii) determines whether the lease is an operating or financing lease, and (iv) recognizes lease right of use (“ROU”) assets and lease liabilities. Lease liabilities and their corresponding ROU assets are recorded based on the present value of lease payments over the expected lease term. The interest rate implicit in lease contracts is typically not readily determinable, and as such, the university uses its incremental borrowing rate based on the information available at the lease commencement date, a rate which represents one that would be incurred to borrow, on a collateralized basis, over a similar term, an amount equal to the lease payments in a similar economic environment. Some leases include options to renew and/or terminate the lease, which can impact the lease term. The exercise of these options is at the university’s discretion and the university does not include any of these options within the expected lease term where it is not reasonably certain that these options will be exercised.

Fixed, or in-substance fixed, lease payments on operating leases are recognized over the expected term of the lease on a straight-line basis, while fixed, or in-substance fixed, payments on financing leases are recognized using the effective interest method. Variable lease expenses that are not considered fixed, or in-substance fixed, are recognized as incurred. Fixed and variable lease expense on operating leases is recognized within other operating expenditures in the consolidated statement of activities. Financing lease ROU asset amortization and interest costs are recorded within depreciation, amortization and interest in the consolidated statement of activities. The university has elected the short-term lease exemption and, therefore, does not recognize a ROU asset or corresponding liability for lease arrangements with an original term of 12 months or less.

Operating and financing leases are included in right of use assets and lease liabilities in the university’s consolidated statements of financial position as of June 30, 2023 and 2022.

The university leases to others portions of certain buildings owned for retail and research purposes. Leases are generally five-year terms or less and are classified as operating leases. These leasing arrangements are not material to the consolidated financial statements.

**f. Land, Buildings and Equipment**

Land, buildings, and equipment are generally stated at cost. Annual depreciation is calculated on a straight-line basis over the lesser of the remaining useful lives or the lease term for financing leases, ranging from 15 to 50 years for buildings and improvements and 4 to 15 years for equipment.

**g. Other Assets**



Other assets include prepaid pension costs, insurance receivables, capitalized software costs, deferred expenses, and inventories. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software, ranging from 5 to 10 years.

#### **h. Collections**

Collections at Yale include works of art, literary works, historical treasures, and artifacts that are maintained in the university's museums and libraries. These collections are protected and preserved for public exhibition, education, research, and the furtherance of public service. Collections are not capitalized; purchases of collection items are recorded as expenses in the university's consolidated statement of activities in the period in which the items are acquired.

#### **i. Split-Interest Agreements**

The university's split-interest agreements with donors consist primarily of charitable gift annuities, pooled income funds, and irrevocable charitable remainder trusts for which the university serves as trustee. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements.

Contribution revenue related to charitable gift annuities and charitable remainder trusts is recognized at the date the agreements are established. In addition, the fair value of the estimated future payments to be made to the beneficiaries under these agreements is recorded as a liability. For pooled income funds, contribution revenue is recognized upon establishment of the agreement at the fair value of the estimated future receipts, discounted for the estimated time period until culmination of the agreement.

#### **j. Beneficial Interest in Trust Assets**

The university is the beneficiary of certain irrevocable perpetual trusts and charitable remainder trusts held and administered by others. The estimated fair values of trust assets are recognized as assets and as gift revenue when reported to the university.

#### **k. Net Tuition, Room and Board**

Tuition, room and board revenue is generated from an enrolled student population of approximately 14,800 and 14,600 in 2023 and 2022, respectively, and is recognized in the period in which it satisfies its performance obligations. Net tuition, room and board revenue from undergraduate enrollment represents approximately 62.5% and 58.5% of total tuition, room and board revenue in 2023 and 2022, respectively.

The university maintains a policy of offering qualified applicants admission to Yale College without regard to financial circumstance, as well as meeting in full the demonstrated financial need of those admitted. Student need in all programs throughout the university is generally fulfilled through a combination of scholarships and fellowships, loans and employment during the academic year. Tuition, room and board revenue has been reduced by certain scholarships and fellowships in the amounts of \$460.1 million and \$416.6 million in 2023 and 2022, respectively.

#### **l. Contributions**

Unconditional promises to give that are expected to be collected within one year are recorded at their net realizable value. Amounts expected to be collected in future years are recorded at the present value of estimated future cash flows, which includes estimates for potential uncollectible receivables. The discount on those contributions is computed using an interest rate that reflects the time value of money applicable to the year in which the promise is received. Amortization of the discount is included in contribution revenue.

Contributions are considered conditional when the underlying agreement includes a performance barrier and a right of return or a right to release promised assets exists. Conditional promises to give are not recognized as revenue until the performance barrier and the right of return or release have been overcome.

#### **m. Grant and Contract Income**

The university receives grant and contract income for exchange and non-exchange agreements from both governmental and private sources. Revenue from exchange agreements is recognized when performance obligations are met. Revenue from conditional non-exchange agreements is recognized as performance barriers are overcome and as the university overcomes either a right of return of assets transferred or the right of release of a promisor's obligation to transfer assets. Grant and contract revenue from conditional non-exchange agreements is generally recognized as qualified costs of sponsored programs are incurred. At June 30, 2023 and 2022, the university has research activities which are contractually authorized by the sponsor, but for which costs have not yet been incurred, totaling \$1,649.0 million and \$1,612.3 million, respectively.

In 2023 and 2022, grant and contract income from the federal government totaled \$776.8 million and \$743.3 million, respectively. Recovery of facilities and administrative costs of federally sponsored programs is at rates negotiated with the university's cognizant agency, the Department of Health and Human Services. The current negotiated rates expired on June 30, 2023. New rates are currently being negotiated for July 1, 2023 based on actual costs incurred in fiscal year 2022.

#### **n. Medical Services Income**

The university provides medical care to patients primarily under agreements with third-party payors, including health maintenance organizations, that provide payment for medical services at amounts different from standard rates established by the university. The university determines performance obligations based on the nature of the services provided and recognizes revenue as it satisfies those performance obligations. Generally, these performance obligations are satisfied at the point in time the service is provided.

Medical services income is reported net of contractual discounts from third-party payors and implicit price concessions to uninsured patients. The university estimates the discounts based on contractual agreements and estimates the implicit price concessions based on its historical collection experience with these classes of patients.

The following table summarizes patient care revenue for the university, net of allowances and discounts at June 30, in thousands of dollars:

	2023	2022
Gross revenue	\$ 2,546,766	\$ 2,337,674
Allowances and discounts	(1,788,371)	(1,628,166)
Total patient care revenue	\$ 758,395	\$ 709,508

In 2023 and 2022, net patient revenue, included in income from medical services, totaled \$553.2 million and \$515.5 million from insurance companies, \$197.4 million and \$192.9 million from Medicare, \$65.9 million and \$74.6 million from Medicaid, and \$107.8 million and \$88.9 million from other third parties, respectively. In 2023 and 2022, income from medical services is offset by denials, charity care and bad debts of \$165.9 million and \$162.4 million, respectively.

**o. Net Assets Released from Restrictions**

Net assets released from restrictions are based upon the satisfaction of the purpose for which the net assets were restricted or the completion of a time stipulation. Restricted operating activity including contributions and net investment return earned, which are restricted, are reported as net assets with donor restrictions and reclassified to net assets without donor restrictions when any donor-imposed restrictions are satisfied. Non-operating restricted net assets associated with building costs are reclassified to net assets without donor restrictions when the capital asset is placed in service.

**p. Self-Insurance**

The university self-insures at varying levels for unemployment, disability, workers' compensation, property losses, certain healthcare plans, general liability, and professional liability, and obtains coverage through a captive insurance company for medical malpractice and related general liability losses. Insurance is purchased to cover liabilities above self-insurance limits. Estimates of retained exposures are accrued.

**q. Tax Status**

The university has been granted tax-exempt status under section 501(c)(3) of the Internal Revenue Code.

The university is subject to several provisions of the Tax Cuts and Jobs Act (the "Act"), enacted on December 22, 2017. Specifically, the Act introduced excise taxes on net investment income and executive compensation, as well as updated rules for calculating unrelated business taxable income. The university records tax assets and liabilities in its consolidated financial statements based on reasonable estimates determined using current guidance, including the U.S. Treasury Department final regulations.

**r. Estimates**

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosures of contingencies at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period.

Significant estimates made by management include the valuation of certain investments and interest rate swap agreements, the estimated net realizable value of receivables, estimated asset

retirement obligations, liabilities under split interest agreements, estimated tax liabilities, and the actuarially determined employee benefit and self-insurance liabilities. Actual results could differ from those estimates.

**s. Related Parties**

The university and Yale New Haven Hospital (the “Hospital”) are parties to an affiliation agreement that establishes guidelines for the operation of activities between these two separate organizations. These guidelines set forth each organization's responsibility under the common goal of delivering comprehensive patient care services. The university provides professional services from faculty of the Yale School of Medicine and a variety of other administrative and clinical services. See additional disclosures in Notes 3 and 5.

**t. Recent Authoritative Pronouncements**

On July 1, 2021, the university adopted new accounting guidance related to pension and postretirement plan disclosures. The impact of adopting the new guidance was not significant to the university's consolidated financial statements.

On July 1, 2021, the university adopted new accounting guidance related to credit losses. The impact of adopting the new guidance was not significant to the university's consolidated financial statements.

In June of 2022, the Financial Accounting Standards Board (“FASB”) issued new accounting guidance related to the valuation of equity securities subject to contractual sale restrictions. The guidance is required to be implemented in the university's fiscal year 2026 with early adoption permitted. The standard is not expected to have a significant impact to the university's consolidated financial statements.

**u. Summarized 2022 Financial Information**

The 2023 consolidated financial statements include selected comparative summarized financial information for 2022. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the university's 2022 consolidated financial statements, from which the summarized financial information was derived.

## **2. Investments**

The university endowment maintains a diversified investment portfolio with a strong orientation to equity investments and strategies designed to take advantage of market inefficiencies. The university's investment objectives are guided by its asset allocation policy and are achieved in partnership with external investment managers operating through a variety of investment vehicles, including separate accounts, limited partnerships and commingled funds. The university's heavy allocation to non-traditional asset classes, such as marketable alternative strategies, private equity (venture capital and leveraged buyouts) and real assets (real estate, timber, energy and minerals) generates return potential and diversification in the portfolio.

The components of endowment and non-endowment investments, net of related liabilities at June 30 are presented below, in thousands of dollars:

	2023	2022
Endowment investments:		
Long-term investment pool	\$ 40,428,680	\$ 41,059,569
Other	75,426	62,704
Total net endowment investments	40,504,106	41,122,273
Non-endowment investments:		
Long-term investment pool	300,000	300,000
Fixed income	1,353,074	1,347,771
Derivatives	109,874	(75,334)
Other	1,381,837	1,477,453
Total non-endowment investments	3,144,785	3,049,890
Net investments, at fair value	\$ 43,648,891	\$ 44,172,163

As described in Note 1d, investments are recorded at fair value. The following tables summarize the fair values of the university's investments by major type and related liabilities as of June 30, in thousands of dollars:

2023	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	\$ 1,261,048	\$ -	\$ -	\$ 1,261,048
Fixed income	3,054,758	1,950	4,335	3,061,043
Common stock:				
Domestic	1,292,811	11,576	1,154	1,305,541
Foreign	281,671	-	42,229	323,900
Total common stock	1,574,482	11,576	43,383	1,629,441
Other equity investments:				
Developed equities	-	-	1,529,689	1,529,689
Real assets	-	-	320,216	320,216
Venture capital	-	-	196,454	196,454
Total other equity investments	-	-	2,046,359	2,046,359
Other investments	50,236	484,940	320,899	856,075
Total leveled investments, at fair value	\$ 5,940,524	\$ 498,466	\$ 2,414,976	\$ 8,853,966
Investments at net asset value				36,825,190
Total investments				\$ 45,679,156
Liabilities associated with investments:				
Securities sold, not yet purchased	\$ 500,356	\$ -	\$ -	\$ 500,356
Other liabilities	37,800	22,656	1,466,392	1,526,848
Total liabilities associated with investments	\$ 538,156	\$ 22,656	\$ 1,466,392	\$ 2,027,204
Non-controlling interests				3,061
Net investments				\$ 43,648,891

2022	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	\$ 1,738,669	\$ -	\$ -	\$ 1,738,669
Fixed income	3,385,938	-	1,185	3,387,123
Common stock:				
Domestic	773,049	11,050	1,006	785,105
Foreign	775,418	-	57,539	832,957
Total common stock	1,548,467	11,050	58,545	1,618,062
Other equity investments:				
Developed equities	-	-	1,604,274	1,604,274
Real assets	-	-	439,971	439,971
Venture capital	-	-	227,937	227,937
Total other equity investments	-	-	2,272,182	2,272,182
Other investments	22,732	329,740	314,319	666,791
Total leveled investments, at fair value	\$ 6,695,806	\$ 340,790	\$ 2,646,231	9,682,827
Investments at net asset value				36,789,245
Total investments				\$ 46,472,072
Liabilities associated with investments:				
Securities sold, not yet purchased	\$ 186,022	\$ -	\$ -	\$ 186,022
Other liabilities	109,697	337,958	1,664,611	2,112,266
Total liabilities associated with investments	\$ 295,719	\$ 337,958	\$ 1,664,611	2,298,288
Non-controlling interests				1,621
Net investments				\$ 44,172,163

Included within cash and short-term investments are restricted short-term investment balances held as collateral in the amount of \$1,117.1 million and \$1,493.0 million as of June 30, 2023 and 2022, respectively.

While not part of a leveling category, fair values for certain investments held are based on the net asset value ("NAV") of such investments as determined by the respective external investment managers, including general partners, if market values are not readily ascertainable. These valuations involve assumptions and methods that are reviewed by the Investments Office.

Investments at NAV as of June 30, in thousands of dollars, include:

	2023	2022
Developed equities	\$ 5,159,727	\$ 4,455,361
Emerging equities	1,379,524	1,648,280
Leveraged buyouts	10,041,213	8,888,559
Marketable alternatives	5,443,689	5,303,852
Real assets	4,837,564	5,488,279
Venture capital	9,963,473	11,004,914
Total investments, at NAV	\$ 36,825,190	\$ 36,789,245

Certain investment companies are required to be consolidated for financial reporting purposes, and the related assets and liabilities of those investment companies have been included in these consolidated financial statements. Where such entities are not wholly owned by the university, the portion of the

consolidated entity's net assets that is not owned by the university is reported as a non-controlling interest.

The fair value of consolidated investment company assets and liabilities included in the university's consolidated financial statements, in thousands of dollars, include:

	2023		2022	
Consolidated investment company assets	\$	90,798	\$	125,108
Consolidated investment company liabilities		4,098		4,692
	\$	86,700	\$	120,416

Level 3 investments are valued by the university or by its external investment managers using valuation techniques standard in the industry in which they operate. The Investments Office reviews these valuation methods and evaluates the appropriateness of these valuations each year. In certain circumstances, when the general partner does not provide a valuation or the valuation provided is not considered appropriate, the Investments Office will determine those values.

The following table summarizes quantitative inputs and assumptions used for Level 3 investments at June 30, for which fair value is based on unobservable inputs that are not developed by external investment managers. Weighted averages were calculated based on relative fair values. Significant increases or decreases in these unobservable inputs may result in significantly higher or lower valuation results.

Asset Class	Fair Value (in 000s)		Valuation Technique	Significant Unobservable Input	Range		Weighted Average	
	2023	2022			2023	2022	2023	2022
Emerging equities	\$	43,383	\$	58,545	Calibrated price of recent investment	Calibrated price of recent round in private investment	N/A	N/A
					NAV of the underlying fund	NAV of investment holding company	N/A	N/A
Developed equities	\$	1,529,689	\$	1,604,274	Carried interest calculation	Fund high water mark	N/A	N/A
Fixed income	\$	4,335	\$	1,185	Indicative market quotations	Recent funding activity	N/A	N/A
Real assets	\$	320,216	\$	439,971	Discounted cash flow	Discount rate	8.0 - 12.0%	8.0 - 12.0%
Trusts	\$	221,845	\$	208,054	Net present value	Discount rate	4.5%	3.7%
Venture capital	\$	196,454	\$	227,937	Tax analysis	Likelihood of taxation	0.0%	0.0%
Other investments	\$	99,054	\$	106,265	Market comparables	Price per acre	\$10,822 - \$53,288	\$8,834 - \$9,164
					University pooled unit market value		\$15,243	\$9,000
Liabilities	\$	(1,466,392)	\$	(1,664,611)	Various methods		\$4,757	\$4,885

The valuation process for investments at NAV and those categorized in Level 3 of the fair value hierarchy includes evaluating the operations and valuation procedures of external investment managers and the transparency of those processes through background and reference checks, attendance at investor meetings, and periodic site visits. In determining the fair value of investments, Investments Office staff reviews periodic investor reports, interim and annual audited financial statements received from external investment managers, and material quarter over quarter changes in valuation; and assesses the impact of macro market factors on the performance. The Investments Office meets with the Corporation's

Investment Committee quarterly to review investment transactions and monitor performance of external investment managers.

Realized and unrealized gains and losses are reported in total endowment return, net of fees. Included in net realized and unrealized gain (loss) in Level 3 reported below were unrealized gains of \$15.5 million and unrealized losses of \$114.1 million that relate to investments held at June 30, 2023 and 2022, respectively.

The tables below present the change in fair value measurements for the university's Level 3 investments during the years ended June 30, in thousands of dollars:

2023	Developed equities	Real assets	Venture capital	Other	Liabilities	Total
Beginning balance	\$ 1,604,274	\$ 439,971	\$ 227,937	\$ 374,049	\$ (1,664,611)	\$ 981,620
Realized and unrealized gain (loss), net	347,949	(68,141)	2,254	(2,108)	50,347	330,301
Purchases	31,117	-	207	13,605	(55,593)	(10,664)
Sales	(453,651)	(51,614)	(33,944)	(16,929)	203,465	(352,673)
Ending balance	\$ 1,529,689	\$ 320,216	\$ 196,454	\$ 368,617	\$ (1,466,392)	\$ 948,584

2022	Developed equities	Real assets	Venture capital	Other	Liabilities	Total
Beginning balance	\$ 1,388	\$ 618,580	\$ 479,519	\$ 388,308	\$ (1,739,077)	\$ (251,282)
Realized and unrealized (loss) gain, net	(92,809)	189,832	(218,602)	(29,784)	30,998	(120,365)
Purchases	23,117	19,342	3,013	51,161	(74,012)	22,621
Sales	(1,388)	(377,764)	(35,993)	(32,974)	117,480	(330,639)
Transfers in	1,673,966	-	-	-	-	1,673,966
Transfers out	-	(10,019)	-	(2,662)	-	(12,681)
Ending balance	\$ 1,604,274	\$ 439,971	\$ 227,937	\$ 374,049	\$ (1,664,611)	\$ 981,620

Transfers into Level 3 consist primarily of investments reclassified from NAV to Level 3 when the practical expedient is not used, while transfers out of Level 3 consist of investments reclassified from Level 3 to NAV due to the use of the practical expedient.



Agreements with external investment managers include certain redemption terms and restrictions as noted in the following table:

Asset Class	Fair Value (in 000s)		Remaining Life	Unfunded Commitment (in 000s)		Redemption Terms	Redemption Restrictions
	2023	2022		2023	2022		
Developed equities	\$ 6,689,416	\$ 6,059,635	No Limit	\$ 112,872	\$ 82,872	Redemption terms range from monthly with 3 days notice to annually with 90 days notice.	Lock-up provisions range from none to 7 years.
Emerging equities	1,379,524	1,648,280	No Limit	67,650	126,000	Redemption terms range from monthly with 15 days notice to closed end structures not available for redemption.	Lock-up provisions range from none to 7 years.
Leveraged buyouts	10,041,213	8,888,559	1-25 years	4,228,144	4,523,006	Closed end funds not eligible for redemption.	Not redeemable.
Marketable alternatives	5,443,689	5,303,852	No Limit	111,173	115,719	Redemption terms range from monthly with 30 days notice to annually with 90 days notice.	Lock-up provisions range from none to 5 years.
Real assets	5,157,780	5,928,250	1-25 years	1,996,579	2,456,597	Closed end funds not eligible for redemption.	Not redeemable.
Venture capital	10,159,927	11,232,851	1-25 years	2,284,191	2,095,548	Redemption terms range from 2 years with 3 years notice to closed end structures not available for redemption.	Not redeemable.
Total	<u>\$ 38,871,549</u>	<u>\$ 39,061,427</u>		<u>\$ 8,800,609</u>	<u>\$ 9,399,742</u>		

The fair value of fixed income securities of \$328.4 million and \$176.8 million was provided at June 30, 2023 and 2022, respectively, to collateralize securities sold, not yet purchased.

The university may employ derivatives and other strategies to (1) manage against market risks, (2) arbitrage mispricing of related securities, and (3) replicate long or short positions more cost effectively. The fair value of derivative positions held at June 30 and related gain (loss) for the year, in thousands of dollars, were as follows:

2023			
	Assets	Liabilities	Gain (Loss)
Endowment:			
Other	\$ 1	\$ 26	\$ (275)
	1	26	(275)
Other:			
Interest rate swaps	149,976	48,682	190,978
	149,976	48,682	190,978
Gross value of derivatives	149,977	48,708	<u>\$ 190,703</u>
Other-counterparty netting	(14,487)	(14,487)	
Collateral:			
Cash collateral received	22,850	-	
Securities collateral received/(posted)	55,480	(16,994)	
Total net exposure for derivatives	<u>\$ 57,160</u>	<u>\$ 17,227</u>	

2022

	Assets	Liabilities	Gain
Endowment:			
Other	\$ 538	\$ 17	\$ 181,928
	538	17	181,928
Other:			
Interest rate swaps	31,642	121,154	498,015
	31,642	121,154	498,015
Gross value of derivatives	32,180	121,171	\$ 679,943
Other-counterparty netting	(31,642)	(31,641)	
Collateral:			
Securities collateral received/(posted)	-	(88,688)	
Total net exposure for derivatives	\$ 538	\$ 842	

Derivatives are reported as other investments and other liabilities for fair value leveling purposes. The university initiates derivatives under legally enforceable master netting agreements. The net exposure for derivatives is presented above, net of these master netting agreements and required collateral.

#### *Interest Rate Swaps*

Interest rate swaps are used to manage exposure to interest rate fluctuations. The notional amount of contracts that pay based on fixed rates and receive based on variable rates was \$2.3 billion for both June 30, 2023 and 2022. The notional amount of contracts that pay based on variable rates and receive based on fixed rates were \$500.0 million and \$800.0 million at June 30, 2023 and 2022, respectively.

Derivative assets are reported as investments in the consolidated statement of financial position and derivative liabilities are reported as liabilities associated with investments. Gains and losses on derivatives used for investing are reported as part of total endowment return and gains and losses related to university debt management are reported as other investment income in the consolidated statement of activities as non-operating activity.

Derivatives held by limited partnerships and commingled investment trusts in which Yale invests pose no off-balance sheet risk to the university due to the limited liability structure of the investments.

Certain investment transactions, including derivative financial instruments, necessarily involve counterparty credit exposure. Such exposure is monitored regularly by the university's Investments Office in accordance with established credit policies and other relevant criteria.

Endowment investments include beneficial interests in outside trusts of \$182.7 million and \$168.6 million at June 30, 2023 and 2022, respectively.

The following investments held under split-interest agreements are included in the endowment investment portfolio, in thousands of dollars:

	2023	2022
Charitable gift annuities	\$ 277,923	\$ 289,105
Charitable remainder trusts	106,666	103,370
Pooled income funds	5,176	5,675
	<u>\$ 389,765</u>	<u>\$ 398,150</u>

Split-interest liabilities reported in the consolidated statement of financial position totaled \$132.3 million and \$130.8 million at June 30, 2023 and 2022, respectively, and are recorded at fair value using Level 2 measurements.

The university has agreements with certain affiliates to invest in the Pool. The obligation to these affiliates included in other liabilities within liabilities associated with investments is \$1,177.1 million and \$1,370.6 million at June 30, 2023 and 2022, respectively. The largest balance recorded is for Yale New Haven Health System (YNHHS), with \$849.0 million and \$1,037.0 million invested at June 30, 2023 and 2022, respectively.

A summary of the university's total investment return as reported in the consolidated statement of activities is presented below, in thousands of dollars:

	2023	2022
Investment income	\$ 438,816	\$ 371,926
Realized and unrealized gain (loss), net of investment management fees	319,868	(106,046)
Total endowment return	758,684	265,880
Other investment income	280,606	571,588
	<u>\$ 1,039,290</u>	<u>\$ 837,468</u>

Endowment investment returns totaling \$1,752.4 million and \$1,568.4 million were allocated to operating activities in 2023 and 2022, respectively, using the spending policy described in Note 1d.

### 3. Accounts Receivable

Accounts receivable from the following sources were outstanding at June 30, in thousands of dollars:

	2023	2022
Medical services	\$ 320,495	\$ 323,304
Grant and contracts	150,998	116,048
Affiliated organizations	115,809	119,644
Publications	6,590	7,267
Other	53,081	73,998
	646,973	640,261
Less: Allowance for doubtful accounts	(236,773)	(234,578)
	\$ 410,200	\$ 405,683

Medical services receivables are net of discounts and allowances of \$220.8 million and \$218.5 million at June 30, 2023 and 2022, respectively.

Receivables for medical services, net of contractual adjustments, are primarily based on negotiated contracts with the following:

	2023	2022
Insurance companies	45%	45%
Payments due directly from patients	19%	22%
Medicare	19%	17%
Commercial insurance and others	13%	11%
Medicaid	4%	5%

The university assesses credit losses on accounts receivable on a regular basis to determine the allowance for doubtful accounts.

The net receivable from the Hospital amounted to \$107.6 million and \$112.9 million at June 30, 2023 and 2022, respectively. Balances are settled in the ordinary course of business. The university recognized \$531.8 million and \$492.2 million in revenue and incurred \$131.8 million and \$135.5 million in expenses related to activities with the Hospital during the years ended June 30, 2023 and 2022, respectively.

#### 4. Contributions Receivable

Contributions receivable consist of the following unconditional promises to give as of June 30, in thousands of dollars:

	2023	2022
Purpose:		
Operating programs	\$ 467,832	\$ 501,570
Endowment	602,067	636,325
Capital purposes	111,789	107,334
Gross unconditional promises to give	1,181,688	1,245,229
Less: Discount to present value	(108,324)	(111,307)
Allowance for uncollectible accounts	(112,985)	(113,429)
	\$ 960,379	\$ 1,020,493
Amounts due in:		
Less than one year	\$ 423,809	\$ 418,213
One to five years	483,615	531,880
More than five years	274,264	295,136
	\$ 1,181,688	\$ 1,245,229

Discount rates used to calculate the present value of contributions receivable ranged from 0.07% to 7.00% at June 30, 2023 and 2022.

The university had conditional pledges of approximately \$12.9 million and \$16.4 million at June 30, 2023 and June 30, 2022, respectively, which are subject to donor-imposed conditions.

#### 5. Notes Receivable

Notes receivable at June 30, in thousands of dollars, include:

	2023	2022
Institutional student loans	\$ 44,042	\$ 43,465
Federally-sponsored student loans	6,695	10,911
Notes receivable	46,880	48,312
	97,617	102,688
Less: Allowance for doubtful accounts	(13,190)	(12,776)
	\$ 84,427	\$ 89,912

##### Student Loans

Institutional student loans are funded by donor funds restricted for student loan purposes and university funds made available to meet demonstrated need in excess of all other sources of student loan borrowings. Interest accrues at fixed rates upon loan disbursement.

Management regularly assesses the adequacy of the allowance for credit losses for student loans by performing ongoing evaluations of the student loan portfolio, including such factors as the differing

economic risks associated with each loan category, the financial condition of specific borrowers, the level of delinquent loans, and, where applicable, the existence of any guarantees or indemnifications. Federally-sponsored loans represent amounts due from current and former students under certain federal loan programs. Loans disbursed under these programs can be assigned to the federal government in certain non-repayment situations. In these situations, the federal portion of the loan balance is guaranteed. Federally-sponsored student loans have mandated interest rates and repayment terms subject to restrictions as to their transfer and disposition.

Amounts received from the federal government to fund a portion of the federally-sponsored student loans are ultimately refundable to the federal government and have been reported as part of other liabilities in the consolidated statement of financial position. The recorded value of student loan instruments approximates fair value.

### Notes Receivable

The university and the Hospital entered into an agreement under which the Hospital will reimburse the university over a 40-year term for advances made relating to the construction of Hospital facilities. The payment includes interest based on the five-year Treasury bill plus 175 basis points, which resets every five years. In 2020, the interest rate was reset, and the monthly payment was adjusted accordingly.

## 6. Right of Use Assets and Lease Liabilities

The following table summarizes the university's lease assets and liabilities as of June 30, in thousands of dollars:

Right of use assets and liabilities	Consolidated statement of financial position location	2023	2022
Right of use asset - Operating	Right of use assets	\$ 31,703	\$ 46,506
Right of use asset - Financing	Right of use assets	240,412	133,139
Right of use liabilities - Operating	Lease liabilities	32,355	47,304
Right of use liabilities - Financing	Lease liabilities	318,767	205,777

The following table summarizes the university's lease related costs for the year ended June 30, in thousands of dollars:

Lease cost	Consolidated statement of activities location	2023	2022
Financing lease cost			
Amortization of right of use assets	Depreciation, amortization and interest	\$ 10,279	\$ 10,279
Interest on lease liabilities	Depreciation, amortization and interest	7,462	7,719
Operating lease cost	Other operating expenses	12,496	10,114
Total lease cost		\$ 30,237	\$ 28,112

The following table summarizes maturities of lease liabilities as of June 30, 2023, in thousands of dollars:

	Financing		Operating		Total
2024	\$	153,668	\$	9,065	\$ 162,733
2025		10,753		7,052	17,805
2026		10,878		5,960	16,838
2027		11,004		5,259	16,263
2028		11,133		2,264	13,397
Thereafter		193,945		5,236	199,181
Undiscounted expected future cash flows		391,381		34,836	426,217
Discount		(72,614)		(2,481)	(75,095)
Discounted expected future cash flows	\$	318,767	\$	32,355	\$ 351,122

The following table summarizes information about financing and operating leases as of June 30, in thousands of dollars:

	2023		2022	
	Financing	Operating	Financing	Operating
Weighted-average remaining lease term (years)	11	7	19	9
Weighted-average discount rate	1.93%	1.53%	3.66%	1.76%
Total undiscounted lease liability	\$ 391,381	\$ 34,836	\$ 287,376	\$ 50,732

During the fiscal year ended June 30, 2023 the university committed to exercising a purchase option during the fiscal year ended June 30, 2024 for a building that it currently leases. As part of the remeasurement, the lease classification for all existing operating and financing leases in the building were reassessed and determined to be financing leases.

## 7. Other Assets

Other assets at June 30, in thousands of dollars, include:

	2023	2022
Prepaid pension costs	\$ 168,634	\$ -
Insurance receivables	142,042	140,923
Software costs, net of accumulated amortization	53,325	39,906
Deferred expenses	43,955	42,315
Inventories	18,001	17,670
	\$ 425,957	\$ 240,814

Prepaid pension costs represent the amount by which the fair value of plan assets exceed the defined benefit obligation at June 30, 2023. At June 30, 2022, the defined benefit pension obligation exceeded the fair value of the plan assets, and the funded status is included in other liabilities (see Note 12).

Amortization expense related to other assets included in operating expenses amounted to \$14.6 million and \$14.2 million in 2023 and 2022, respectively.

## 8. Land, Buildings and Equipment

Land, buildings and equipment at June 30, less accumulated depreciation and amortization, in thousands of dollars, are as follows:

	2023	2022
Land and real estate improvements	\$ 139,394	\$ 137,203
Buildings	8,785,418	8,380,253
Equipment	535,769	624,506
	<u>9,460,581</u>	<u>9,141,962</u>
Less: Accumulated depreciation and amortization	(4,146,360)	(3,961,507)
	<u>5,314,221</u>	<u>5,180,455</u>
Construction in progress	433,762	417,614
	<u>\$ 5,747,983</u>	<u>\$ 5,598,069</u>

Depreciation expense included in operating expenses amounted to \$312.4 million and \$306.7 million in 2023 and 2022, respectively.

## 9. Other Liabilities

Other liabilities include obligations of the university that will be paid over extended periods of time and consist of the following as of June 30, in thousands of dollars:

	2023	2022
Employee benefit obligations	\$ 860,230	\$ 993,684
Compensated absences	82,233	78,275
Financial aid grant obligations	55,825	49,674
Asset retirement obligations	39,727	38,229
Other	181,929	208,866
	<u>\$ 1,219,944</u>	<u>\$ 1,368,728</u>

Included in employee benefit obligations are defined benefit plan liabilities in excess of plan assets. These liabilities amounted to \$572.7 million at June 30, 2023 and \$743.8 million at June 30, 2022 (see Note 12).



## 10. Bonds and Notes Payable

Bonds and notes payable outstanding at June 30, in thousands of dollars, include:

	Interest Rate at June 30, 2023	Calendar Year of Maturity	Outstanding Balance	
			2023	2022
CHEFA tax-exempt bonds:				
Series S	5.00%	2027	\$ 111,205	\$ 111,205
Series T	5.00%	2029	93,625	93,625
Series U	1.10%	2033	250,000	250,000
Series V	1.73%	2036	200,000	200,000
Series X	0.25%	2037	125,000	125,000
Series 2010A	0.68%	2049	300,000	300,000
Series 2013A	1.73%	2042	100,000	100,000
Series 2014A	2.80%	2048	250,000	250,000
Series 2015A	0.38%	2035	300,000	300,000
Series 2016A	1.90%	2042	399,320	399,320
Series 2017A	2.28%	2042	170,920	170,920
Series 2017B	2.44%	2029/2037	194,530	194,530
Series 2017C	3.51%	2040/2057	383,380	383,380
Series 2018A	5.00%	2025	67,610	67,610
Total CHEFA bonds			2,945,590	2,945,590
Medium term notes	7.38%	2096	125,000	125,000
Taxable Series 2020A	1.59%	2025/2030/2050	1,500,000	1,500,000
Commercial paper	3.87%	2023	500,000	500,000
US Department of Energy	2.70%	2029	18,526	24,786
Principal amount			5,089,116	5,095,376
Less: Bond issue costs			(16,632)	(17,524)
Plus: Unamortized premiums and discounts, net			65,149	86,578
			\$ 5,137,633	\$ 5,164,430

### CHEFA Tax-Exempt Bonds

The university borrows at tax-exempt rates through the Connecticut Health and Facilities Authority (“CHEFA”), a conduit issuer. CHEFA debt is a general unsecured obligation of the university. Although CHEFA is the issuer, the university is responsible for the repayment of the tax-exempt debt.

Series S bonds total \$111.2 million, bear a fixed interest rate of 5.00%, and mature in July 2027. These bonds include a net premium of \$11.7 million as of June 30, 2023.

Series T bonds consist of \$93.6 million Series T-2 bonds maturing in July 2029. The Series T-2 bonds bear a fixed interest rate of 5.00% through June 2029. These bonds include a net premium of \$20.0 million as of June 30, 2023.

Series U bonds consist of 1) \$125.0 million Series U-1 bonds and 2) \$125.0 million Series U-2 bonds, both maturing in July 2033. After a remarketing on February 8, 2022, Series U bonds bear a fixed interest rate of 1.10% through February 10, 2025.

Series V bonds total \$200.0 million, bear interest at a daily rate, and mature in July 2036. The bonds may be converted from a daily rate period to other variable rate modes or to a fixed rate mode at the discretion of the university.

Series X bonds consist of \$125.0 million, bear fixed interest rate of 0.25% through February 8, 2024, and mature in July 2037.

Series 2010A bonds consist of 1) \$150.0 million Series 2010A-3 and 2) \$150 million Series 2010A-4, maturing July 2049. Series 2010A-3 have a fixed rate of 0.25% through February 8, 2024. On February 8, 2022, Series 2010A-4 was remarketed from a fixed rate of 2.00% to a fixed rate of 1.10% through February 10, 2025.

Series 2013A bonds total \$100.0 million maturing in July 2042. Series 2013A had a fixed interest rate of 1.45% through June 30, 2022. On July 1, 2022, the Series was remarketed at a daily variable interest rate.

Series 2014A bonds total \$250.0 million, maturing in July 2048. On February 7, 2023 the Series was remarketed from a fixed rate of 1.10% to a fixed rate of 2.80% through February 9, 2026.

Series 2015A bonds total \$300.0 million and mature in July 2035. After a remarketing in July 2021, the bonds bear a fixed interest rate of 0.38% through July 11, 2024.

Series 2016A bonds consist of 1) \$150.0 million Series 2016A-1 bonds that were remarketed on July 1, 2022 from a fixed rate of 1.45% to a daily variable interest rate and 2) \$249.3 million Series 2016A-2 bonds bearing a fixed interest rate of 2.00% through June 30, 2026. Series 2016A-2 include a net premium of \$203 thousand as of June 30, 2023. Both bond series mature in July 2042.

Series 2017A bonds consist of 1) \$85.5 million Series 2017A-1 bonds and 2) \$85.5 million Series 2017A-2 bonds. Both bond series were remarketed from a fixed interest rate of 5.00% to a weekly variable interest rate on July 1, 2022. Both bond series mature in July 2042.

Series 2017B bonds consist of 1) \$82.4 million Series 2017B-1 bonds that bear a fixed interest rate of 5.00% through July 2029 and mature in July 2029 and 2) \$112.1 million Series 2017B-2 bonds that bear a fixed interest rate of 0.55% through July 2023 and mature in July 2037. The Series 2017B-1 bonds include a net premium of \$19.8 million as of June 30, 2023. On July 3, 2023, the Series 2017B-2 bonds were remarketed to a fixed rate of 3.2% through June 30, 2026.

Series 2017C bonds consist of 1) \$123.3 million Series 2017C-1 bonds maturing in July 2040 and 2) \$260.1 million 2017C-2 bonds maturing in July 2057. Series 2017C-1 bonds bear a fixed interest rate of 5.00% through January 2028 and include a net premium of \$13.4 million as of June 30, 2023. On February 2, 2023, Series 2017C-2 was remarketed from a fixed interest rate of 5.00% to a fixed interest rate of 2.80% through February 2, 2026.

Series 2018A bonds total \$67.6 million, bear a fixed interest rate of 5.00%, and mature in July 2025. These bonds include a net premium of \$3.5 million as of June 30, 2023.

**Notes Payable**

Medium-term notes bear a fixed interest rate of 7.38% and mature in 2096, with an optional redemption provision in the year 2026. The discount associated with these notes was \$120 thousand as of June 30, 2023.

**Taxable Bonds**

Taxable bonds, Series 2020A, in the amount of \$1.5 billion were issued on June 9, 2020 consisting of: 2020A-1 in the amount of \$500 million bearing a fixed rate of 0.873% through maturity due April 15, 2025, 2020A-2 in the amount of \$500 million bearing a fixed rate of 1.48% through maturity due April 15, 2030, and 2020A-3 in the amount of \$500 million bearing a fixed rate of 2.40% through maturity due April 15, 2050. The bonds are subject to an optional redemption (in whole or in part) prior to maturity at the written direction of the issuer to the trustee.

**Commercial Paper**

Commercial paper consists of notes issued in the short-term taxable market and is sold at a discount from par. The maturities of individual notes are issued in ranges from one day to no more than one year and fall, on average, in a range of thirty to sixty days. The discount associated with commercial paper was \$3.4 million as of June 30, 2023.

**Other Financing Arrangements**

The university financed a wind energy project, Record Hill Wind, LLC, through a financing arrangement with the U.S. Department of Energy. The financing arrangement is non-recourse debt to the university and bears interest at rates ranging from 2.24% to 2.78%.

Scheduled maturities of the debt obligations, in thousands of dollars, are as follows:

2024	\$	504,835
2025		504,835
2026		72,445
2027		2,601
2028		111,783
Thereafter		3,892,617
Total	\$	5,089,116

Certain CHEFA Series are subject to tender by bondholders. To the extent all bonds subject to tender could not be remarketed, \$2.0 billion of bonds scheduled for maturity between 2033 and 2057 would be due when tendered.

Total interest expense incurred on indebtedness was \$93.8 million and \$71.0 million in 2023 and 2022, respectively. Interest capitalized to land, buildings and equipment totaled \$5.6 million and \$5.0 million in 2023 and 2022, respectively. Amortization expense related to bond issue costs included in operating expenses amounted to \$3.6 million and \$3.4 million in 2023 and 2022, respectively.

## 11. Retirement Plans – Defined Contribution

The university maintains defined contribution plans for faculty and certain staff employees. Participants may direct employee and employer contributions to annuities, mutual funds, and other investment options. Retirement expense for these plans amounted to \$165.2 million and \$146.9 million in 2023 and 2022, respectively, and is included in operating expense.

## 12. Pension and Postretirement Plans – Defined Benefit

The university has a noncontributory, defined benefit pension plan for staff. The staff pension plan provides payments based on the employee's earnings and years of participation.

In addition, the university provides postretirement benefits including health benefits based on years of service, life insurance, and a pay-out of unused sick time. While the university's subsidy of the cost of comprehensive health care benefits differs among retiree groups, substantially all employees who meet minimum age and service requirements and retire from the university are eligible for these benefits. Non-faculty employees are paid 50% of unused sick time and receive life insurance benefits upon retirement from active status.

The university uses a June 30 measurement date for its defined benefit plans.

The following table sets forth the pension and postretirement plans' funded status that is reported in other assets or other liabilities within the consolidated statements of financial position at June 30, in thousands of dollars:

	Pension		Postretirement	
	2023	2022	2023	2022
Change in benefit obligation:				
Benefit obligation, beginning of year	\$ 1,983,077	\$ 2,407,762	\$ 1,409,933	\$ 1,708,602
Service cost	69,846	101,014	56,129	66,548
Interest cost	73,438	58,060	53,227	38,456
Benefit payments	(57,895)	(51,846)	(31,966)	(32,101)
Assumption changes	(280,114)	(536,173)	(133,597)	(253,543)
Actuarial loss (gain)	17,875	4,260	93,617	(118,029)
Benefit obligation, end of year	\$ 1,806,227	\$ 1,983,077	\$ 1,447,343	\$ 1,409,933
Change in plan assets:				
Fair value, beginning of year	\$ 1,895,798	\$ 2,066,964	\$ 753,421	\$ 802,442
Actual return on plan assets	127,016	(166,373)	54,152	(96,185)
University contributions	13,169	49,945	100,457	80,623
Benefits paid	(57,895)	(51,846)	(31,966)	(32,101)
Expenses paid	(3,227)	(2,892)	(1,466)	(1,358)
Fair value, end of year	\$ 1,974,861	\$ 1,895,798	\$ 874,598	\$ 753,421
Funded Status	\$ 168,634	\$ (87,279)	\$ (572,745)	\$ (656,512)

### Benefit Obligation

The benefit obligation represents the actuarial present value of expected future payments to plan participants for services rendered prior to that date, based on the pension benefit formula. In calculating the value, the participants' compensation levels are projected to retirement.

The accumulated benefit obligation differs from the benefit obligation above in that it does not consider assumptions about future compensation levels. It represents the actuarial present value of future payments to plan participants using current and past compensation levels. The accumulated benefit obligation for the pension plan was \$1,586.5 million and \$1,705.5 million at June 30, 2023 and June 30, 2022, respectively.

Assumptions used in determining the year end obligation of the pension and postretirement plans are:

	2023	2022
Weighted-average discount rate -		
all plans except unused sick pay plan	4.65%	3.75%
Weighted-average discount rate - unused sick pay plan	4.85%	3.75%
Weighted-average increase in future compensation levels	3.19%	3.18%
Projected health care cost trend rate (pre-65/post-65)	6.82%/13.02%	7.08%/12.73%
Ultimate trend rate (pre-65/post-65)	5.00%/5.00%	5.00%/5.00%
Year ultimate trend rate is achieved	2033	2031
Mortality	RP2014 Collar Adj., Scale MP2019	RP2014 Collar Adj., Scale MP2019

Changes in assumptions during the year resulted in a net decrease to the pension benefit obligation and postretirement benefit obligation at June 30, as follows, in thousands of dollars:

	2023		2022	
	Pension	Postretirement	Pension	Postretirement
Discount rate	\$ (280,114)	\$ (217,182)	\$ (525,707)	\$ (411,253)
Inflation	-	-	148	9,223
Medicare Part B reimbursement trends	-	(2,694)	-	-
Medicare Advantage and EGWP trends	-	86,279	-	-
Salary scale	-	-	(10,614)	726
Medical trend rates	-	-	-	147,761
	\$ (280,114)	\$ (133,597)	\$ (536,173)	\$ (253,543)

### Net Periodic Benefit Cost

Net periodic benefit cost for the plans includes the following components for the year ended June 30, in thousands of dollars:

	Pension		Postretirement	
	2023	2022	2023	2022
Service cost	\$ 69,846	\$ 101,014	\$ 56,129	\$ 66,548
Administrative expenses	2,967	2,753	1,400	1,400
Interest cost	73,438	58,060	53,227	38,456
Expected return on plan assets	(135,690)	(126,466)	(59,348)	(51,274)
Net amortization:				
Prior service cost	1,663	2,725	-	-
Net loss	-	29,855	-	7,432
Net periodic benefit cost	\$ 12,224	\$ 67,941	\$ 51,408	\$ 62,562

The service cost component of net periodic benefit cost is included in employee benefits as a part of operating expenses in the consolidated statement of activities. The components of net periodic benefit

cost other than service cost, are included in other increases, which is reported as non-operating activity in the consolidated statement of activities.

Assumptions used in determining the net periodic benefit cost of the pension and postretirement plans are:

	2023	2022
Weighted-average discount rate -		
all plans except unused sick pay plan	3.75%	2.45%
Weighted-average discount rate - unused sick pay plan	3.75%	2.15%
Expected long-term rate of return	7.25%	7.25%
Weighted-average compensation increase	3.18%	3.13%
Health care cost increase (pre-65/post-65)	7.08%/11.68%	6.22%/5.46%
Ultimate trend rate (pre-65/post-65)	5.00%/5.00%	4.50%/4.50%
Year ultimate trend rate is achieved	2031	2030
Mortality	RP2014 Collar Adj., Scale MP2019	RP2014 Collar Adj., Scale MP2019

The funded status consists of the cumulative unfunded net periodic benefit cost and the cumulative change in funded status of defined benefit plans. The components of the change in funded status of defined benefit plans, which is reported in non-operating results, for the year ended June 30, in thousands of dollars, include:

	Pension		Postretirement	
	2023	2022	2023	2022
Unrecognized net actuarial loss	\$ (253,304)	\$ (238,935)	\$ (34,717)	\$ (224,234)
Amortization of unrecognized obligation	(1,663)	(32,580)	-	(7,432)
	\$ (254,967)	\$ (271,515)	\$ (34,717)	\$ (231,666)

During fiscal year 2023, the postretirement plans experienced a \$93.6 million actuarial loss largely attributable to a change in retiree cost sharing for healthcare coverage for Medicare-eligible former hourly employees. The pension plan experienced an actuarial loss of \$17.9 million largely attributable to updated census information. At the same time, both plans experienced assumption change gains as summarized on the prior page, and asset losses of \$5.2 million and \$8.7 million for the postretirement and pension plans, respectively.

During fiscal year 2022, the postretirement plans experienced a \$118.0 million actuarial gain largely attributable to claims experience. The pension plan experienced an actuarial loss of \$4.3 million largely attributable to updated census information. At the same time, both plans experienced assumption change gains as summarized on the prior page, and asset losses of \$147.5 million and \$292.8 million for the postretirement and pension plans, respectively.

The cumulative amounts of these adjustments reported as deductions to net assets in the consolidated statement of financial position at June 30, in thousands of dollars, include:

	Pension		Postretirement	
	2023	2022	2023	2022
Unrecognized net actuarial (gain) loss	\$ (234,556)	\$ 18,748	\$ (1,362)	\$ 33,355
Unrecognized prior service cost	3,396	5,059	-	-
	\$ (231,160)	\$ 23,807	\$ (1,362)	\$ 33,355

Actuarial gains or losses and prior service costs resulting from plan amendments are amortized over the average remaining years of service of active participants.

### Plan Assets

The defined benefit plan assets are valued utilizing the same fair value hierarchy as the university's investments as described in Note 1d.

The following table summarizes the fair values of investments by major type held by the staff pension plan at June 30, 2023 in thousands of dollars:

2023	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	\$ 30,081	\$ -	\$ -	\$ 30,081
US government securities	96,681	-	-	96,681
Common stock:				
Domestic	49,313	-	-	49,313
Foreign	1,484	-	-	1,484
Total common stock	50,797	-	-	50,797
Other equity investments:				
Real assets	-	-	23,918	23,918
Total other equity investments	-	-	23,918	23,918
Other investments	419	-	-	419
Total leveled investments, at fair value	\$ 177,978	\$ -	\$ 23,918	201,896
Investments at net asset value				1,785,610
Total investments				1,987,506
Liabilities associated with investments	\$ 17,360	\$ 196	\$ -	17,556
Net investments				1,969,950
Benefit payable				4,911
Fair value, end of year				\$ 1,974,861

The following table summarizes the fair values of investments by major type held by the staff pension plan at June 30, 2022 in thousands of dollars:

2022	Level 1		Level 2		Level 3		Total
Investments, at fair value:							
Cash and short-term investments	\$	32,537	\$	-	\$	-	\$ 32,537
US government securities		132,298		-		-	132,298
Common stock:							
Domestic		35,849		-		-	35,849
Foreign		1,926		-		-	1,926
Total common stock		37,775		-		-	37,775
Other equity investments:							
Real assets		-		-		32,334	32,334
Total other equity investments		-		-		32,334	32,334
Other investments		299		-		-	299
Total leveled investments, at fair value	\$	202,909	\$	-	\$	32,334	235,243
Investments at net asset value							1,656,228
Total investments							1,891,471
Liabilities associated with investments	\$	141	\$	280	\$	-	421
Net investments							1,891,050
Benefit payable							4,748
Fair value, end of year							\$ 1,895,798

The following table summarizes the fair values of investments by major type held by the retiree health plan at June 30, 2023 in thousands of dollars:

2023	Level 1		Level 2		Level 3		Total
Investments, at fair value:							
Cash and short-term investments	\$	40,873	\$	-	\$	-	\$ 40,873
US government securities		52,491		-		-	52,491
Common stock:							
Domestic		31,060		-		-	31,060
Foreign		14,761		-		-	14,761
Total common stock		45,821		-		-	45,821
Other investments		334		-		-	334
Total leveled investments, at fair value	\$	139,519	\$	-	\$	-	139,519
Investments at net asset value							744,468
Total investments							883,987
Liabilities associated with investments	\$	6,865	\$	69	\$	-	6,934
Net investments, at fair value							877,053
Receivable							2,455
Fair value, end of year							\$ 874,598



The following table summarizes the fair values of investments by major type held by the retiree health plan at June 30, 2022 in thousands of dollars:

2022	Level 1		Level 2		Level 3		Total
Investments, at fair value:							
Cash and short-term investments	\$	16,845	\$	-	\$	-	\$ 16,845
US government securities		64,605		-		-	64,605
Common stock:							
Domestic		21,826		-		-	21,826
Foreign		15,397		-		-	15,397
Total common stock		37,223		-		-	37,223
Other investments		164		-		-	164
Total leveled investments, at fair value	\$	118,837		-	\$	-	118,837
Investments at net asset value							636,672
Total investments							755,509
Liabilities associated with investments	\$	87	\$	178	\$	-	265
Net investments, at fair value							755,244
Receivable							1,823
Fair value, end of year							\$ 753,421

The table below represents the change in fair value measurements for Level 3 investments held by the staff pension plan for the plan's year ended June 30, in thousands of dollars. There are no Level 3 investments held by the retiree health plan:

Pension			
	2023	2022	
Beginning balance	\$ 32,334	\$ 21,364	
Unrealized (loss) / gain	(4,622)	13,727	
Purchases	-	1,512	
Sales	(3,794)	(4,269)	
Ending balance	\$ 23,918	\$ 32,334	

The investment objective for the pension and retiree health plans seeks a positive long-term total return after inflation to meet the university's current and future plan obligations. Asset allocations for both plans combine tested theory and informed market judgment to balance investment risks with the need for high returns. Actual plan asset allocations by category at June 30 are as follows:

	Pension		Retiree Health	
	2023	2022	2023	2022
Developed equities	38.4%	28.3%	44.7%	33.8%
Emerging equities	2.5%	4.9%	4.0%	7.5%
Marketable alternatives	16.4%	16.1%	16.7%	16.3%
Fixed income	4.9%	7.0%	6.0%	8.6%
Leveraged buyouts	15.6%	14.2%	8.9%	8.9%
Venture capital	12.2%	17.5%	8.8%	14.0%
Real assets	8.8%	10.5%	6.8%	9.0%
Cash	1.2%	1.5%	4.1%	1.9%

The pension and retiree health long-term rate of return assumption is determined by adding expected inflation to expected long-term real returns of various asset classes, considering expected volatility and correlation between the returns of various asset classes.

### Contributions

Annual contributions for the pension and retiree health plans are determined by the university considering calculations prepared by the plans' actuary as well as other factors. Expected contributions on a cash basis to the retiree health plan in fiscal year 2024 are \$121.2 million. There are no contributions expected to the pension plan in fiscal year 2024.

### Benefit Payments

The following estimated benefit payments, which reflect expected future service, are expected to be paid out of the plans, in thousands of dollars:

Fiscal year	Pension	Postretirement	Total
2024	\$ 68,133	\$ 44,431	\$ 112,564
2025	72,319	48,926	121,245
2026	76,759	52,297	129,056
2027	81,388	56,362	137,750
2028	86,098	60,794	146,892
2029-2033	502,324	368,925	871,249
	<u>\$ 887,021</u>	<u>\$ 631,735</u>	<u>\$ 1,518,756</u>

## 13. Net Assets

The university's net assets as of June 30, in thousands of dollars, includes:

	2023	2022
With Donor Restrictions:		
Donor-restricted endowments, perpetual in nature	\$ 5,883,346	\$ 5,530,421
Student loans, perpetual in nature	52,850	52,999
Donor-restricted endowments, subject to spending policy and appropriation	27,810,806	28,663,194
Board designated endowment, subject to spending policy and appropriation	327,357	298,908
Unexpended gift balances	1,509,734	1,554,287
Total net assets with donor restrictions	<u>\$ 35,584,093</u>	<u>\$ 36,099,809</u>
Without Donor Restrictions:		
Board designated endowment, subject to spending policy and appropriation	\$ 6,725,358	\$ 6,890,737
Funded status of defined benefit plans	(404,111)	(743,791)
Derivatives	109,874	(75,334)
Undesignated	2,709,686	2,520,983
Non-controlling interest	3,061	1,621
Total net assets without donor restrictions	<u>9,143,868</u>	<u>8,594,216</u>
Total net assets	<u>\$ 44,727,961</u>	<u>\$ 44,694,025</u>

Yale's endowment consists of approximately 8,500 funds established for a variety of purposes.

The endowment includes both donor-restricted and board-designated endowment funds. Board designated endowment funds are designated by the Corporation to function as endowments and include funds that have donor-imposed purpose restrictions. The university endowment fund composition by fund type as of June 30, in thousands of dollars, includes:

2023	Without Donor Restrictions	With Donor Restrictions	Total
Donor-restricted endowment	\$ -	\$ 33,694,152	\$ 33,694,152
Board-designated endowment	6,725,358	327,357	7,052,715
	\$ 6,725,358	\$ 34,021,509	\$ 40,746,867

  

2022	Without Donor Restrictions	With Donor Restrictions	Total
Donor-restricted endowment	\$ -	\$ 34,193,615	\$ 34,193,615
Board-designated endowment	6,890,737	298,908	7,189,645
	\$ 6,890,737	\$ 34,492,523	\$ 41,383,260

The classification of endowment net assets by purpose as of June 30, in thousands of dollars, is as follows:

	2023	2022
Undesignated	\$ 9,070,176	\$ 9,437,657
Teaching and research	9,957,821	10,105,276
Facilities and operations	7,426,505	7,463,516
Financial aid	7,278,778	7,369,578
Other specific purposes	7,013,587	7,007,233
	\$ 40,746,867	\$ 41,383,260

Changes in endowment net assets for the fiscal year ended June 30, in thousands of dollars, were:

2023	Without Donor Restrictions	With Donor Restrictions	Total
Endowment net assets, beginning of year	\$ 6,890,737	\$ 34,492,523	\$ 41,383,260
Investment return:			
Investment income	74,679	364,137	438,816
Net appreciation	290	319,578	319,868
Total investment return	74,969	683,715	758,684
Contributions	8,316	283,574	291,890
Allocation of endowment spending	(311,275)	(1,441,100)	(1,752,375)
Other increases	62,611	2,797	65,408
Endowment net assets, end of year	\$ 6,725,358	\$ 34,021,509	\$ 40,746,867

2022	Without Donor Restrictions	With Donor Restrictions	Total
Endowment net assets, beginning of year	\$ 7,048,097	\$ 35,234,755	\$ 42,282,852
Investment return:			
Investment income	62,511	309,415	371,926
Net depreciation	(12,179)	(93,867)	(106,046)
Total investment return	50,332	215,548	265,880
Contributions	1,625	299,730	301,355
Allocation of endowment spending	(278,461)	(1,289,981)	(1,568,442)
Other increases	69,144	32,471	101,615
Endowment net assets, end of year	\$ 6,890,737	\$ 34,492,523	\$ 41,383,260

## 14. Functional and Natural Classification of Expenses

The consolidated financial statements report certain categories of expenses that are attributable to one or more program or supporting functions of the university. Expenses reported by functional categories include allocations of costs for the operation and maintenance of plant, interest on indebtedness and depreciation and amortization expense. The university applies various methods to allocate costs among the program and support functions, the most significant of which is based on the amount of building space utilized.

Operating expenses by functional and natural classification for the fiscal year ended June 30, in thousands of dollars, were:

	Programmatic support	Patient care and other related services	Administration and other institutional support	Total
2023				
Salaries and wages	\$ 1,459,902	\$ 698,754	\$ 169,480	\$ 2,328,136
Employee benefits	499,294	175,040	70,489	744,823
Depreciation, amortization and interest	410,799	11,770	18,633	441,202
Other operating expenditures	1,077,892	247,447	96,768	1,422,107
Total operating expenses	\$ 3,447,887	\$ 1,133,011	\$ 355,370	\$ 4,936,268

	Programmatic support	Patient care and other related services	Administration and other institutional support	Total
2022				
Salaries and wages	\$ 1,324,115	\$ 635,674	\$ 155,109	\$ 2,114,898
Employee benefits	500,771	185,671	73,349	759,791
Depreciation, amortization and interest	365,717	17,061	25,017	407,795
Other operating expenditures	938,765	244,017	75,034	1,257,816
Total operating expenses	\$ 3,129,368	\$ 1,082,423	\$ 328,509	\$ 4,540,300

## 15. Commitments and Contingencies

The university is involved in various legal actions arising in the normal course of activities and is also subject to periodic audits and inquiries by various regulatory agencies. Although the ultimate outcome is not determinable at this time, management, after taking into consideration advice of legal counsel, believes that the resolution of these pending matters should not have a material adverse effect upon the university's financial position.

The university has outstanding commitments on contracts to construct campus facilities in the amount of \$393.2 million at June 30, 2023. Funding for these projects is expected to come from capital replacement reserves, gifts, and debt.

## 16. Subsequent Events

Management has evaluated subsequent events for the period after June 30, 2023, through October 27, 2023, the date the consolidated financial statements were issued. Other than what has been disclosed in Note 10, there were no subsequent events that occurred after the balance sheet date that have a material impact on the university's consolidated financial statements.

**PART II**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Defense</u>				
Direct:				
Department of Defense	HR00112320023	12.RD	\$ 1	\$ -
Department of Defense	W81XWH2010157	12.RD	12,697	-
Department of Defense	W81XWH2010036	12.RD	23,894	-
Department of Defense	S-D00154-00003-YALE	12.RD	98,648	-
Department of Defense	CONQUER3	12.RD	111,735	-
Department of Defense	W81XWH1910649	12.RD	190,641	-
Department of Defense	HR00112320003	12.RD	450,831	-
Department of Defense	HR00112190136	12.RD	600,403	347,962
Department of Defense	N6600121C4018	12.RD	973,880	441,153
Department of Defense	W81XWH2010072	12.RD	1,380,064	-
			<u>3,842,794</u>	<u>789,115</u>
Basic and Applied Scientific Research	N00014-20-1-2197	12.300	86	-
Basic and Applied Scientific Research	N00014-23-1-2600	12.300	745	-
Basic and Applied Scientific Research	N00014-19-1-2132	12.300	1,282	-
Basic and Applied Scientific Research	N00014-19-1-2104	12.300	40,899	-
Basic and Applied Scientific Research	N00014-20-1-2134	12.300	76,847	-
Basic and Applied Scientific Research	N00014-19-1-2406	12.300	79,003	-
Basic and Applied Scientific Research	N00014-20-1-2126	12.300	96,129	-
Basic and Applied Scientific Research	N00014-23-1-2018	12.300	103,364	-
Basic and Applied Scientific Research	N00014-22-1-2147	12.300	107,181	-
Basic and Applied Scientific Research	N00014-23-1-2121	12.300	120,000	-
Basic and Applied Scientific Research	N00014-18-1-2776	12.300	120,111	-
Basic and Applied Scientific Research	N00014-22-1-2652	12.300	142,555	-
Basic and Applied Scientific Research	N00014-18-1-2353	12.300	182,774	-
Basic and Applied Scientific Research	N00014-20-1-2335	12.300	201,445	-
Basic and Applied Scientific Research	N00014-21-1-2131	12.300	347,433	-
Basic and Applied Scientific Research	N00014-21-1-2417	12.300	368,658	63,761
Basic and Applied Scientific Research	N00173-21-G006	12.300	382,841	-
Basic and Applied Scientific Research	N00014-18-1-2409	12.300	397,352	308,762
Basic and Applied Scientific Research	N00014-20-1-2628	12.300	463,365	-
			<u>3,232,070</u>	<u>372,523</u>
Military Medical Research and Development	W81XWH-22-1-062	12.420	1	-
Military Medical Research and Development	HT94252310458	12.420	554	-
Military Medical Research and Development	W81XWH-17-2-0035	12.420	895	-
Military Medical Research and Development	HT9425-23-1-0441	12.420	13,666	-
Military Medical Research and Development	W81XWH1810698/PR171449P1	12.420	13,939	-
Military Medical Research and Development	HT9425-23-1-0454	12.420	14,663	-
Military Medical Research and Development	HT9425-23-1-0329	12.420	19,915	-
Military Medical Research and Development	HT94252310126	12.420	21,936	-
Military Medical Research and Development	W81XWH2010310	12.420	23,771	-
Military Medical Research and Development	PR170078P1/W81XWH1810630	12.420	29,035	-
Military Medical Research and Development	HT94252310034	12.420	33,605	-
Military Medical Research and Development	W81XWH1910264	12.420	49,461	-
Military Medical Research and Development	W81XWH2010003	12.420	66,240	-
Military Medical Research and Development	W81XWH1910618/NF180073	12.420	68,506	5,389
Military Medical Research and Development	W81XWH2010673	12.420	88,206	-

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Defense</u>				
Direct: (Continued)				
Military Medical Research and Development	HT94252310020	12.420	\$ 91,641	\$ -
Military Medical Research and Development	W81XWH2010538	12.420	114,303	-
Military Medical Research and Development	W81XWH2110088	12.420	129,100	-
Military Medical Research and Development	W81XWH2211077	12.420	141,284	-
Military Medical Research and Development	W81XWH2110083	12.420	171,240	-
Military Medical Research and Development	W81XWH2010580	12.420	173,730	-
Military Medical Research and Development	W81XWH2010120	12.420	196,608	-
Military Medical Research and Development	W81XWH2210823	12.420	202,557	-
Military Medical Research and Development	W81XWH1910377	12.420	211,246	-
Military Medical Research and Development	W81XWH2110488	12.420	215,421	-
Military Medical Research and Development	W81XWH2210865	12.420	216,650	-
Military Medical Research and Development	W81XWH-21-1-0718/LR200001	12.420	234,699	-
Military Medical Research and Development	W81XWH-20-1-0454	12.420	247,766	-
Military Medical Research and Development	W81XWH2010680	12.420	268,858	-
Military Medical Research and Development	W81XWH2110956	12.420	270,933	-
Military Medical Research and Development	W81XWH2211078	12.420	271,562	-
Military Medical Research and Development	W81XWH2110479	12.420	275,243	-
Military Medical Research and Development	W81XWH2010718	12.420	304,715	-
Military Medical Research and Development	W81XWH1910557	12.420	316,383	-
Military Medical Research and Development	W81XWH2010297	12.420	361,282	-
Military Medical Research and Development	W81XWH-22-1-0099	12.420	383,275	-
Military Medical Research and Development	W81XWH-20-1-0763	12.420	437,221	-
Military Medical Research and Development	W81XWH2110547	12.420	457,828	136,681
Military Medical Research and Development	W81XWH2110514	12.420	461,847	-
Military Medical Research and Development	W81XWH2110411	12.420	472,129	-
Military Medical Research and Development	W81XWH2010882	12.420	475,305	-
Military Medical Research and Development	W81XWH2210005	12.420	621,952	-
Military Medical Research and Development	W81XWH2210629	12.420	686,970	-
Military Medical Research and Development	W81XWH2110717	12.420	797,089	-
Military Medical Research and Development	W81XWH2110019	12.420	1,428,347	-
Military Medical Research and Development	W81XWH2110739	12.420	2,786,682	39,517
			13,868,259	181,587
Basic Scientific Research	W911NF-23-1-0132	12.431	4,569	-
Basic Scientific Research	W911NF-18-1-0020	12.431	7,066	-
Basic Scientific Research	W911NF-23-1-0032	12.431	11,579	-
Basic Scientific Research	W911NF2310139	12.431	18,513	-
Basic Scientific Research	W911NF1810378	12.431	26,274	-
Basic Scientific Research	W911NF-23-1-0064	12.431	41,465	-
Basic Scientific Research	W911NF1910371	12.431	43,509	-
Basic Scientific Research	W911NF2110256	12.431	147,923	-
Basic Scientific Research	W911NF2310006	12.431	225,075	-
Basic Scientific Research	FA9550-22-1-0320	12.431	282,755	-
Basic Scientific Research	W911NF2210053	12.431	399,502	87,028
Basic Scientific Research	W911NF-23-1-0051	12.431	1,062,234	-
Basic Scientific Research	W911NF1810212	12.431	1,607,759	24,739
			3,878,223	111,767

The accompanying notes are an integral part of this schedule



**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing	Expenditures	Subrecipient Expenditures
		Number		
I. Research and Development Cluster				
Department of Defense				
Direct: (Continued)				
Air Force Defense Research Sciences Program	FA9550-18-1-0165	12.800	\$ 951	\$ -
Air Force Defense Research Sciences Program	FA9550-23-1-0338	12.800	996	-
Air Force Defense Research Sciences Program	FA9550-22-1-0097	12.800	46,391	-
Air Force Defense Research Sciences Program	FA9550-22-1-0393	12.800	62,773	-
Air Force Defense Research Sciences Program	FA9550-18-1-0134	12.800	95,529	-
Air Force Defense Research Sciences Program	FA9550-22-1-0041	12.800	103,869	-
Air Force Defense Research Sciences Program	FA9550-20-1-0037	12.800	106,037	-
Air Force Defense Research Sciences Program	FA9550-18-1-0213	12.800	146,203	-
Air Force Defense Research Sciences Program	FA9550-21-1-0173	12.800	152,989	-
Air Force Defense Research Sciences Program	FA9550-22-1-0209	12.800	224,600	-
Air Force Defense Research Sciences Program	FA9550-20-1-0129	12.800	324,259	-
Air Force Defense Research Sciences Program	FA9550-21-1-0152	12.800	438,655	-
			1,703,252	-
Research and Technology Development	D22AP00141	12.910	208,731	44,525
Research and Technology Development	HR0011-20-2-0045	12.910	445,382	-
Research and Technology Development	HR00112120014	12.910	3,211,003	1,229,048
			3,865,116	1,273,573
	Subtotal - Department of Defense - Direct		30,389,714	2,728,565
Pass-through:				
University of California, Berkeley - Department of Defense	00011281	12.RD	20,594	-
Azimuth Corporation - Department of Defense	238-011-Yale	12.RD	25,188	-
Luna Labs USA, LLC - Department of Defense	7033-ARM-1T/YALE	12.RD	26,173	-
University of Colorado, Denver - Department of Defense	1560823	12.RD	34,523	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Department of Defense	0258-A061-4609	12.RD	38,019	-
Dana Farber Cancer Institute - Department of Defense	3089103	12.RD	38,192	-
Pennsylvania State University - Department of Defense	S001881-AFOSR	12.RD	50,571	-
Georgia Institute of Technology - Department of Defense	AWD-004311-S8	12.RD	51,861	-
University of Washington, Seattle - Department of Defense	UWSC14393	12.RD	67,330	-
Sandia National Laboratories/DOE - Department of Defense	2199141	12.RD	109,251	-
University of Washington, Seattle - Department of Defense	UWSC13521	12.RD	164,050	-
Nalas Engineering Services - Department of Defense	SERDP Project Number WP20-1010	12.RD	167,155	-
GE Global Research - Department of Defense	401126008	12.RD	229,781	-
			1,022,688	-
Cornell University - Basic and Applied Scientific Research	87748-21011	12.300	3,929	-
University of Rochester - Basic and Applied Scientific Research	417314/URFAO:GR510771	12.300	4,572	-
New York University - Basic and Applied Scientific Research	F1168-01	12.300	46,053	-
University of California, San Diego - Basic and Applied Scientific Research	703872	12.300	64,116	-
New York University - Basic and Applied Scientific Research	F2229-01	12.300	77,139	-
University of Illinois, Chicago - Basic and Applied Scientific Research	097239-17598	12.300	80,233	-
Duke University - Basic and Applied Scientific Research	313-0982	12.300	153,996	-
Purdue University - Basic and Applied Scientific Research	13000966-030	12.300	223,466	-
			653,504	-
University of Pennsylvania - Military Construction, National Guard	583239	12.400	14,550	-
			14,550	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Defense</u>				
<u>Pass-through: (Continued)</u>				
Icahn School of Medicine at Mount Sinai (ISMMS) - Military Medical Research and Development	0258-0761-4609	12.420	\$ 1,416	\$ -
Rutgers, the State University of New Jersey - Military Medical Research and Development	0420/PO #804112	12.420	4,485	-
University of Alabama at Birmingham - Military Medical Research and Development	000523682-SC001	12.420	5,256	-
Thomas Jefferson University - Military Medical Research and Development	080-27000-X17201	12.420	9,976	-
Dana Farber Cancer Institute - Military Medical Research and Development	3092701	12.420	42,474	-
CaroGen Corporation - Military Medical Research and Development	W81XWH2210762	12.420	49,964	-
Johns Hopkins University - Military Medical Research and Development	2005207506	12.420	70,358	-
Philips Healthcare - Military Medical Research and Development	W81XWH20C0142	12.420	77,592	-
SPINOGENIX, INC. - Military Medical Research and Development	33492Spinogenix	12.420	91,028	-
Jackson (Henry M.) Foundation - Military Medical Research and Development	4551	12.420	198,190	-
Research Triangle Institute - Military Medical Research and Development	9-312-0216591-66319L	12.420	231,805	-
			<u>782,544</u>	-
Regents of the University of Michigan - Basic Scientific Research	SUBK00010308	12.431	119,805	-
University of Chicago - Basic Scientific Research	FP056991-01-PR	12.431	135,601	-
University of Arizona - Basic Scientific Research	PRIME - W911NF2110325	12.431	144,021	-
Regents of the University of Michigan - Basic Scientific Research	SUBK00013908	12.431	149,728	-
University of Maryland - Basic Scientific Research	39406-Z8425101	12.431	292,918	-
			<u>842,073</u>	-
IBM Corporation - Basic, Applied, and Advanced Research in Science and Engineering	PO 4700184288	12.630	14	-
			<u>14</u>	-
Jackson (Henry M.) Foundation - Uniformed Services University Medical Research Projects	4052	12.750	2,596	-
Jackson (Henry M.) Foundation - Uniformed Services University Medical Research Projects	5354	12.750	78,587	-
Jackson (Henry M.) Foundation - Uniformed Services University Medical Research Projects	5379/65821	12.750	92,677	-
			<u>173,860</u>	-
Ludwig Maximilians Universit?t Mnchen - Air Force Defense Research Sciences Program	CAO FA9550-21-1-0039	12.800	52,707	-
Regents of the University of Michigan - Air Force Defense Research Sciences Program	SUBK00014745	12.800	90,652	-
Johns Hopkins University - Air Force Defense Research Sciences Program	2005131401	12.800	131,016	-
Stanford University - Air Force Defense Research Sciences Program	62742085-204669	12.800	271,561	-
University of Chicago - Air Force Defense Research Sciences Program	SUB00000155	12.800	321,844	-
University of Chicago - Air Force Defense Research Sciences Program	AWD102104 (SUB00000507)	12.800	539,537	-
Emory University - Air Force Defense Research Sciences Program	A755663	12.800	652,244	-
			<u>2,059,561</u>	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Research and Technology Development	0258-A951-4609	12.910	311,916	-
California Institute of Technology (Caltech) - Research and Technology Development	S547062	12.910	348,909	-
Air Force Research Laboratory (AFRL)/AirForce/DoD - Research and Technology Development	FA8650-18-2-7850	12.910	942,471	363,257
			<u>1,603,296</u>	<u>363,257</u>
Subtotal - Department of Defense - Pass Through			<u>7,152,090</u>	<u>363,257</u>
Subtotal - Department of Defense			37,541,804	3,091,822
<u>Department of Agriculture</u>				
<u>Direct:</u>				
Department of Agriculture	17-CR-11242303-064	10.RD	2,201	-
Department of Agriculture	20-CS-11132540-050	10.RD	21,741	-
			<u>23,942</u>	-
COVID-19 Agricultural and Rural Economic Research, Cooperative Agreements and Collaborations	58-3000-0-0027	10.250	2,637	-
			<u>2,637</u>	-
Specialty Crop Research Initiative	2020-70029-33160	10.309	429,545	34,049
			<u>429,545</u>	<u>34,049</u>

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing Number	Subrecipient Expenditures	
			Expenditures	Expenditures
I. Research and Development Cluster				
Department of Agriculture				
Direct: (Continued)				
Agriculture and Food Research Initiative (AFRI)	2021-67034-35165	10.310	\$ 28,964	\$ -
Agriculture and Food Research Initiative (AFRI)	2020-67034-31894	10.310	75,152	-
			104,116	-
Research Joint Venture and Cost Reimbursable Agreements	22-JV-11330152-043	10.707	14,524	-
			14,524	-
	Subtotal - Department of Agriculture - Direct		574,764	34,049
Pass-through:				
City of New Haven - Department of Agriculture	A22-0368/1910	10.RD	23,190	-
			23,190	-
Tufts--New England Medical Center - Agricultural Research_Basic and Applied Research	103093-00001:AG0014	10.001	51,034	-
			51,034	-
University of Vermont - Sustainable Agriculture Research and Education	GNE22-291-AWD00000495	10.215	2,754	-
University of Vermont and State Agricultural College - Sustainable Agriculture Research and Education	LNE23-469-AWD00001024	10.215	9,571	-
University of Vermont - Sustainable Agriculture Research and Education	LNE21-423-35383	10.215	54,805	7,040
			67,130	7,040
University of Georgia - Agriculture and Food Research Initiative (AFRI)	SUB00002498	10.310	147,711	-
Washington University in St. Louis - Agriculture and Food Research Initiative (AFRI)	WU-23-0281	10.310	208,844	-
			356,555	-
Colgate University - Forestry Research	201684-617	10.652	13,051	-
			13,051	-
	Subtotal - Department of Agriculture - Pass Through		510,960	7,040
	Subtotal - Department of Agriculture		1,085,724	41,089
Department of Education				
Direct:				
Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program	P022A220047	84.022	53,510	-
			53,510	-
Social and Behavioral Context for Academic Learning	R305A210262	84.305	432,455	-
			432,455	-
	Subtotal - Department of Education - Direct		485,965	-
Pass-through:				
Center for Educational Improvement - Supporting Effective Educator Development Program	GR22CEIPRCH	84.423	80,360	-
			80,360	-
University of Connecticut - HEERF II Institutional Grants	170365801	84.425F	1,303	-
University of Connecticut - HEERF II Institutional Grants	171318567	84.425F	17,842	-
University of Connecticut - HEERF II Institutional Grants	482711/157042423	84.425F	151,777	-
			170,922	-
	Subtotal - Department of Education - Pass Through		251,282	-
	Subtotal - Department of Education		737,247	-

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Commerce</u>				
Direct:				
Climate and Atmospheric Research	NA20OAR4310377	11.431	\$ 76,775	\$ -
Climate and Atmospheric Research	NA20OAR4310304	11.431	163,615	-
			240,390	-
	Subtotal - Department of Commerce - Direct		240,390	-
Pass-through:				
University of Connecticut - Sea Grant Support	KFS# 5657730 390744	11.417	16,527	-
			16,527	-
	Subtotal - Department of Commerce - Pass Through		16,527	-
	Subtotal - Department of Commerce		256,917	-
<u>Department of Energy</u>				
Direct:				
Department of Energy	PO# 2184982	81.RD	54,607	-
Department of Energy	7563601	81.RD	154,978	-
			209,585	-
Office of Science Financial Assistance Program	DE-SC0019061	81.049	38,303	-
Office of Science Financial Assistance Program	DE-SC0022535	81.049	55,559	-
Office of Science Financial Assistance Program	DE-SC0020315	81.049	60,441	-
Office of Science Financial Assistance Program	DE-SC0023672	81.049	67,701	-
Office of Science Financial Assistance Program	DE-SC0020162	81.049	77,683	-
Office of Science Financial Assistance Program	DE-SC0023198	81.049	95,395	-
Office of Science Financial Assistance Program	DE-SC0019406	81.049	120,374	90,003
Office of Science Financial Assistance Program	DE-SC0019211	81.049	136,754	-
Office of Science Financial Assistance Program	DE-SC0021965	81.049	142,766	-
Office of Science Financial Assistance Program	DE-FG02-08ER46482	81.049	149,618	-
Office of Science Financial Assistance Program	DE-SC0021298	81.049	192,402	-
Office of Science Financial Assistance Program	DE-FG02-98ER20311	81.049	194,362	-
Office of Science Financial Assistance Program	DE-SC0021012	81.049	205,455	-
Office of Science Financial Assistance Program	DE-SC0023134	81.049	218,097	126,952
Office of Science Financial Assistance Program	DE-SC0023284	81.049	229,079	89,585
Office of Science Financial Assistance Program	DE-SC0021953	81.049	247,854	-
Office of Science Financial Assistance Program	DE-FG02-05ER15646	81.049	265,661	-
Office of Science Financial Assistance Program	DE-SC0019521	81.049	393,690	-
Office of Science Financial Assistance Program	DE-SC0012654	81.049	522,647	-
Office of Science Financial Assistance Program	DE-FG02-07ER15909	81.049	659,639	-
Office of Science Financial Assistance Program	DE-SC0004168	81.049	980,178	-
Office of Science Financial Assistance Program	DE-SC0017660	81.049	1,631,630	-
			6,685,288	306,540
Renewable Energy Research and Development	DE-EE0009363	81.087	603,342	258,125
			603,342	258,125
Advanced Research Projects Agency - Energy	DE-AR0000871	81.135	20,903	43,989
			20,903	43,989
	Subtotal - Department of Energy - Direct		7,519,118	608,654

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Energy</u>				
Pass-through:				
National Renewable Energy Laboratory (NREL) - Department of Energy	SUB-2021-10390	81.RD	\$ 1,865	\$ -
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	7538128	81.RD	3,182	-
Jefferson Science Associates LLC - Department of Energy	JSA-23-Q418077 PO#23-P1077	81.RD	4,680	-
The Krell Institute - Department of Energy	Cushman	81.RD	5,588	-
Lawrence Livermore National Laboratory - Department of Energy	B648887	81.RD	12,784	-
Lawrence Livermore National Laboratory - Department of Energy	B654518	81.RD	13,048	-
Brookhaven National Laboratory/DOE - Department of Energy	389926	81.RD	15,529	-
Oak Ridge Institute for Science and Education (ORISE) - Department of Energy	ORISE Fellowship	81.RD	17,641	-
Brookhaven National Laboratory/DOE - Department of Energy	424803	81.RD	17,655	-
Pacific Northwest National Laboratory/DOE - Department of Energy	423571	81.RD	18,021	-
Sandia National Laboratories/DOE - Department of Energy	PO # 2449257 / 2011882 / 001SOW(05-17)	81.RD	22,905	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	7631842	81.RD	23,303	-
InventWood LLC - Department of Energy	DE-AR0001485-3	81.RD	24,594	-
Northwestern University - Department of Energy	60063984 YU	81.RD	30,478	-
Lawrence Livermore National Laboratory - Department of Energy	B655885	81.RD	37,361	-
Pacific Northwest National Laboratory/DOE - Department of Energy	423572	81.RD	46,731	-
Regents University of California, San Francisco - Department of Energy	7369232	81.RD	48,675	-
Lawrence Livermore National Laboratory - Department of Energy	B650854	81.RD	56,626	-
Fermi National Accelerator Laboratory/DOE - Department of Energy	683405	81.RD	61,847	-
Pacific Northwest National Laboratory/DOE - Department of Energy	655680	81.RD	69,152	-
Argonne National Laboratory - Department of Energy	2F-60081	81.RD	71,769	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	7648973	81.RD	73,093	-
Pacific Northwest National Laboratory/DOE - Department of Energy	659300	81.RD	86,480	-
Lawrence Livermore National Laboratory - Department of Energy	B652532	81.RD	99,996	-
REMADE Institute/SMIA - Department of Energy	SA-20-10	81.RD	111,501	-
Brookhaven National Laboratory/DOE - Department of Energy	420940	81.RD	117,542	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	7615037	81.RD	120,010	-
Northwestern University - Department of Energy	60057285 YALE	81.RD	124,165	-
Colorado School of Mines - Department of Energy	401385-5801	81.RD	126,501	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	7645391	81.RD	145,566	-
Fermi National Accelerator Laboratory/DOE - Department of Energy	653603	81.RD	156,729	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	7563699	81.RD	172,113	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	2021-0568	81.RD	192,752	-
Brookhaven National Laboratory/DOE - Department of Energy	324165	81.RD	250,089	-
Sandia National Laboratories/DOE - Department of Energy	2227089	81.RD	433,706	-
University of North Carolina - Department of Energy	5118795	81.RD	1,458,532	-
Brookhaven National Laboratory/DOE - Department of Energy	390027	81.RD	2,601,589	-
			6,873,798	-
Massachusetts Institute of Technology (MIT) - Office of Science Financial Assistance Program	S4685 - PO 238637	81.049	6,547	-
PD3 Technologies, Inc. - Office of Science Financial Assistance Program	DE-SC0021858	81.049	8,866	-
Cornell University - Office of Science Financial Assistance Program	85989-11162	81.049	17,835	-
Duke University - Office of Science Financial Assistance Program	323-000042	81.049	39,223	-
InnoSense, LLC - Office of Science Financial Assistance Program	DE-SC0022379	81.049	54,120	-
Regents of the University of California - Office of Science Financial Assistance Program	2022-1848	81.049	113,527	-
Research Foundation of CUNY - Office of Science Financial Assistance Program	CM00002281-00	81.049	132,928	-
University of Missouri-Columbia - Office of Science Financial Assistance Program	C00069556-1	81.049	138,284	-
Massachusetts Institute of Technology (MIT) - Office of Science Financial Assistance Program	S5862 PO#826438	81.049	200,442	-
			711,772	-

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**Yale University**  
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**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
<b>I. Research and Development Cluster</b>				
<u>Department of Energy</u>				
Pass-through: (Continued)				
Colorado State University - Renewable Energy Research and Development	G-64001-02	81.087	\$ (1,363)	\$ -
			(1,363)	-
SuperCool Metals - Advanced Research Projects Agency - Energy	0719ARPA-E-YALE	81.135	1,132	-
			1,132	-
Subtotal - Department of Energy - Pass Through			7,585,339	-
Subtotal - Department of Energy			15,104,457	608,654
<u>Department of Health &amp; Human Services</u>				
Direct:				
Department Of Health And Human Services	75N95020P00721/5821819/75N95020Q00334	93.RD	225	-
COVID-19 Department Of Health And Human Services	75D30120C09810	93.RD	9,520	-
Department Of Health And Human Services	75F40122P00413	93.RD	10,321	-
	Bender: IL-23 and IL-17A mRNA-targeted oligonucleotide therapeutics in autoimmune uveitis	93.RD	20,773	-
Department Of Health And Human Services	75N93022P00924	93.RD	25,000	-
Department Of Health And Human Services	R21NS112121	93.RD	40,143	-
Department Of Health And Human Services	75N92019F00074	93.RD	117,861	115,783
Department Of Health And Human Services	75N93022P01153	93.RD	165,966	-
COVID-19 Department Of Health And Human Services	75D30120C09570	93.RD	176,544	108,891
Department Of Health And Human Services	5R01CA226842-02	93.RD	274,486	-
COVID-19 Department Of Health And Human Services	2U19AI089992-10	93.RD	393,425	-
COVID-19 Department Of Health And Human Services	75A50120C000097-2	93.RD	441,752	-
COVID-19 Department Of Health And Human Services	75D30122C14697	93.RD	463,836	-
Department Of Health And Human Services	1R01GM137117	93.RD	471,520	-
Department Of Health And Human Services	75N92019D00036	93.RD	674,020	337,381
COVID-19 Department Of Health And Human Services	75F40120C00174	93.RD	908,942	-
Department Of Health And Human Services	75F40120C00174	93.RD	82,578	-
			4,276,912	562,055
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA046334/3R01DA046334-S1	93.077	95,170	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	1K01DA056494	93.077	129,205	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	1K01DA056424	93.077	132,533	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA054993-02	93.077	133,147	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5K01DA051882-03	93.077	167,883	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	1R01DA054993-01A1	93.077	249,036	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA046360	93.077	284,322	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA052566-02	93.077	284,949	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA049878	93.077	387,241	148,154
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5U54DA036151-10/3U54DA036151-09S1,S2,S3	93.077	4,701,529	376,794
			6,565,015	524,948
Prevention of Disease, Disability, and Death by Infectious Diseases	6 U01CK000572	93.084	65,183	-
Prevention of Disease, Disability, and Death by Infectious Diseases	1U01CK000572	93.084	128,799	48,477
			193,982	48,477
Food and Drug Administration_Research	5U01FD005938	93.103	2,045,538	209,855
Food and Drug Administration_Research	5U01FD005938	93.103	2,200,221	1,621,137
			4,245,759	1,830,992

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance		
		Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Environmental Health	R00ES026729-03	93.113	\$ 9,774	\$ -
Environmental Health	1F31ES033114	93.113	39,396	-
Environmental Health	1R03ES033381-01	93.113	96,096	-
Environmental Health	1R21ES031525	93.113	145,625	-
Environmental Health	5R21ES034164	93.113	241,835	-
Environmental Health	7R01ES033630	93.113	367,082	-
Environmental Health	2R01ES005775-26	93.113	435,637	-
Environmental Health	1R01ES030562	93.113	438,907	43,617
Environmental Health	R01ES026246	93.113	596,240	320,499
			2,370,592	364,116
Oral Diseases and Disorders Research	7R01DE028061	93.121	16,989	-
Oral Diseases and Disorders Research	7R01DE030656	93.121	19,626	-
Oral Diseases and Disorders Research	1F31DE030332-01	93.121	33,109	-
			69,724	-
Emergency Medical Services for Children	H34MC33245	93.127	426,541	210,428
			426,541	210,428
Centers for Research and Demonstration for Health Promotion and Disease Prevention	6 U48DP006380	93.135	155,553	42,750
Centers for Research and Demonstration for Health Promotion and Disease Prevention	1 U48DP006380	93.135	710,025	310,243
			865,578	352,993
NIEHS Superfund Hazardous Substances_Basic Research and Education	R01ES032712	93.143	185,452	109,286
NIEHS Superfund Hazardous Substances_Basic Research and Education	1P42ES033815	93.143	1,000,931	-
			1,186,383	109,286
Human Genome Research	5R01HG008383-02	93.172	-	(604)
Human Genome Research	R01HG012872	93.172	34,480	-
Human Genome Research	F30HG011193	93.172	42,589	-
Human Genome Research	7R01HG011066	93.172	48,223	-
Human Genome Research	1R01HG010171	93.172	237,293	-
Human Genome Research	4R00HG010669-03	93.172	251,628	-
Human Genome Research	1R01HG012735	93.172	292,996	-
Human Genome Research	1R01HG010749-01A1	93.172	488,895	81,884
Human Genome Research	R01HG011245-01	93.172	514,549	-
Human Genome Research	1U24HG012108	93.172	538,595	10,866
Human Genome Research	R01HG010898	93.172	843,570	129,452
Human Genome Research	1R01HG011868-01	93.172	976,542	408,977
			4,269,360	630,575
Research Related to Deafness and Communication Disorders	5R01DC008130	93.173	168	-
Research Related to Deafness and Communication Disorders	F31DC018708	93.173	4,306	-
Research Related to Deafness and Communication Disorders	1K99DC019397	93.173	20,158	-
Research Related to Deafness and Communication Disorders	7R01DC017439	93.173	61,109	-
Research Related to Deafness and Communication Disorders	1F32DC019302-01A1	93.173	68,560	-
Research Related to Deafness and Communication Disorders	1R21DC018098	93.173	69,092	13,588
Research Related to Deafness and Communication Disorders	1K01DC020145	93.173	70,831	-
Research Related to Deafness and Communication Disorders	1F32DC019250	93.173	71,076	-
Research Related to Deafness and Communication Disorders	1F32DC018445-01A1	93.173	76,279	-
Research Related to Deafness and Communication Disorders	F32DC019521	93.173	80,325	-
Research Related to Deafness and Communication Disorders	7R01DC002717	93.173	106,657	-
Research Related to Deafness and Communication Disorders	R01DC017025	93.173	145,248	-
Research Related to Deafness and Communication Disorders	1R01DC016851-01A1	93.173	170,501	-
Research Related to Deafness and Communication Disorders	7R01DC019687	93.173	177,536	-

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing			Subrecipient Expenditures
		Number	Expenditures	Expenditures	
I. Research and Development Cluster					
Department of Health & Human Services					
Direct: (Continued)					
Research Related to Deafness and Communication Disorders	1R01DC017989-01	93.173	\$ 237,718	\$	42,323
Research Related to Deafness and Communication Disorders	1R01DC018570-01	93.173	304,033		-
Research Related to Deafness and Communication Disorders	2R01DC011697-20	93.173	331,150		-
Research Related to Deafness and Communication Disorders	R01DC013791	93.173	331,177		-
Research Related to Deafness and Communication Disorders	2R01DC004729-22	93.173	347,471		-
Research Related to Deafness and Communication Disorders	2R01DC002174-33A1	93.173	374,431		-
Research Related to Deafness and Communication Disorders	2R01DC001919-29	93.173	486,935		-
Research Related to Deafness and Communication Disorders	1R01DC019057-01	93.173	512,551		-
Research Related to Deafness and Communication Disorders	R01DC016318	93.173	533,796		89,404
			4,581,108		145,315
Immunization Research, Demonstration, Public Information and Education_Training and Clinical Skills Improvement Projects	6 U01IP001110-03-01	93.185	283,054		-
			283,054		-
Research and Training in Complementary and Integrative Health	5R34AT010365	93.213	3,091		-
Research and Training in Complementary and Integrative Health	1R21AT012430	93.213	25,705		-
Research and Training in Complementary and Integrative Health	5R21AT010763-02/3R21AT010763	93.213	74,270		-
Research and Training in Complementary and Integrative Health	1R61AT010619-01	93.213	88,052		17,237
Research and Training in Complementary and Integrative Health	K08AT011570	93.213	111,218		-
Research and Training in Complementary and Integrative Health	5R34AT009887	93.213	134,299		-
Research and Training in Complementary and Integrative Health	R01AT012041	93.213	146,486		-
Research and Training in Complementary and Integrative Health	5K23AT011342-03	93.213	153,791		-
Research and Training in Complementary and Integrative Health	1R21AT011575-01	93.213	156,255		-
Research and Training in Complementary and Integrative Health	R01AT010014	93.213	447,064		-
Research and Training in Complementary and Integrative Health	4R33AT010619-02	93.213	454,937		-
Research and Training in Complementary and Integrative Health	5R01AT010508	93.213	631,149		-
Research and Training in Complementary and Integrative Health	R01AT011419	93.213	767,828		460,622
Research and Training in Complementary and Integrative Health	5UH3AT009767-06	93.213	895,334		735,636
Research and Training in Complementary and Integrative Health	5UH3AT009758-04	93.213	1,077,584		275,973
Research and Training in Complementary and Integrative Health	5U24AT009769-06/3U24AT009769-06S1	93.213	1,393,028		112,310
			6,560,091		1,601,778
COVID-19 Research on Healthcare Costs, Quality and Outcomes	1R01HS028612	93.226	184,090		-
COVID-19 Research on Healthcare Costs, Quality and Outcomes	R01HS028340	93.226	302,859		23,968
COVID-19 Research on Healthcare Costs, Quality and Outcomes	2T32HS017589	93.226	313,748		-
COVID-19 Research on Healthcare Costs, Quality and Outcomes	1U18HS029307	93.226	450,255		68,028
COVID-19 Research on Healthcare Costs, Quality and Outcomes	1R01HS027626	93.226	511,792		108,982
COVID-19 Research on Healthcare Costs, Quality and Outcomes	2U18HS016978-12	93.226	754,049		586,740
			2,516,793		787,718
National Center on Sleep Disorders Research	3U01HL150596-01S1	93.233	268		-
National Center on Sleep Disorders Research	1R01HL126770-01A1	93.233	28,771		-
National Center on Sleep Disorders Research	1R03HL157009-01	93.233	109,174		-
National Center on Sleep Disorders Research	1K23HL159259-01	93.233	165,887		-
National Center on Sleep Disorders Research	U01HL150596	93.233	1,252,062		-
			1,556,162		-



**Yale University**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>		<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster					
<u>Department of Health &amp; Human Services</u>					
Direct: (Continued)					
	Mental Health Research Grants	5R01MH109648-03	93.242	\$ -	\$ 17,403
	Mental Health Research Grants	5U01MH124639-02	93.242	1	-
	Mental Health Research Grants	5U01MH107803	93.242	1	-
	Mental Health Research Grants	5U01MH081902-08	93.242	77	-
	Mental Health Research Grants	1R01MH111652-05	93.242	410	-
	Mental Health Research Grants	1R61MH129559	93.242	915	-
	Mental Health Research Grants	3R01MH109413-04	93.242	1,403	-
	Mental Health Research Grants	1R21MH119552-01A1	93.242	1,412	-
	Mental Health Research Grants	1R03MH118609-01A1	93.242	3,469	-
	Mental Health Research Grants	1R21MH130927	93.242	6,046	-
	Mental Health Research Grants	5R01MH108590-05	93.242	10,945	-
	Mental Health Research Grants	R21MH113955	93.242	15,869	-
	Mental Health Research Grants	1R21MH122202-01	93.242	21,692	-
	Mental Health Research Grants	2R25MH071584	93.242	24,640	-
	Mental Health Research Grants	5R21MH115316	93.242	24,653	-
	Mental Health Research Grants	1F30MH132282	93.242	25,548	-
	Mental Health Research Grants	1F31MH131246	93.242	25,888	-
	Mental Health Research Grants	R25MH077823	93.242	26,788	-
	Mental Health Research Grants	F30MH129085	93.242	28,354	-
	Mental Health Research Grants	1F32MH123088-01A1	93.242	28,909	-
COVID-19	Mental Health Research Grants	RF1MH132356	93.242	30,755	735
	Mental Health Research Grants	1F31MH127891	93.242	31,694	-
	Mental Health Research Grants	5R01MH112189-05	93.242	34,264	-
	Mental Health Research Grants	1R21MH133245	93.242	37,022	-
	Mental Health Research Grants	5R01MH121848-03	93.242	39,386	-
	Mental Health Research Grants	F30MH123074	93.242	39,979	-
	Mental Health Research Grants	F30MH124271	93.242	41,377	-
	Mental Health Research Grants	1R01MH131551	93.242	42,096	-
	Mental Health Research Grants	4R00MH110570-04	93.242	42,338	-
	Mental Health Research Grants	1R01MH127158-01A1	93.242	47,171	-
	Mental Health Research Grants	1R61MH123028-01	93.242	52,798	-
	Mental Health Research Grants	1R01MH131768	93.242	54,116	-
	Mental Health Research Grants	1F32MH129052-01A1	93.242	57,525	-
	Mental Health Research Grants	1K99MH126098	93.242	62,319	-
	Mental Health Research Grants	1R03MH128847-01A1	93.242	65,895	-
	Mental Health Research Grants	1R01MH130538	93.242	66,928	-
	Mental Health Research Grants	2R01MH067528	93.242	68,314	-
	Mental Health Research Grants	F32MH124319-01A1	93.242	69,826	-
	Mental Health Research Grants	8K00MH133250	93.242	70,835	-
	Mental Health Research Grants	1R21MH122887	93.242	82,894	-
	Mental Health Research Grants	5U01MH124639	93.242	83,567	-
	Mental Health Research Grants	1K23MH128451-01A1	93.242	89,255	-
	Mental Health Research Grants	1RM1MH132648	93.242	90,797	-
	Mental Health Research Grants	5R01MH113852-05	93.242	99,367	-
	Mental Health Research Grants	1K99MH130894-01	93.242	111,726	-
	Mental Health Research Grants	1R34MH130260-01A1	93.242	119,032	-
	Mental Health Research Grants	2P30MH062294	93.242	119,295	-
	Mental Health Research Grants	1R21MH125199	93.242	130,367	38,382
	Mental Health Research Grants	1R21MH128114-01A1	93.242	141,926	22,644
	Mental Health Research Grants	5K23MH122777-02	93.242	143,604	-

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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing		Subrecipient Expenditures
		Number	Expenditures	
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Mental Health Research Grants	5R01MH114927	93.242	\$ 152,447	\$ -
Mental Health Research Grants	1R34MH131238-01	93.242	155,398	14,829
Mental Health Research Grants	1R01MH132386-01	93.242	155,950	112,124
Mental Health Research Grants	5R21MH120615-02/3R21MH120615-02S1	93.242	157,675	2,203
Mental Health Research Grants	K23MH118999	93.242	159,706	-
Mental Health Research Grants	5K24MH121571-04	93.242	166,595	-
Mental Health Research Grants	1R21MH123870-01A1	93.242	168,358	-
Mental Health Research Grants	K01MH122316	93.242	169,530	-
Mental Health Research Grants	1R01MH132137	93.242	171,697	-
Mental Health Research Grants	2R01MH099045	93.242	173,814	-
Mental Health Research Grants	1K01MH125142	93.242	185,162	46,872
Mental Health Research Grants	1R21MH125293-01A1	93.242	185,285	-
Mental Health Research Grants	1R21MH122940	93.242	188,752	-
Mental Health Research Grants	5K23MH123760-03	93.242	190,627	-
Mental Health Research Grants	1K23MH126366	93.242	190,730	-
Mental Health Research Grants	1R21MH128740-01A1	93.242	192,705	-
Mental Health Research Grants	1K08MH128665-01	93.242	193,488	-
Mental Health Research Grants	5K08MH117351-05	93.242	198,084	-
Mental Health Research Grants	5K08MH122733-03	93.242	203,627	-
Mental Health Research Grants	5K08MH116119-04	93.242	203,963	-
Mental Health Research Grants	7U01MH107803-03	93.242	204,166	-
Mental Health Research Grants	5R01MH107570-03	93.242	205,469	-
Mental Health Research Grants	K23MH121778-01	93.242	223,988	-
Mental Health Research Grants	5R25MH071584-14/3R25MH071584-14S1	93.242	228,234	-
Mental Health Research Grants	1R01MH124802	93.242	234,115	193,380
Mental Health Research Grants	1R21MH126072	93.242	235,822	-
Mental Health Research Grants	5K23MH115252-05	93.242	238,366	-
Mental Health Research Grants	R01MH115705	93.242	242,465	-
Mental Health Research Grants	1R01MH113557	93.242	245,138	-
Mental Health Research Grants	1RF1MH128614-01	93.242	246,099	296,208
Mental Health Research Grants	1R01MH129721-01A1	93.242	251,330	-
Mental Health Research Grants	5R01MH077681	93.242	254,710	-
Mental Health Research Grants	R25MH087217	93.242	255,736	19,307
Mental Health Research Grants	1R01MH119430-01	93.242	263,825	23,929
Mental Health Research Grants	1R01MH118453	93.242	279,096	-
COVID-19 Mental Health Research Grants	R01MH125737	93.242	283,803	107,026
Mental Health Research Grants	5T32MH019961-24	93.242	284,435	-
Mental Health Research Grants	5R01MH116002-04	93.242	305,289	-
Mental Health Research Grants	1R01MH127259-01A1	93.242	337,328	53,042
Mental Health Research Grants	R01MH077939	93.242	337,634	-
Mental Health Research Grants	5R01MH093897	93.242	341,421	-
Mental Health Research Grants	R56MH116941	93.242	345,204	-
Mental Health Research Grants	5R01MH119826	93.242	363,004	159,009
Mental Health Research Grants	5R01MH113230-03/3R01MH113230-03S1	93.242	370,903	-
Mental Health Research Grants	5T32MH014276	93.242	385,259	-
Mental Health Research Grants	1R01MH128190	93.242	388,563	-
Mental Health Research Grants	R01MH116527	93.242	406,110	241,104
Mental Health Research Grants	R01MH113257	93.242	425,166	-
Mental Health Research Grants	1R01MH121372-01	93.242	433,760	-
Mental Health Research Grants	1R01MH130609	93.242	436,012	-
Mental Health Research Grants	R01MH130825	93.242	436,112	-
Mental Health Research Grants	R01MH115939	93.242	441,126	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>		<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster					
<u>Department of Health &amp; Human Services</u>					
Direct: (Continued)					
	Mental Health Research Grants	RF1MH123978-01	93.242	\$ 449,706	\$ -
	Mental Health Research Grants	7R01MH118278	93.242	459,833	20,609
	Mental Health Research Grants	4R33MH123028-03	93.242	461,784	-
	Mental Health Research Grants	T32MH018268-36	93.242	483,021	-
	Mental Health Research Grants	RF1MH123245	93.242	492,013	-
COVID-19	Mental Health Research Grants	1RF1MH132337-01	93.242	505,325	-
	Mental Health Research Grants	1R01MH119164-01A1	93.242	509,984	61,494
	Mental Health Research Grants	2T32MH020031	93.242	517,929	-
	Mental Health Research Grants	1R01MH118245-02	93.242	544,513	353,842
	Mental Health Research Grants	1R01MH125008-01	93.242	547,995	-
	Mental Health Research Grants	1R01MH121991-01	93.242	563,066	-
	Mental Health Research Grants	1R01MH127147-01A1	93.242	583,631	-
	Mental Health Research Grants	R01MH125396	93.242	603,055	-
	Mental Health Research Grants	1R01MH118554	93.242	625,098	-
	Mental Health Research Grants	1R01MH120081-01	93.242	625,428	-
	Mental Health Research Grants	R01MH118344-01A1	93.242	636,240	86,433
	Mental Health Research Grants	R01MH125203-01	93.242	664,123	-
	Mental Health Research Grants	5R01MH116038-03	93.242	665,087	-
	Mental Health Research Grants	U01MH122678	93.242	682,998	-
	Mental Health Research Grants	5R01MH120089/3R01MH120089	93.242	685,891	-
	Mental Health Research Grants	1R56MH122449-01A1	93.242	701,172	63,358
	Mental Health Research Grants	5R01MH118332	93.242	738,190	77,374
	Mental Health Research Grants	1R01MH120080-01	93.242	752,823	131,053
	Mental Health Research Grants	1P50MH115716-02	93.242	753,362	-
	Mental Health Research Grants	1R01MH124892-01A1	93.242	773,037	-
	Mental Health Research Grants	1R01MH129301	93.242	778,088	277,647
	Mental Health Research Grants	4R33MH115113-03	93.242	801,665	-
	Mental Health Research Grants	R01MH121095	93.242	845,550	-
	Mental Health Research Grants	2U01MH107803-06	93.242	902,269	-
	Mental Health Research Grants	5R01MH118728	93.242	908,077	5,072
	Mental Health Research Grants	5R01MH125205/3R01MH125205	93.242	916,764	144,185
	Mental Health Research Grants	1R01MH124110	93.242	918,555	34,149
	Mental Health Research Grants	7R01MH117289-02	93.242	920,920	68,970
	Mental Health Research Grants	1R01MH125737-01A1	93.242	925,913	155,057
	Mental Health Research Grants	RF1MH128876	93.242	941,553	-
	Mental Health Research Grants	5R01MH116657-03	93.242	953,108	-
	Mental Health Research Grants	U01MH116488	93.242	960,009	-
	Mental Health Research Grants	R01MH118215	93.242	1,046,619	-
	Mental Health Research Grants	1R01MH123155	93.242	1,191,256	621,573
	Mental Health Research Grants	1U01MH124619-02	93.242	1,577,599	5,346
	Mental Health Research Grants	P30MH062294	93.242	1,868,563	185,517
	Mental Health Research Grants	5U01MH124639-02/3U01MH124639-02S1	93.242	1,968,257	2,066,723
	Mental Health Research Grants	5U01MH121766	93.242	2,677,762	1,400,460
	Mental Health Research Grants	UMH108206B	93.242	6,978,744	4,429,867
	Mental Health Research Grants	5U01MH124639-03	93.242	6,980,967	5,630,529
				65,994,311	17,167,455

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	5H79TI080966-03	93.243	\$ 375,121	\$ 37,720
			<u>375,121</u>	<u>37,720</u>
Alcohol Research Programs	R21AA028628	93.273	1,021	-
Alcohol Research Programs	5P50AA012870-20	93.273	1,177	-
Alcohol Research Programs	1K01AA024788	93.273	1,542	-
Alcohol Research Programs	1F31AA028992-01	93.273	2,153	-
Alcohol Research Programs	5U24AA022001-09	93.273	4,267	-
Alcohol Research Programs	1R03AA028361-01A1	93.273	11,238	-
Alcohol Research Programs	1K01AA028258	93.273	20,493	-
Alcohol Research Programs	1T35AA023760	93.273	21,384	-
Alcohol Research Programs	5R21AA024917-02	93.273	22,630	-
Alcohol Research Programs	1K99AA030601	93.273	27,951	-
Alcohol Research Programs	1R01AA030136	93.273	30,237	-
Alcohol Research Programs	5U01AA026224-04	93.273	32,011	39,846
Alcohol Research Programs	1R21AA030380-01	93.273	33,890	-
Alcohol Research Programs	2P50AA012870-21	93.273	33,961	32,470
Alcohol Research Programs	5U01AA020790-10	93.273	43,176	138,884
Alcohol Research Programs	5U24AA020794	93.273	43,231	-
Alcohol Research Programs	R21AA028432	93.273	79,388	21,357
Alcohol Research Programs	1F32AA029627-01	93.273	81,657	-
Alcohol Research Programs	5K02AA027300-04	93.273	97,940	-
Alcohol Research Programs	5P50AA012870	93.273	115,833	-
Alcohol Research Programs	5K99AA029454-02	93.273	120,759	-
Alcohol Research Programs	2R01AA013892	93.273	125,092	-
Alcohol Research Programs	5K23AA026890-04	93.273	127,445	-
Alcohol Research Programs	5K99AA029716-02	93.273	141,302	-
Alcohol Research Programs	5U01AA020795	93.273	145,109	43,675
Alcohol Research Programs	5K01AA025670	93.273	147,060	-
Alcohol Research Programs	1R21AA029206	93.273	147,239	-
Alcohol Research Programs	1K01AA029706-01A1	93.273	149,649	-
Alcohol Research Programs	R21AA029457	93.273	158,454	-
Alcohol Research Programs	5K23AA028515	93.273	158,606	-
Alcohol Research Programs	1K08AA029182-01A1	93.273	164,526	-
Alcohol Research Programs	5K01AA027832-03	93.273	167,304	-
Alcohol Research Programs	1R01AA029088	93.273	210,383	11,618
Alcohol Research Programs	1R21AA028886-01A1	93.273	232,698	-
Alcohol Research Programs	1R01AA025342-02	93.273	239,578	-
Alcohol Research Programs	1U01AA026962	93.273	250,367	-

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Alcohol Research Programs	1R01AA029611-01	93.273	\$ 274,820	\$ 169,800
Alcohol Research Programs	1R01AA028859	93.273	298,410	-
Alcohol Research Programs	1R01AA026364-01	93.273	320,509	141,985
Alcohol Research Programs	1R01AA030183-01	93.273	320,951	-
Alcohol Research Programs	T32AA028259	93.273	323,201	-
Alcohol Research Programs	R24AA022057	93.273	325,454	-
Alcohol Research Programs	5R01AA025605	93.273	341,357	-
Alcohol Research Programs	1R01AA029075	93.273	356,031	-
Alcohol Research Programs	1R01AG072893	93.273	368,301	-
Alcohol Research Programs	1R01AA027553-01	93.273	395,535	72,145
Alcohol Research Programs	5R01AA026514	93.273	425,345	-
Alcohol Research Programs	5R01AA029137-03	93.273	437,930	-
Alcohol Research Programs	1R01AA030170	93.273	462,981	-
Alcohol Research Programs	1R01AA029820	93.273	498,413	-
Alcohol Research Programs	5R01AA026844-03/3R01AA026844-03S1	93.273	797,935	-
Alcohol Research Programs	R01AA025954	93.273	849,605	147,241
Alcohol Research Programs	1R01AA029113	93.273	894,431	-
Alcohol Research Programs	1R01AA028765	93.273	905,962	-
Alcohol Research Programs	1P01AA029545	93.273	1,582,379	382,798
Alcohol Research Programs	5P50AA012870-22	93.273	1,661,466	195,199
Alcohol Research Programs	5U54AA027989/3U54AA027989	93.273	2,013,983	-
			17,245,750	1,397,018
Drug Abuse and Addiction Research Programs	5R01DA042691-03	93.279	94	-
Drug Abuse and Addiction Research Programs	1R36DA058877	93.279	2,443	-
Drug Abuse and Addiction Research Programs	UG1DA015831	93.279	5,631	5,631
Drug Abuse and Addiction Research Programs	1F30DA059437	93.279	5,655	-
Drug Abuse and Addiction Research Programs	7R01DA018928	93.279	16,085	-
Drug Abuse and Addiction Research Programs	1R21DA047621	93.279	21,423	-
Drug Abuse and Addiction Research Programs	1K99DA057487	93.279	22,140	-
Drug Abuse and Addiction Research Programs	1R01DA057789	93.279	34,747	-
Drug Abuse and Addiction Research Programs	F31DA054861-01	93.279	34,905	-
Drug Abuse and Addiction Research Programs	K01DA056854	93.279	36,604	-
Drug Abuse and Addiction Research Programs	R21DA057540	93.279	38,268	-
Drug Abuse and Addiction Research Programs	R03DA052179	93.279	41,201	11,591
Drug Abuse and Addiction Research Programs	5R21DA045743-02	93.279	41,478	-
Drug Abuse and Addiction Research Programs	F31DA054762	93.279	43,094	-
Drug Abuse and Addiction Research Programs	5R01DA040698-03	93.279	46,258	-
Drug Abuse and Addiction Research Programs	5R01DA041067	93.279	48,192	-
Drug Abuse and Addiction Research Programs	1R03DA054453-01A1	93.279	52,788	-
Drug Abuse and Addiction Research Programs	5P30DA018343	93.279	53,476	-
Drug Abuse and Addiction Research Programs	1F32DA055389-01A1	93.279	55,031	-
Drug Abuse and Addiction Research Programs	5R01DA037974-05	93.279	56,106	-
Drug Abuse and Addiction Research Programs	4R33DA041661-03	93.279	57,467	-
Drug Abuse and Addiction Research Programs	5R01DA029910	93.279	59,533	49,703
Drug Abuse and Addiction Research Programs	R21DA057592	93.279	69,570	-
Drug Abuse and Addiction Research Programs	5K01DA042998	93.279	71,685	-
Drug Abuse and Addiction Research Programs	5K12DA000167-30	93.279	72,448	27,951
Drug Abuse and Addiction Research Programs	1R21DA047902-01A1	93.279	74,040	34,814
Drug Abuse and Addiction Research Programs	5P30DA018343	93.279	74,642	44,119
Drug Abuse and Addiction Research Programs	1UG3DA050322-01	93.279	75,000	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing	Expenditures	Subrecipient Expenditures
		Number		
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Drug Abuse and Addiction Research Programs	5R01DA041271	93.279	\$ 78,025	\$ -
Drug Abuse and Addiction Research Programs	5R01DA038709-02	93.279	79,219	-
Drug Abuse and Addiction Research Programs	1R21DA049583	93.279	93,187	-
Drug Abuse and Addiction Research Programs	5R21DA043055-02	93.279	96,323	-
Drug Abuse and Addiction Research Programs	1K01DA047194	93.279	111,653	35,562
Drug Abuse and Addiction Research Programs	5R21DA046030-02	93.279	118,234	-
Drug Abuse and Addiction Research Programs	5R21DA050160-02/3R21DA050160-02S1&S2	93.279	124,438	-
Drug Abuse and Addiction Research Programs	5K01DA042937-05	93.279	132,294	-
Drug Abuse and Addiction Research Programs	2T32DA007238	93.279	155,145	-
Drug Abuse and Addiction Research Programs	5K08DA051667-03	93.279	160,881	-
Drug Abuse and Addiction Research Programs	1R61DA057675	93.279	164,793	-
Drug Abuse and Addiction Research Programs	5UG1DA050072	93.279	168,530	-
Drug Abuse and Addiction Research Programs	1K01DA045738	93.279	172,137	-
Drug Abuse and Addiction Research Programs	1R21DA054491-01	93.279	172,815	-
Drug Abuse and Addiction Research Programs	1R21DA052864-01A1	93.279	174,588	-
Drug Abuse and Addiction Research Programs	DP2DA056169	93.279	180,000	-
Drug Abuse and Addiction Research Programs	1R01DA057672	93.279	180,326	15,892
Drug Abuse and Addiction Research Programs	5K01DA046561-05	93.279	190,646	-
Drug Abuse and Addiction Research Programs	5R01DA041480	93.279	191,388	-
Drug Abuse and Addiction Research Programs	5K23DA052682	93.279	203,351	-
Drug Abuse and Addiction Research Programs	1R21DA052620-01A1	93.279	207,464	-
Drug Abuse and Addiction Research Programs	1K23DA045957	93.279	208,787	-
Drug Abuse and Addiction Research Programs	5R25DA043870	93.279	230,764	-
Drug Abuse and Addiction Research Programs	1R01DA052385	93.279	235,150	-
Drug Abuse and Addiction Research Programs	1R01DA043125	93.279	240,590	122,361
Drug Abuse and Addiction Research Programs	2R01DA043443	93.279	244,038	33,194
Drug Abuse and Addiction Research Programs	1R01DA057342	93.279	244,139	-
Drug Abuse and Addiction Research Programs	4UH3DA050322-02	93.279	255,186	-
Drug Abuse and Addiction Research Programs	5R01DA043337	93.279	265,403	56,649
Drug Abuse and Addiction Research Programs	1R01DA047063	93.279	278,182	123,909
Drug Abuse and Addiction Research Programs	5R01DA047094-03	93.279	284,257	70,096
Drug Abuse and Addiction Research Programs	1R01DA054851	93.279	286,367	118,988
Drug Abuse and Addiction Research Programs	RDA052790A	93.279	291,966	110,381
COVID-19 Drug Abuse and Addiction Research Programs	1R01DA053301-01A1	93.279	312,169	58,358
Drug Abuse and Addiction Research Programs	1R01DA047789	93.279	347,937	126,598
Drug Abuse and Addiction Research Programs	5U01DA041174	93.279	356,989	-
Drug Abuse and Addiction Research Programs	1R01DA052846-01	93.279	366,475	48,235
Drug Abuse and Addiction Research Programs	UG1DA050072	93.279	368,561	254,434
Drug Abuse and Addiction Research Programs	5U01DA045372	93.279	374,649	116,300
Drug Abuse and Addiction Research Programs	2T32DA019426-17	93.279	382,562	-
Drug Abuse and Addiction Research Programs	1R01DA054703	93.279	389,518	151,141
Drug Abuse and Addiction Research Programs	2R01DA033679	93.279	395,972	171,850
Drug Abuse and Addiction Research Programs	1R01DA050454-01A1	93.279	401,954	18,849

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance	Subrecipient	
		Listing Number	Expenditures	Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Drug Abuse and Addiction Research Programs	2K12DA000167-31	93.279	\$ 403,916	\$ -
Drug Abuse and Addiction Research Programs	1R01DA042911	93.279	405,922	-
Drug Abuse and Addiction Research Programs	1DP1DA056106-01	93.279	424,970	-
Drug Abuse and Addiction Research Programs	1R61DA053592-01A1	93.279	431,075	-
Drug Abuse and Addiction Research Programs	T32DA022975	93.279	436,317	-
Drug Abuse and Addiction Research Programs	2K12DA033312	93.279	451,726	16,926
Drug Abuse and Addiction Research Programs	5R37DA014241	93.279	490,748	-
Drug Abuse and Addiction Research Programs	5R01DA047820	93.279	528,360	107,010
Drug Abuse and Addiction Research Programs	R01DA046160	93.279	542,689	-
Drug Abuse and Addiction Research Programs	1R01DA047986-01A1	93.279	545,187	-
Drug Abuse and Addiction Research Programs	5R37DA023999	93.279	545,825	-
Drug Abuse and Addiction Research Programs	5U01DA051639	93.279	583,959	10,792
Drug Abuse and Addiction Research Programs	R01DA060636	93.279	605,782	24,117
Drug Abuse and Addiction Research Programs	1DP2DA049282-01	93.279	628,001	-
Drug Abuse and Addiction Research Programs	R01DA054314	93.279	655,815	-
Drug Abuse and Addiction Research Programs	5U01DA051977	93.279	706,762	326,252
Drug Abuse and Addiction Research Programs	4R33DA047527	93.279	709,599	170,910
Drug Abuse and Addiction Research Programs	4R33DA047037	93.279	709,647	-
Drug Abuse and Addiction Research Programs	1R01DA051871	93.279	716,058	115,770
Drug Abuse and Addiction Research Programs	1R01DA051906-01	93.279	848,662	-
Drug Abuse and Addiction Research Programs	R01DA045465	93.279	858,900	933
Drug Abuse and Addiction Research Programs	1R01DA052454-01A1	93.279	910,315	-
Drug Abuse and Addiction Research Programs	U01DA041174	93.279	1,228,171	37,724
Drug Abuse and Addiction Research Programs	4UH3DA047003	93.279	1,234,615	426,756
Drug Abuse and Addiction Research Programs	1U01DA053628-01	93.279	1,552,066	89,047
Drug Abuse and Addiction Research Programs	5UG1DA015831	93.279	1,564,236	755,161
Drug Abuse and Addiction Research Programs	4UH3DA050251-03	93.279	1,591,883	19,125
Drug Abuse and Addiction Research Programs	5P30DA018343-18	93.279	1,598,719	-
Drug Abuse and Addiction Research Programs	UG1DA050072	93.279	1,933,206	1,014,719
Drug Abuse and Addiction Research Programs	UM1DA051410	93.279	1,978,550	43,927
Drug Abuse and Addiction Research Programs	1RM1DA055310	93.279	2,180,630	611,300
Drug Abuse and Addiction Research Programs	1U01DA053039	93.279	2,938,247	1,342,130
Drug Abuse and Addiction Research Programs	UG1DA015831	93.279	9,574,785	7,862,445
			51,642,399	14,781,650
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R21EB032950	93.286	20,732	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R25EB030985-01A1	93.286	23,359	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB032791-01A1	93.286	26,515	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB023414	93.286	61,278	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB033764	93.286	74,893	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB023366-01A1	93.286	76,532	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R03EB031123	93.286	93,719	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB027872	93.286	100,923	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R21EB029607-01A1	93.286	125,225	-

The accompanying notes are an integral part of this schedule

**Yale University**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB022030	93.286	\$ 144,968	\$ -
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB026759	93.286	151,122	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R01EB031821	93.286	257,001	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB025840	93.286	297,530	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB028954	93.286	305,218	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R01EB025468	93.286	419,517	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R01EB031114	93.286	494,844	175,921
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB032658	93.286	629,511	96,706
Discovery and Applied Research for Technological Innovations to Improve Human Health	U01EB029811	93.286	1,393,658	889,162
			<u>4,696,545</u>	<u>1,161,789</u>
Minority Health and Health Disparities Research	R21MD013481	93.307	16,354	-
Minority Health and Health Disparities Research	1F31MD017129	93.307	27,763	-
Minority Health and Health Disparities Research	1R01MD016922-01	93.307	28,152	21,700
Minority Health and Health Disparities Research	1R21MD012697	93.307	80,520	8,645
Minority Health and Health Disparities Research	1R01MD016853	93.307	128,794	-
Minority Health and Health Disparities Research	U54MD010711	93.307	136,508	-
Minority Health and Health Disparities Research	5K01MD016166-03	93.307	142,544	-
Minority Health and Health Disparities Research	R21MD016949	93.307	171,508	39,455
Minority Health and Health Disparities Research	1R21MD017327	93.307	177,778	34,221
Minority Health and Health Disparities Research	1R01MD018255	93.307	248,258	-
Minority Health and Health Disparities Research	1R01MD017569	93.307	255,141	-
Minority Health and Health Disparities Research	1R01MD017526	93.307	300,687	83,012
Minority Health and Health Disparities Research	1R01MD016054-01A1	93.307	386,064	83,656
Minority Health and Health Disparities Research	1R01MD012769	93.307	416,253	250,610
Minority Health and Health Disparities Research	1R01MD017298-01	93.307	438,604	-
Minority Health and Health Disparities Research	1R01MD016386	93.307	533,238	192,012
Minority Health and Health Disparities Research	R01MD014853	93.307	735,007	401,822
			<u>4,223,173</u>	<u>1,115,133</u>
Trans-NIH Research Support	R03OD030609-01	93.310	18,315	-
Trans-NIH Research Support	1R03TR003402	93.310	76,268	-
Trans-NIH Research Support	7DP5OD024566	93.310	76,633	-
Trans-NIH Research Support	5U54HG012510	93.310	95,743	-
Trans-NIH Research Support	UG3NS115597	93.310	133,084	63,338
Trans-NIH Research Support	R03TR004173	93.310	156,338	-
Trans-NIH Research Support	DP2GM132930	93.310	207,357	-
Trans-NIH Research Support	7U54HG012510	93.310	242,455	-
Trans-NIH Research Support	1UG3HL147352	93.310	244,336	-
COVID-19 Trans-NIH Research Support	3U54MD010711-05S2	93.310	262,797	41,023
Trans-NIH Research Support	1DP2AI176740	93.310	267,139	-
Trans-NIH Research Support	1R03OD032623	93.310	272,023	-
Trans-NIH Research Support	1DP2CA280625-01	93.310	346,897	-
Trans-NIH Research Support	7U24LM013755	93.310	404,685	31,380
Trans-NIH Research Support	UH3NS115597	93.310	416,135	-
Trans-NIH Research Support	DP2CA238295	93.310	420,612	-
Trans-NIH Research Support	1UG3CA257393	93.310	471,786	-
COVID-19 Trans-NIH Research Support	3UG1DA050072	93.310	507,321	176,474
Trans-NIH Research Support	1DP2CA248136-01	93.310	548,609	-
Trans-NIH Research Support	R01AI145057	93.310	558,659	285,168
Trans-NIH Research Support	1U01CA260701	93.310	565,151	-

The accompanying notes are an integral part of this schedule



**Yale University**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>		<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster					
<u>Department of Health &amp; Human Services</u>					
Direct: (Continued)					
COVID-19	Trans-NIH Research Support	7DP5OD029636	93.310	\$ 580,771	\$ -
	Trans-NIH Research Support	3UG1DA050072-02S3	93.310	675,641	-
	Trans-NIH Research Support	3UG1DA050072-02S3	93.310	(73,533)	648,714
	Trans-NIH Research Support	7DP2AT011327-02	93.310	615,027	-
	Trans-NIH Research Support	1DP2GM146253-01	93.310	663,282	-
	Trans-NIH Research Support	1U01OD033241-01/3U01OD033241-01S1	93.310	905,243	108,806
	Trans-NIH Research Support	5UH3HL147352	93.310	921,388	-
	Trans-NIH Research Support	1U54AG079759	93.310	1,070,091	-
	Trans-NIH Research Support	U54AG076043	93.310	1,165,044	-
	Trans-NIH Research Support	5DP1DA050986-04	93.310	1,185,243	-
COVID-19	Trans-NIH Research Support	3U54MD010711-05S1	93.310	1,416,217	-
	Trans-NIH Research Support	3U54MD010711-05S1	93.310	(228,719)	530,173
Dietary Supplement Research Program		F30HD106694	93.321	15,188,038	1,885,076
				28,060	-
				28,060	-
National Center for Advancing Translational Sciences		5TL1TR001864	93.350	1	-
National Center for Advancing Translational Sciences		KL2TR001862	93.350	4,933	-
National Center for Advancing Translational Sciences		5KL2TR001862	93.350	88,265	-
National Center for Advancing Translational Sciences		7R21TR002639	93.350	95,874	38,750
National Center for Advancing Translational Sciences		TL1TR001864	93.350	797,436	-
National Center for Advancing Translational Sciences		5UL1TR001863	93.350	915,898	-
National Center for Advancing Translational Sciences		KL2TR001862	93.350	1,072,867	-
National Center for Advancing Translational Sciences		1U01TR002763	93.350	1,799,156	633,244
National Center for Advancing Translational Sciences		2UL1TR001863	93.350	10,186,126	-
				14,960,556	671,994
Research Infrastructure Programs		2R24OD016474-05	93.351	47,558	37,381
Research Infrastructure Programs		1S10OD032384	93.351	224,230	-
Research Infrastructure Programs		1S10OD026810	93.351	240,000	-
Research Infrastructure Programs		1S10OD032277	93.351	293,336	-
Research Infrastructure Programs		S10OD030370	93.351	366,335	-
Research Infrastructure Programs		1S10OD030493	93.351	540,000	-
Research Infrastructure Programs		1S10OD030363-01A1	93.351	1,198,132	-
				2,909,591	37,381
21st Century Cures Act - Beau Biden Cancer Moonshot		U01CA233096	93.353	942,568	-
21st Century Cures Act - Beau Biden Cancer Moonshot		U2CCA252979	93.353	1,999,682	1,043,579
				2,942,250	1,043,579
Nursing Research		1F31NR019934-01	93.361	7,759	-
Nursing Research		1R34NR019283	93.361	146,757	10,267
Nursing Research		1R01NR020748	93.361	201,577	35,102

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
<u>Direct: (Continued)</u>				
Covid-19	Nursing Research	1R01NR020855	93.361	\$ 204,071 \$ -
	Nursing Research	R01NR019009	93.361	518,255 473,767
	Nursing Research	1R01NR018335	93.361	576,117 23,611
				<u>1,654,536 542,747</u>
	Cancer Cause and Prevention Research	5R01CA206465-03 REV	93.393	- 1,705
	Cancer Cause and Prevention Research	R01CA201873	93.393	135 -
	Cancer Cause and Prevention Research	7R01CA157644-12	93.393	1,980 -
	Cancer Cause and Prevention Research	1R03CA270656	93.393	15,700 -
	Cancer Cause and Prevention Research	1R03CA245991	93.393	21,420 -
	Cancer Cause and Prevention Research	1R01CA218141	93.393	21,430 -
	Cancer Cause and Prevention Research	4R37CA230580	93.393	23,306 -
	Cancer Cause and Prevention Research	K07CA230234	93.393	26,817 -
	Cancer Cause and Prevention Research	1R01CA215990	93.393	33,015 -
	Cancer Cause and Prevention Research	R03CA252808	93.393	36,341 -
	Cancer Cause and Prevention Research	1R21CA238100	93.393	59,309 -
	Cancer Cause and Prevention Research	1R01CA215453	93.393	60,310 -
	Cancer Cause and Prevention Research	1R21CA267900	93.393	62,706 -
	Cancer Cause and Prevention Research	2R01CA215553	93.393	72,720 -
	Cancer Cause and Prevention Research	R21CA238066	93.393	82,212 -
	Cancer Cause and Prevention Research	K00CA245722	93.393	95,989 -
	Cancer Cause and Prevention Research	R01CA276666	93.393	107,805 -
	Cancer Cause and Prevention Research	5R01CA213138	93.393	165,420 -
	Cancer Cause and Prevention Research	1R01CA206483	93.393	169,486 10,923
	Cancer Cause and Prevention Research	1R21CA252916-01A1	93.393	172,477 -
	Cancer Cause and Prevention Research	R37CA230580-03	93.393	204,368 -
	Cancer Cause and Prevention Research	1R01CA238570	93.393	258,678 -
	Cancer Cause and Prevention Research	5R01CA214703	93.393	261,471 -
	Cancer Cause and Prevention Research	1R01CA262286-01A1	93.393	284,200 -
	Cancer Cause and Prevention Research	1R01CA270788-01	93.393	362,472 -
	Cancer Cause and Prevention Research	2R01CA204120	93.393	404,646 -
	Cancer Cause and Prevention Research	1R01CA245313	93.393	497,181 -
	Cancer Cause and Prevention Research	R01CA224140	93.393	514,532 47,412
	Cancer Cause and Prevention Research	5R01CA244660	93.393	583,476 352,413
	Cancer Cause and Prevention Research	R01CA258269	93.393	607,402 231,610
	Cancer Cause and Prevention Research	1R01CA222518	93.393	678,011 -
	Cancer Cause and Prevention Research	1R01CA266604	93.393	685,463 -
	Cancer Cause and Prevention Research	R01CA24391	93.393	777,569 571,231
				<u>7,348,047 1,215,294</u>
	Cancer Detection and Diagnosis Research	1R01CA206180	93.394	6,464 3,500
	Cancer Detection and Diagnosis Research	R21CA252587	93.394	17,495 -
	Cancer Detection and Diagnosis Research	1R21CA274152	93.394	21,220 -
	Cancer Detection and Diagnosis Research	1R03CA267438	93.394	33,589 -
	Cancer Detection and Diagnosis Research	1R01CA269349-01A1	93.394	48,545 -
	Cancer Detection and Diagnosis Research	1R01CA219647-01	93.394	54,486 -
	Cancer Detection and Diagnosis Research	1R01CA280871	93.394	96,011 -
	Cancer Detection and Diagnosis Research	1R21CA259964	93.394	173,637 -

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
<u>Direct: (Continued)</u>				
COVID-19 Cancer Detection and Diagnosis Research	U01CA260507	93.394	\$ 244,030	\$ -
Cancer Detection and Diagnosis Research	U01CA260507	93.394	(9,275)	-
Cancer Detection and Diagnosis Research	R21CA256380	93.394	253,826	-
Cancer Detection and Diagnosis Research	1R33CA246711-01	93.394	261,904	-
Cancer Detection and Diagnosis Research	R01CA255226	93.394	287,527	-
Cancer Detection and Diagnosis Research	2R01CA206180-06A1	93.394	325,305	-
Cancer Detection and Diagnosis Research	R37CA245154	93.394	397,098	-
Cancer Detection and Diagnosis Research	R01CA264851	93.394	469,577	-
COVID-19 Cancer Detection and Diagnosis Research	U01CA260507	93.394	550,699	-
Cancer Detection and Diagnosis Research	U01CA233364	93.394	640,366	132,648
Cancer Detection and Diagnosis Research	1U01CA271278	93.394	946,069	269,604
			4,818,573	405,752
Cancer Treatment Research	1R01CA207753	93.395	-	31,164
Cancer Treatment Research	R21CA240660	93.395	2,793	-
Cancer Treatment Research	1R21CA278934	93.395	5,419	-
Cancer Treatment Research	R01CA269286	93.395	26,876	-
Cancer Treatment Research	5R35CA197589-04	93.395	34,703	-
Cancer Treatment Research	1R01CA216846	93.395	80,225	-
Cancer Treatment Research	R21CA275978	93.395	95,034	-
Cancer Treatment Research	R01CA218501	93.395	148,270	-
Cancer Treatment Research	1R21CA263437-01	93.395	175,542	-
Cancer Treatment Research	4UM1CA186689	93.395	207,504	-
Cancer Treatment Research	1R01CA224023-01	93.395	247,309	-
Cancer Treatment Research	1R01CA266757	93.395	290,374	-
Cancer Treatment Research	R01CA258867	93.395	314,463	-
Cancer Treatment Research	1R01CA215553	93.395	435,832	212,107
Cancer Treatment Research	P50CA121974	93.395	562,799	5,453
Cancer Treatment Research	R01CA256530-01A1	93.395	568,021	73,295
Cancer Treatment Research	2R35CA197589-8	93.395	758,273	-
Cancer Treatment Research	1UG1CA233337	93.395	781,901	-
Cancer Treatment Research	1R35CA197574	93.395	1,006,747	-
Cancer Treatment Research	P50CA121974	93.395	1,775,095	13,090
Cancer Treatment Research	2UM1CA186689	93.395	2,715,017	1,577,347
			10,232,197	1,912,456
Cancer Biology Research	R21CA246118	93.396	14,808	-
Cancer Biology Research	1R01CA204002-01A1	93.396	47,687	-
Cancer Biology Research	R00CA226342	93.396	53,264	25,172
Cancer Biology Research	7R01CA203011	93.396	56,481	-
Cancer Biology Research	1R01CA214704-02	93.396	64,906	-
Cancer Biology Research	1R03CA259881-01	93.396	81,943	-
Cancer Biology Research	1R01CA212376	93.396	82,553	-
Cancer Biology Research	1R50CA265359-01A1	93.396	94,212	-
Cancer Biology Research	1U01CA235747	93.396	135,649	-
Cancer Biology Research	R01CA237586	93.396	261,276	-
Cancer Biology Research	1R01CA269779	93.396	288,969	12,155

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Cancer Biology Research	1R01CA230444-01	93.396	\$ 344,893	\$ 6,807
Cancer Biology Research	R01CA166376	93.396	350,696	-
Cancer Biology Research	R01CA274735	93.396	359,923	-
Cancer Biology Research	1R01CA262377-01	93.396	377,609	-
Cancer Biology Research	1R01CA274355-01	93.396	406,627	15,647
Cancer Biology Research	2R01CA157644	93.396	419,150	-
Cancer Biology Research	1R01CA248532-01A1	93.396	419,771	-
Cancer Biology Research	1R37CA258261-01A1	93.396	421,876	-
Cancer Biology Research	R33CA251037-01	93.396	439,700	-
Cancer Biology Research	1R01CA227473	93.396	533,339	139,115
Cancer Biology Research	1R01CA230275-01A1	93.396	537,201	214,480
Cancer Biology Research	R01CA240602	93.396	539,284	20,216
Cancer Biology Research	1U01CA235747	93.396	561,792	-
Cancer Biology Research	R01CA259386	93.396	568,566	-
Cancer Biology Research	1R01CA248166	93.396	573,232	156,726
Cancer Biology Research	R01CA231112	93.396	588,239	-
Cancer Biology Research	5R01CA263715-03	93.396	596,007	218,710
Cancer Biology Research	1U01CA238728	93.396	638,440	125,387
Cancer Biology Research	2R01CA198164	93.396	653,063	-
Cancer Biology Research	R35CA242462	93.396	896,090	-
Cancer Biology Research	2R35CA197628-07	93.396	1,031,653	-
			12,438,899	934,415
Cancer Centers Support Grants	1U54CA209992-01	93.397	40,887	-
Cancer Centers Support Grants	2P50CA196530	93.397	128,087	-
Cancer Centers Support Grants	1P50DE030707	93.397	257,023	239,928
Cancer Centers Support Grants	5P30CA016359	93.397	379,043	43,017
Cancer Centers Support Grants	5P50CA196530	93.397	1,740,373	-
Cancer Centers Support Grants	5P50DE030707	93.397	2,130,464	514,216
Cancer Centers Support Grants	5P30CA016359	93.397	4,157,312	-
			8,833,189	797,161
Cancer Research Manpower	1F31CA243295-01	93.398	409	-
Cancer Research Manpower	1F31CA275096	93.398	10,104	-
Cancer Research Manpower	1F31CA268845-01	93.398	23,035	-
Cancer Research Manpower	F31CA257288	93.398	26,537	-
Cancer Research Manpower	F31CA260794	93.398	30,035	-
Cancer Research Manpower	1F31CA254426	93.398	30,442	-
Cancer Research Manpower	F30CA254246	93.398	30,651	-
Cancer Research Manpower	1K99CA277586	93.398	30,679	-
Cancer Research Manpower	F30CA254158	93.398	30,777	-
Cancer Research Manpower	1F99CA264425	93.398	30,953	-
Cancer Research Manpower	1F31CA261129-01	93.398	31,204	-
Cancer Research Manpower	F31CA265173-01	93.398	31,237	-
Cancer Research Manpower	1F31CA268894	93.398	32,449	-
Cancer Research Manpower	F31CA265150	93.398	32,517	-
Cancer Research Manpower	F30CA254123	93.398	33,853	-
Cancer Research Manpower	1 F31 CA261126-01	93.398	35,669	-
Cancer Research Manpower	1F31CA254339-01	93.398	36,747	-
Cancer Research Manpower	F30CA250249	93.398	43,130	-
Cancer Research Manpower	5K99CA256350-02	93.398	52,646	-
Cancer Research Manpower	F32CA265041	93.398	78,124	-
Cancer Research Manpower	1K08CA204732	93.398	116,821	-

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Cancer Research Manpower	K08CA245211	93.398	\$ 119,543	\$ -
Cancer Research Manpower	K08CA237856	93.398	122,933	-
Cancer Research Manpower	1K08CA237872	93.398	178,790	-
Cancer Research Manpower	1K22CA244865-01	93.398	179,457	-
Cancer Research Manpower	T32CA250803	93.398	205,408	-
Cancer Research Manpower	K08CA258796	93.398	206,466	-
Cancer Research Manpower	K08CA259222	93.398	213,745	-
Cancer Research Manpower	1K08CA255465	93.398	228,754	-
Cancer Research Manpower	1K08CA248725	93.398	262,068	-
Cancer Research Manpower	K08CA245112	93.398	273,321	-
Cancer Research Manpower	T32CA233414	93.398	292,714	-
Cancer Research Manpower	2R25CA203650	93.398	332,312	99,520
Cancer Research Manpower	T32CA193200	93.398	392,573	-
Cancer Research Manpower	K12CA215110	93.398	503,770	-
			<u>4,279,873</u>	<u>99,520</u>
ACL National Institute on Disability, Independent Living, and Rehabilitation Research	90AREM0002	93.433	265	-
ACL National Institute on Disability, Independent Living, and Rehabilitation Research	90AREM0002-03-00	93.433	15,139	-
ACL National Institute on Disability, Independent Living, and Rehabilitation Research	90AREM0002-04-01	93.433	97,869	-
			<u>113,273</u>	<u>-</u>
Cardiovascular Diseases Research	2T35HL007649	93.837	150	-
Cardiovascular Diseases Research	5K99HL150234-02	93.837	785	-
Cardiovascular Diseases Research	1R01HL138567-01	93.837	956	-
Cardiovascular Diseases Research	1K08HL143133	93.837	1,654	-
Cardiovascular Diseases Research	1F31HL149289-01	93.837	4,306	-
Cardiovascular Diseases Research	5R01HL123949	93.837	5,099	-
Cardiovascular Diseases Research	F31HL167578	93.837	18,091	-
Cardiovascular Diseases Research	1R13HL164037-01	93.837	20,000	-
Cardiovascular Diseases Research	1K99HL157552	93.837	22,394	-
Cardiovascular Diseases Research	1R01HL168473	93.837	22,402	-
Cardiovascular Diseases Research	1F31HL162505	93.837	23,490	-
Cardiovascular Diseases Research	F31HL158091-01	93.837	28,783	-
Cardiovascular Diseases Research	1F31HL149246-01	93.837	30,981	-
Cardiovascular Diseases Research	F31HL156319	93.837	30,997	-
Cardiovascular Diseases Research	F30HL156469	93.837	31,536	-
Cardiovascular Diseases Research	F30HL158154	93.837	31,798	-
Cardiovascular Diseases Research	F31HL165968	93.837	42,359	-
Cardiovascular Diseases Research	R01HL148819	93.837	58,169	8,990
Cardiovascular Diseases Research	1R21HL161691	93.837	60,243	-
Cardiovascular Diseases Research	1R01HL137365-01A1	93.837	75,229	43,086
Cardiovascular Diseases Research	7R01HL145293	93.837	89,166	-
Cardiovascular Diseases Research	1K23HL161424-01A1	93.837	130,405	-
Cardiovascular Diseases Research	K08HL155888	93.837	143,473	-
Cardiovascular Diseases Research	1K08HL157727-01A1	93.837	150,585	-
Cardiovascular Diseases Research	1R01HL142090-01	93.837	157,922	-

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Cardiovascular Diseases Research	1R21HL165147-01	93.837	\$ 172,917	\$ -
Cardiovascular Diseases Research	1K08HL136898	93.837	175,282	-
Cardiovascular Diseases Research	K01HL145347	93.837	175,607	-
Cardiovascular Diseases Research	K23HL153775-01A1	93.837	185,569	-
Cardiovascular Diseases Research	1R21HL165342	93.837	185,762	-
Cardiovascular Diseases Research	1R01HL136590	93.837	213,442	128,620
Cardiovascular Diseases Research	R01HL138357	93.837	225,179	16,444
Cardiovascular Diseases Research	1R01HL142818-01	93.837	265,446	-
Cardiovascular Diseases Research	R01HL115148	93.837	284,868	-
Cardiovascular Diseases Research	1R01HL146101	93.837	290,965	-
Cardiovascular Diseases Research	1R56HL161652-01A1	93.837	298,640	-
Cardiovascular Diseases Research	R01HL144706	93.837	303,447	-
Cardiovascular Diseases Research	1R01HL164783-01	93.837	320,228	-
Cardiovascular Diseases Research	1R01HL163640-01A1	93.837	333,141	-
Cardiovascular Diseases Research	1R01HL139629-01	93.837	345,233	-
Cardiovascular Diseases Research	R01HL121226	93.837	345,545	92,930
Cardiovascular Diseases Research	1R01HL162580	93.837	354,955	-
Cardiovascular Diseases Research	T32HL007950-21	93.837	355,796	-
Cardiovascular Diseases Research	1R01HL141852	93.837	358,133	-
Cardiovascular Diseases Research	1R01HL162792	93.837	366,342	-
Cardiovascular Diseases Research	2R01HL124402	93.837	370,274	-
Cardiovascular Diseases Research	1R01HL155105	93.837	372,740	-
Cardiovascular Diseases Research	T32HL098069-11A1	93.837	376,257	-
Cardiovascular Diseases Research	2U01HL098162	93.837	381,764	41,799
Cardiovascular Diseases Research	R01HL150449	93.837	384,975	-
Cardiovascular Diseases Research	R01HL155411-01A1	93.837	392,036	-
Cardiovascular Diseases Research	R01HL149344-01A1	93.837	422,684	-
Cardiovascular Diseases Research	1R01HL146723	93.837	480,189	-
Cardiovascular Diseases Research	1R01HL141137	93.837	499,735	-
Cardiovascular Diseases Research	1U01HL142518	93.837	509,089	244,663
Cardiovascular Diseases Research	R01HL155543	93.837	513,583	-
Cardiovascular Diseases Research	R01HL148008	93.837	526,508	-
Cardiovascular Diseases Research	R01HL151222-01A1	93.837	528,980	-
Cardiovascular Diseases Research	2R01HL131952	93.837	534,302	-
Cardiovascular Diseases Research	1R01HL161746-01A1	93.837	535,422	-
Cardiovascular Diseases Research	1R01HL157019-01	93.837	535,793	-
Cardiovascular Diseases Research	R01HL157111	93.837	555,408	-
Cardiovascular Diseases Research	R01HL158876	93.837	555,441	-
Cardiovascular Diseases Research	1R01HL160822	93.837	590,787	97,487
Cardiovascular Diseases Research	R01HL142765-01A1	93.837	604,583	11,866
Cardiovascular Diseases Research	R01HL150352	93.837	623,827	-
Cardiovascular Diseases Research	R01HL144476	93.837	646,335	-
Cardiovascular Diseases Research	1R35HL145249-02	93.837	655,072	-
Cardiovascular Diseases Research	1R01HL137696	93.837	674,635	241,542
Cardiovascular Diseases Research	R01HL154345	93.837	698,054	-
Cardiovascular Diseases Research	1R01HL149746-01A1	93.837	700,457	-

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Cardiovascular Diseases Research	R01HL152548-01	93.837	\$ 703,708	\$ 7,022
Cardiovascular Diseases Research	2R01HL125811-05A1	93.837	706,135	-
Cardiovascular Diseases Research	DP2HL151354-01	93.837	731,550	-
Cardiovascular Diseases Research	1R01HL149343-01	93.837	758,148	-
Cardiovascular Diseases Research	1R01HL148354	93.837	803,790	89,116
Cardiovascular Diseases Research	R35HL135820	93.837	841,176	-
Cardiovascular Diseases Research	2R01HL135582-05	93.837	845,889	-
Cardiovascular Diseases Research	1R35HL135767	93.837	948,008	-
Cardiovascular Diseases Research	5U01HL125511-04	93.837	1,096,766	716,638
Cardiovascular Diseases Research	R35HL155988	93.837	1,124,446	-
Cardiovascular Diseases Research	R01HL152197	93.837	1,130,978	-
Cardiovascular Diseases Research	2P01HL107205-06A1	93.837	1,666,394	-
			31,763,388	1,740,203
Lung Diseases Research	1R03HL154276	93.838	(1,806)	-
Lung Diseases Research	1K23HL138229-01A1	93.838	2,265	-
Lung Diseases Research	1R01HL163177-01A1	93.838	6,548	-
Lung Diseases Research	1F31HL158119-01A1	93.838	26,635	-
Lung Diseases Research	1R01HL162629	93.838	29,518	-
Lung Diseases Research	F30HL162459	93.838	33,117	-
Lung Diseases Research	1R03HL154275-01	93.838	38,141	-
Lung Diseases Research	F30HL149151	93.838	49,551	-
Lung Diseases Research	1K99HL151806	93.838	111,870	-
Lung Diseases Research	R01HL145152	93.838	130,561	-
Lung Diseases Research	1K08HL159422-01A1	93.838	131,606	-
Lung Diseases Research	1K08HL151970-01	93.838	141,578	-
Lung Diseases Research	1K99HL159261-01A1	93.838	163,477	-
Lung Diseases Research	1R21HL161556-01	93.838	170,121	71,842
Lung Diseases Research	1R21HL161723-01	93.838	172,637	-
Lung Diseases Research	2T35HL007649	93.838	213,477	-
Lung Diseases Research	U01HL145567	93.838	279,896	37,693
Lung Diseases Research	1R01HL163984-01	93.838	448,054	31,880
Lung Diseases Research	1R01HL152677-01	93.838	479,881	-
Lung Diseases Research	2R01HL127349-05	93.838	526,762	-
Lung Diseases Research	1R01HL145660	93.838	599,078	236,693
Lung Diseases Research	1R01HL153604	93.838	661,752	31,015
Lung Diseases Research	2T32HL007778-26	93.838	702,891	-
Lung Diseases Research	1R01HL157776-01A1	93.838	755,758	-
Lung Diseases Research	1R01HL155948	93.838	813,300	-
Lung Diseases Research	R01HL159459-01	93.838	829,724	218,905
Lung Diseases Research	R35HL135805	93.838	907,402	-
Lung Diseases Research	R35HL150766-01	93.838	994,101	-
			9,417,895	628,028
Blood Diseases and Resources Research	1R01HL133406	93.839	180	-
Blood Diseases and Resources Research	1F31HL167628	93.839	21,732	-
Blood Diseases and Resources Research	1R21HL150642-01A1	93.839	43,799	-
Blood Diseases and Resources Research	1R21HL165306-01	93.839	45,530	-
Blood Diseases and Resources Research	1R34HL159119-01A1	93.839	103,353	40,068
Blood Diseases and Resources Research	K01HL145580	93.839	177,535	-
Blood Diseases and Resources Research	U01HL128566	93.839	277,854	-

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		Number		
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Blood Diseases and Resources Research	1R01HL139756	93.839	\$ 337,206	\$ -
Blood Diseases and Resources Research	1R01HL132951	93.839	349,301	-
Blood Diseases and Resources Research	R01HL122815-05A1	93.839	459,465	-
Blood Diseases and Resources Research	2T32HL007974-21	93.839	467,757	-
Blood Diseases and Resources Research	1R01HL150515-01	93.839	578,905	-
			2,862,617	40,068
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	F31HL156805-01	93.840	1,750	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	1F30HL164061	93.840	24,707	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	1R01HL163092-01A1	93.840	47,023	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	R21HL150459	93.840	78,926	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	T32HL155000	93.840	407,510	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	1R01HL143785	93.840	468,840	262,592
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	1K12HL138037	93.840	558,257	32,954
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	5R01HL151603	93.840	878,519	352,240
			2,465,532	647,786
Arthritis, Musculoskeletal and Skin Diseases Research	1F31AR073094	93.846	853	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR070851	93.846	5,966	-
Arthritis, Musculoskeletal and Skin Diseases Research	1K08AR081408	93.846	13,732	-
Arthritis, Musculoskeletal and Skin Diseases Research	R21AR074571	93.846	23,992	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR070811-05	93.846	25,797	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R13AR081668-01	93.846	30,000	-
Arthritis, Musculoskeletal and Skin Diseases Research	1F31AR079928	93.846	30,022	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R21AR078538	93.846	46,156	-
Arthritis, Musculoskeletal and Skin Diseases Research	1F32AR079892	93.846	71,009	-
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR072668-02	93.846	71,239	-
Arthritis, Musculoskeletal and Skin Diseases Research	2R01AR063663-06A1	93.846	102,149	-
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR074545	93.846	135,136	-
Arthritis, Musculoskeletal and Skin Diseases Research	R21AR079591-01	93.846	135,680	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR068994	93.846	153,428	-
Arthritis, Musculoskeletal and Skin Diseases Research	1K08AR080777	93.846	170,394	-
Arthritis, Musculoskeletal and Skin Diseases Research	1K08AR077689-01A1	93.846	194,410	-
Arthritis, Musculoskeletal and Skin Diseases Research	R21AR081661	93.846	196,185	-
Arthritis, Musculoskeletal and Skin Diseases Research	7R01AR068353	93.846	235,578	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR078334-01	93.846	277,347	-
Arthritis, Musculoskeletal and Skin Diseases Research	T32AR007107	93.846	303,169	-
Arthritis, Musculoskeletal and Skin Diseases Research	2T32AR007016-48	93.846	350,691	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR073270-01	93.846	357,412	69,052
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR075412	93.846	392,948	17,786
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR079428	93.846	396,236	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR073607	93.846	398,074	-
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR071491	93.846	475,145	-
Arthritis, Musculoskeletal and Skin Diseases Research	2R01AR063663-11	93.846	476,380	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR076420-01A1	93.846	479,507	-
Arthritis, Musculoskeletal and Skin Diseases Research	R37AR040072	93.846	547,538	-
Arthritis, Musculoskeletal and Skin Diseases Research	2R01AR068392	93.846	564,839	-



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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR080152	93.846	\$ 571,875	\$ -
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR080416	93.846	608,131	-
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR062111	93.846	627,402	-
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR078715	93.846	650,844	137,180
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR076938-03	93.846	705,730	121,400
Arthritis, Musculoskeletal and Skin Diseases Research	2R01AR072668-06	93.846	733,235	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR079232	93.846	748,199	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR080104	93.846	759,753	-
			12,066,181	345,418
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK114504	93.847	-	2,395
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK111038-03	93.847	189	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R03DK124743	93.847	1,761	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R03DK135445	93.847	2,105	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK114031-01	93.847	3,068	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R03DK134791	93.847	3,895	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R56DK121511	93.847	5,018	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK135587	93.847	13,574	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	F31DK132941	93.847	13,862	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK134329	93.847	14,265	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK135689	93.847	17,384	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK115894-01A1	93.847	21,348	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F32MH118700	93.847	26,361	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK135650	93.847	28,547	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F30DK131846	93.847	28,573	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F31DK130556	93.847	29,052	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F31DK129022-01A1	93.847	29,329	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F31DK126362	93.847	30,162	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R03DK134793	93.847	33,281	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK123227	93.847	39,347	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK112797	93.847	41,447	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK119386-01	93.847	59,475	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R56DK132266-01A1	93.847	61,830	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK121326	93.847	65,286	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K01DK132514	93.847	75,712	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K01DK129441	93.847	87,589	8,151
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK134549	93.847	99,385	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2T32DK007017-46	93.847	102,157	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK132563	93.847	111,836	-

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I. Research and Development Cluster					
<u>Department of Health &amp; Human Services</u>					
Direct: (Continued)					
COVID-19	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK131127-01A1	93.847	\$ 112,604	\$ -
	Diabetes, Digestive, and Kidney Diseases Extramural Research	K08DK133496	93.847	116,097	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R25DK121566	93.847	118,164	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R56DK129344	93.847	132,939	14,104
	Diabetes, Digestive, and Kidney Diseases Extramural Research	5K08DK113109-04	93.847	134,464	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK113135	93.847	137,411	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK134977-01	93.847	137,534	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R21DK128680-01	93.847	142,468	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK093629	93.847	143,191	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK135052-01	93.847	147,002	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	5K01DK120783-04	93.847	148,945	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1K08DK128585	93.847	154,099	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	U01DK133768	93.847	156,443	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	K23DK128560	93.847	156,780	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	K01DK118005	93.847	162,559	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	K01DK124441	93.847	175,049	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK129836-01	93.847	175,418	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	5K23DK115893	93.847	176,468	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	7K08DK124686	93.847	186,310	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK117650	93.847	191,081	5,192
	Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK129616	93.847	196,848	88,167
	Diabetes, Digestive, and Kidney Diseases Extramural Research	5K08DK119642	93.847	197,398	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	R21DK128662	93.847	197,456	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	K23DK117065	93.847	199,187	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R21DK130299	93.847	207,206	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK127154-01A1	93.847	214,660	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK124788-01A1	93.847	231,360	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	T35DK104689	93.847	233,337	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	R00DK129712	93.847	248,666	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK130362-01	93.847	254,211	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK093771	93.847	267,696	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	2T32DK007356	93.847	271,069	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	R00DK120869	93.847	277,780	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	2P30DK045735	93.847	294,621	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK120373-01A1	93.847	301,280	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK027044	93.847	314,027	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK089098	93.847	319,765	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK124321-01	93.847	320,991	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK114075-01A1	93.847	321,453	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK132274	93.847	322,095	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1U01DK123799	93.847	325,477	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK117651-04	93.847	338,179	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK117597	93.847	340,579	-
	Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK121551	93.847	354,618	-

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		Number	Expenditures	
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK132645	93.847	\$ 357,342	\$ -
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK132069	93.847	360,960	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK049587	93.847	376,513	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2U01 DK106908-06	93.847	377,615	76,001
Diabetes, Digestive, and Kidney Diseases Extramural Research	1U2CDK134901	93.847	379,960	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	T32DK007276	93.847	387,690	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK120911-03/3R01DK120911-03S1	93.847	402,692	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK128277	93.847	405,146	51,456
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK124272	93.847	407,985	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK101984-07	93.847	426,532	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK057846	93.847	427,751	16,079
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK111539	93.847	429,249	144,709
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK131033	93.847	430,866	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK121948-01	93.847	439,232	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK113984	93.847	440,661	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK114041	93.847	441,200	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK072614-30	93.847	442,416	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK099097	93.847	449,035	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK112771	93.847	453,388	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5T32DK007058	93.847	454,011	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK121511-01A1	93.847	457,794	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK033793-34A1	93.847	474,750	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK129552	93.847	476,019	24,611
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK125492-02	93.847	476,317	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK119968-03	93.847	477,599	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126809	93.847	481,060	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	7R01DK122164-03	93.847	485,557	34,633
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK128087	93.847	503,073	326,285
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK113191	93.847	508,365	32,882
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK114169/3R01DK114169 S1	93.847	530,368	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK124500	93.847	538,647	147,071
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126637-01	93.847	539,292	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK020495-42	93.847	549,270	10,274
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK130318	93.847	550,696	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK133143	93.847	577,019	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK096096	93.847	577,865	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK133798	93.847	587,511	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126815	93.847	591,702	126,369
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126447-02	93.847	609,731	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK077065-12	93.847	611,980	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK101528	93.847	612,676	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK125650-01A1	93.847	655,286	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK124420	93.847	661,940	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK083294	93.847	668,356	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing	Subrecipient		
		Number	Expenditures	Expenditures	
I. Research and Development Cluster					
Department of Health & Human Services					
Direct: (Continued)					
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK129466	93.847	\$ 671,226	\$ -	
Diabetes, Digestive, and Kidney Diseases Extramural Research	1DP2DK125119	93.847	683,649	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK120891	93.847	684,739	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK111038	93.847	691,129	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK118728	93.847	722,353	254,023	
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK130997	93.847	736,607	12,498	
Diabetes, Digestive, and Kidney Diseases Extramural Research	U01DK123817	93.847	745,570	254,969	
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126295-01A1	93.847	751,359	23,993	
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK127637	93.847	812,070	396,279	
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK129523-01	93.847	816,349	293,932	
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK099039	93.847	823,458	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	U54DK106857	93.847	906,094	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK115933	93.847	918,807	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	P30DK045735	93.847	1,131,083	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	5RC2DK120534-02	93.847	1,199,924	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	2P30DK034989	93.847	1,397,088	-	
Diabetes, Digestive, and Kidney Diseases Extramural Research	P30DK079310	93.847	1,614,233	172,295	
			47,399,678	2,516,368	
Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS113445	93.853	(27,020)	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	RF1NS132840	93.853	1	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R25NS079193-06	93.853	18	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS100106	93.853	81	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS096088-01A1	93.853	1,265	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS101104-05/3R01NS101104-04S1	93.853	2,337	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	K00MH122372	93.853	3,249	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS109641-01	93.853	6,374	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS131038	93.853	6,922	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS127453	93.853	8,044	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS128641	93.853	9,695	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F32NS117780-02	93.853	11,056	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1UG3NS130228	93.853	11,956	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS115519	93.853	12,600	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS132011	93.853	20,559	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS130899	93.853	22,275	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS130903	93.853	23,307	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R35NS132156	93.853	24,387	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS131036	93.853	25,649	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F99NS129174	93.853	25,747	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS122294	93.853	26,848	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS122417	93.853	27,203	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	F99NS125835	93.853	29,624	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS125953	93.853	30,045	-	
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R35NS132342	93.853	30,901	-	

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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing</u>		<u>Subrecipient</u>
		<u>Number</u>	<u>Expenditures</u>	<u>Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS122412	93.853	\$ 30,927	\$ -
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS118810-01	93.853	31,350	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS127495	93.853	35,650	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS129354	93.853	37,962	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS129248	93.853	38,742	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS132543	93.853	40,856	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	F32NS123002	93.853	67,440	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS131852	93.853	73,454	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R01NS116584	93.853	75,770	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS107328	93.853	77,746	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS102267-01	93.853	82,752	82,830
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS127469-01A1	93.853	84,490	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1U24NS129500	93.853	85,894	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS110980	93.853	92,655	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS119992-01	93.853	94,977	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R25NS079193	93.853	98,352	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS118764	93.853	101,086	21,510
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS109734	93.853	103,211	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS130057	93.853	104,448	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS118616-01A1	93.853	110,575	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS102277	93.853	129,003	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS108060	93.853	131,101	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS130381	93.853	138,424	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1K23NS101099-01A1	93.853	145,589	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS105924	93.853	156,793	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS123469	93.853	158,055	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS091070	93.853	159,707	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS118056	93.853	164,601	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS130189	93.853	178,200	47,083
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS129197	93.853	183,286	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS102239	93.853	189,315	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS094253-02	93.853	193,530	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5K23NS107624-02	93.853	199,818	43,399
Extramural Research Programs in the Neurosciences and Neurological Disorders	2T32NS007224-36	93.853	200,570	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS120116	93.853	202,368	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS121634	93.853	202,507	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS116584-01	93.853	206,482	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS099478	93.853	214,666	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS112596	93.853	215,551	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	T32NS105583	93.853	219,393	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	RF1NS128953	93.853	228,193	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS110721	93.853	229,420	3,008
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS036251-21	93.853	242,591	-

The accompanying notes are an integral part of this schedule

**Yale University**  
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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing		Subrecipient
		Number	Expenditures	Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS130585	93.853	\$ 253,681	\$ -
Extramural Research Programs in the Neurosciences and Neurological Disorders	U24NS107136	93.853	274,905	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	U24NS107215	93.853	283,020	78,272
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS113236	93.853	296,574	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS118884-01A1	93.853	299,215	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS109160-01A1	93.853	308,130	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R00NS114166-03	93.853	332,572	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS126271	93.853	336,067	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R37NS100901	93.853	340,066	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS109062	93.853	350,391	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS102239	93.853	352,786	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS124819-01A1	93.853	359,076	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS076558	93.853	364,123	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS121026-01A1	93.853	367,636	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R37NS045876	93.853	387,160	27,550
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS066974-10	93.853	400,286	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS112223	93.853	400,787	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS127879-01	93.853	406,619	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1RF1NS130069-01	93.853	415,275	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS128358-01	93.853	417,303	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS104917	93.853	420,437	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS112706-01	93.853	424,884	353,572
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS114400-02	93.853	430,162	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS105640	93.853	442,716	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS117904-01	93.853	448,154	256,344
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS121773	93.853	453,802	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS122388-01	93.853	455,845	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS028695	93.853	459,354	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS100547-06A1	93.853	479,992	87,578
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS111242-02	93.853	483,792	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	T32NS041228	93.853	498,187	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS111980	93.853	500,770	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS123405-01	93.853	502,506	7,172
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS086932	93.853	503,783	196,208
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS035193	93.853	520,527	61,995
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS100547	93.853	536,707	517,090
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS111961	93.853	542,764	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS122907-01	93.853	559,198	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1RF1NS110354	93.853	561,995	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS112907	93.853	564,844	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS097547-06	93.853	578,779	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS126277	93.853	616,469	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS021501-33A1	93.853	643,639	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS094219	93.853	644,185	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS118886	93.853	659,461	64,091
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS115544-02	93.853	670,116	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS111935	93.853	699,974	-

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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS123183	93.853	\$ 720,834	\$ -
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS110824	93.853	735,099	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS106104	93.853	749,785	543,216
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS118463-01	93.853	806,155	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R53NS097283	93.853	1,315,673	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	UH3NS112826-03	93.853	1,557,399	418,122
Extramural Research Programs in the Neurosciences and Neurological Disorders	UG3NS123307	93.853	1,625,053	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	DP1NS111778	93.853	1,731,209	-
COVID-19 Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS106513-02	93.853	7,926	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS106513-02	93.853	2,902,052	2,292,335
			39,490,522	5,101,375
Allergy and Infectious Diseases Research	5F31AI150168	93.855	709	-
Allergy and Infectious Diseases Research	1R21AI178705	93.855	945	-
Allergy and Infectious Diseases Research	U19AI089992	93.855	1,721	2,087
Allergy and Infectious Diseases Research	1R21AI178859	93.855	3,407	-
Allergy and Infectious Diseases Research	2R56AI120558-05A1	93.855	3,642	-
Allergy and Infectious Diseases Research	5R01AI130068-03	93.855	4,685	-
Allergy and Infectious Diseases Research	R01AI174863	93.855	4,720	-
Allergy and Infectious Diseases Research	F30AI145102	93.855	5,537	-
Allergy and Infectious Diseases Research	R21AI173914	93.855	5,741	-
COVID-19 Allergy and Infectious Diseases Research	R01AI174105	93.855	5,771	-
Allergy and Infectious Diseases Research	1F31AI169882	93.855	7,126	-
Allergy and Infectious Diseases Research	1F30AI174787	93.855	15,259	-
Allergy and Infectious Diseases Research	1F31AI157221-02	93.855	18,229	-
COVID-19 Allergy and Infectious Diseases Research	1R21AI158179-01	93.855	18,787	-
Allergy and Infectious Diseases Research	1R21AI174129-01A1	93.855	22,431	-
Allergy and Infectious Diseases Research	1F31AI169966	93.855	22,707	-
Allergy and Infectious Diseases Research	2T32AI007019	93.855	25,313	-
Allergy and Infectious Diseases Research	1R21AI149628-01	93.855	27,505	-
Allergy and Infectious Diseases Research	1R01AI22220-01A1	93.855	27,969	-
Allergy and Infectious Diseases Research	F30AI157227	93.855	30,942	-
Allergy and Infectious Diseases Research	1F31AI161971	93.855	33,149	-
Allergy and Infectious Diseases Research	F31AI164909	93.855	39,900	-
Allergy and Infectious Diseases Research	F30AI157301	93.855	40,002	-
Allergy and Infectious Diseases Research	1F31AI167626	93.855	40,897	-
Allergy and Infectious Diseases Research	1R01AI123321-01A1	93.855	43,519	-
COVID-19 Allergy and Infectious Diseases Research	3R01AI157488	93.855	44,629	-
Allergy and Infectious Diseases Research	1R21AI154187	93.855	49,275	-
Allergy and Infectious Diseases Research	1R21AI173637	93.855	53,402	5,428
Allergy and Infectious Diseases Research	2R01AI032524-26	93.855	57,589	-
Allergy and Infectious Diseases Research	1R03AI159275	93.855	60,508	-
Allergy and Infectious Diseases Research	R21AI144345	93.855	63,761	-
Allergy and Infectious Diseases Research	1R56AI175206	93.855	64,357	-
Allergy and Infectious Diseases Research	2R01AI055472-30	93.855	65,944	-
Allergy and Infectious Diseases Research	1R21AI156595-01	93.855	80,044	18,126
Allergy and Infectious Diseases Research	5R01AI068041-15	93.855	82,875	-

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance</u>		
		<u>Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Allergy and Infectious Diseases Research	1K99AI159302	93.855	\$ 91,356	\$ -
Allergy and Infectious Diseases Research	1R21AI159580	93.855	99,097	-
Allergy and Infectious Diseases Research	1R21AI168968	93.855	104,322	-
Allergy and Infectious Diseases Research	5R01AI132452	93.855	104,751	-
Allergy and Infectious Diseases Research	1R21AI157890	93.855	109,314	5,968
Allergy and Infectious Diseases Research	R21AI163969	93.855	116,849	20,471
Allergy and Infectious Diseases Research	1R21AI142708-01A1	93.855	122,039	-
Allergy and Infectious Diseases Research	1R01AI126033	93.855	126,823	-
Allergy and Infectious Diseases Research	1R56AI155497	93.855	128,094	-
Allergy and Infectious Diseases Research	5R01AI122797-03	93.855	131,723	77,203
Allergy and Infectious Diseases Research	1R01AI123204	93.855	135,516	-
Allergy and Infectious Diseases Research	4R37AI041699-22	93.855	139,720	-
Allergy and Infectious Diseases Research	R21AI159201	93.855	140,647	-
Allergy and Infectious Diseases Research	1U01AI132895	93.855	142,911	-
Allergy and Infectious Diseases Research	K08AI159229	93.855	142,953	-
Allergy and Infectious Diseases Research	4R33AI122384-03	93.855	145,991	-
Allergy and Infectious Diseases Research	1R21AI149731-01	93.855	153,383	-
Allergy and Infectious Diseases Research	R21AI156208	93.855	161,986	-
Allergy and Infectious Diseases Research	1R21AI152927	93.855	164,212	35,656
Allergy and Infectious Diseases Research	T32AI007210	93.855	165,146	-
Allergy and Infectious Diseases Research	1R21AI161838-01A1	93.855	169,093	-
COVID-19 Allergy and Infectious Diseases Research	K23AI159518	93.855	172,574	-
Allergy and Infectious Diseases Research	5T32AI055403	93.855	172,849	-
COVID-19 Allergy and Infectious Diseases Research	U19AI089992BCV	93.855	185,434	-
Allergy and Infectious Diseases Research	1R21AI160171	93.855	186,739	-
Allergy and Infectious Diseases Research	1R21AI164590-01	93.855	187,322	-
Allergy and Infectious Diseases Research	2P01AI039671	93.855	189,032	-
COVID-19 Allergy and Infectious Diseases Research	1R01AI157488	93.855	197,095	-
Allergy and Infectious Diseases Research	1R21AI167773	93.855	208,206	52,487
COVID-19 Allergy and Infectious Diseases Research	RAI169531A	93.855	212,286	-
Allergy and Infectious Diseases Research	1R21AI166387	93.855	219,044	-
Allergy and Infectious Diseases Research	1R21AI153644-01A1	93.855	255,635	-
Allergy and Infectious Diseases Research	T32AI007640	93.855	256,090	-
Allergy and Infectious Diseases Research	R21AI163663-01	93.855	256,844	-
Allergy and Infectious Diseases Research	5R01AI104739-07	93.855	257,025	12,930
Allergy and Infectious Diseases Research	5R01AI121207-04	93.855	265,862	260,793
Allergy and Infectious Diseases Research	R21AI171333	93.855	268,240	-
Allergy and Infectious Diseases Research	U19AI089992	93.855	280,211	-
Allergy and Infectious Diseases Research	2R01AI044616-20	93.855	284,745	-
Allergy and Infectious Diseases Research	R01AI110452	93.855	292,931	-
Allergy and Infectious Diseases Research	3R01AI151176	93.855	298,948	126,295
Allergy and Infectious Diseases Research	2T32AI007517	93.855	306,476	-
Allergy and Infectious Diseases Research	2R01AI108834-08	93.855	322,936	-
Allergy and Infectious Diseases Research	1R01AI131613	93.855	349,548	-
Allergy and Infectious Diseases Research	R01AI114780-06A1	93.855	360,346	-



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		Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Direct: (Continued)				
Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research COVID-19 Allergy and Infectious Diseases Research 				

**Yale University**  
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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing			Subrecipient Expenditures
		Number	Expenditures	Expenditures	
I. Research and Development Cluster					
Department of Health & Human Services					
Direct: (Continued)					
COVID-19 Allergy and Infectious Diseases Research	2P01AI039671-20A1	93.855	\$ 734,799	\$ 146,082	
	1R01AI163395-01	93.855	744,297	13,507	
	9R01AI155072	93.855	746,313	-	
	1R01AI162645	93.855	751,411	20,452	
	1R01AI164692	93.855	752,911	110,573	
	1R01AI153100	93.855	760,416	130,350	
	1R01AI146584	93.855	761,001	464,787	
	1R01AI165661	93.855	794,316	-	
	R01AI151176-03	93.855	796,327	277,512	
	3R01AI157488	93.855	796,866	-	
	5R01AI132409	93.855	809,870	107,908	
	1R01AI171980-01A1	93.855	841,944	41,291	
	1R01AI150334-01	93.855	887,279	80,514	
	1R01AI145164-01	93.855	1,002,609	-	
	1R01AI158615-01	93.855	1,012,547	377,050	
	5U19AI089681	93.855	1,326,707	996,019	
	U19AI089992	93.855	1,603,214	24,216	
				48,913,640	6,115,251
	Biomedical Research and Research Training	1F32GM139389	93.859	226	-
Biomedical Research and Research Training	1R01GM127876-01	93.859	10,627	-	
Biomedical Research and Research Training	1K99GM135533-01A1	93.859	12,734	-	
Biomedical Research and Research Training	1F32GM137502-01	93.859	13,342	-	
Biomedical Research and Research Training	5R01GM129149	93.859	13,449	-	
Biomedical Research and Research Training	1K99GM141320	93.859	15,254	-	
Biomedical Research and Research Training	1R35GM1122580	93.859	15,399	-	
Biomedical Research and Research Training	1R01GM137411	93.859	19,729	18,171	
Biomedical Research and Research Training	2R37GM061221	93.859	26,442	-	
Biomedical Research and Research Training	1R01GM118614	93.859	26,469	-	
Biomedical Research and Research Training	1F31GM143917	93.859	29,618	-	
Biomedical Research and Research Training	1R01GM146147	93.859	29,857	-	
Biomedical Research and Research Training	1F31GM142294-01	93.859	30,083	-	
Biomedical Research and Research Training	2R01GM105672	93.859	33,512	-	
Biomedical Research and Research Training	1F31GM145178-01	93.859	33,969	-	
Biomedical Research and Research Training	1F32GM142247	93.859	34,208	-	
Biomedical Research and Research Training	5R01GM122984-02	93.859	37,483	-	
Biomedical Research and Research Training	2R01GM065313	93.859	37,696	-	
Biomedical Research and Research Training	R25GM146264	93.859	42,854	-	
Biomedical Research and Research Training	1F32GM145087-01	93.859	46,354	-	
Biomedical Research and Research Training	1R01GM129308	93.859	53,444	-	
Biomedical Research and Research Training	K99GM144683	93.859	58,161	-	
Biomedical Research and Research Training	1F32GM139266-01	93.859	63,646	-	
Biomedical Research and Research Training	1F32GM140723	93.859	63,691	-	
Biomedical Research and Research Training	1F32GM145094-01	93.859	68,060	-	
Biomedical Research and Research Training	1R01GM125951-04	93.859	69,574	-	
Biomedical Research and Research Training	1F32GM139285-01	93.859	69,765	-	
Biomedical Research and Research Training	1F32GM136179-01A1	93.859	70,240	-	

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Biomedical Research and Research Training	1F32GM142204	93.859	\$ 71,266	\$ -
Biomedical Research and Research Training	1RM1GM149406	93.859	72,173	-
Biomedical Research and Research Training	F32GM145116	93.859	74,376	-
Biomedical Research and Research Training	2R01GM065313	93.859	88,949	-
Biomedical Research and Research Training	1K99GM140174	93.859	94,978	-
Biomedical Research and Research Training	1R35GM147565-01	93.859	130,105	-
Biomedical Research and Research Training	4R00GM126145-03	93.859	145,875	-
Biomedical Research and Research Training	1R35GM149293	93.859	148,788	-
Biomedical Research and Research Training	2R01GM026132	93.859	154,692	-
Biomedical Research and Research Training	1R01GM125955	93.859	160,809	-
Biomedical Research and Research Training	1T32GM145452	93.859	163,663	-
Biomedical Research and Research Training	1R01GM125769-01	93.859	175,109	-
Biomedical Research and Research Training	T32GM100884	93.859	179,496	-
Biomedical Research and Research Training	4R00GM124296-03	93.859	179,994	-
Biomedical Research and Research Training	1R01GM129081	93.859	180,560	-
Biomedical Research and Research Training	R01GM131642	93.859	186,689	50,356
Biomedical Research and Research Training	R25GM140278-01	93.859	202,469	-
Biomedical Research and Research Training	2R01GM106121	93.859	207,222	-
Biomedical Research and Research Training	R01GM105672	93.859	213,763	-
Biomedical Research and Research Training	R35GM145251	93.859	218,572	-
Biomedical Research and Research Training	2R01GM105718	93.859	232,590	-
Biomedical Research and Research Training	1R35GM146919-01	93.859	232,812	-
Biomedical Research and Research Training	R01GM102262	93.859	244,158	-
Biomedical Research and Research Training	2R01GM106189	93.859	250,203	92,905
Biomedical Research and Research Training	1R01GM139337-01	93.859	252,429	-
Biomedical Research and Research Training	R01GM117230	93.859	256,950	-
Biomedical Research and Research Training	R35GM147095	93.859	260,273	-
Biomedical Research and Research Training	1R01GM131004-01	93.859	266,506	-
Biomedical Research and Research Training	2R01GM032136	93.859	273,047	-
Biomedical Research and Research Training	2R01GM126211	93.859	279,079	-
Biomedical Research and Research Training	1R35GM146725-01	93.859	279,269	-
Biomedical Research and Research Training	1R35GM131776	93.859	280,871	-
Biomedical Research and Research Training	1R01GM132114	93.859	284,579	-
Biomedical Research and Research Training	1R01GM138533	93.859	285,963	-
Biomedical Research and Research Training	T32GM086287	93.859	287,773	-
Biomedical Research and Research Training	1R35GM122560	93.859	297,002	-
Biomedical Research and Research Training	1R01GM134083-01	93.859	299,121	-
Biomedical Research and Research Training	R01GM137068	93.859	304,914	-
Biomedical Research and Research Training	5R01GM134005-02	93.859	308,015	104,724
Biomedical Research and Research Training	1R01GM141313	93.859	309,357	-
Biomedical Research and Research Training	1R01GM140735	93.859	317,267	-
Biomedical Research and Research Training	R21GM141669	93.859	326,449	-
Biomedical Research and Research Training	1R01GM135331-01A1	93.859	332,911	-
Biomedical Research and Research Training	1R01GM138722-01	93.859	336,317	-

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Biomedical Research and Research Training	1R35GM128619	93.859	\$ 337,658	\$ -
Biomedical Research and Research Training	2R01GM101316	93.859	346,451	-
Biomedical Research and Research Training	1R01GM138411-01	93.859	359,106	-
Biomedical Research and Research Training	1R35GM128661-01	93.859	363,792	-
Biomedical Research and Research Training	1R01GM135290	93.859	363,811	-
Biomedical Research and Research Training	2R01GM110243-06A1	93.859	365,102	191,392
Biomedical Research and Research Training	R35GM143072-01	93.859	366,870	-
Biomedical Research and Research Training	1R35GM139449-01	93.859	367,883	-
Biomedical Research and Research Training	1R01GM146463	93.859	370,806	-
Biomedical Research and Research Training	2R01GM112766	93.859	371,165	-
Biomedical Research and Research Training	2R01GM123011	93.859	383,042	-
Biomedical Research and Research Training	2R01GM117386-06	93.859	387,666	-
Biomedical Research and Research Training	1R35GM148348	93.859	387,831	-
Biomedical Research and Research Training	T32GM007324	93.859	389,607	-
Biomedical Research and Research Training	2R01GM115636-06A1	93.859	391,230	-
Biomedical Research and Research Training	R01GM132358	93.859	395,485	-
Biomedical Research and Research Training	2R01GM118614-06A1	93.859	397,582	-
Biomedical Research and Research Training	2R01GM110530-06	93.859	401,253	-
Biomedical Research and Research Training	R01GM130847	93.859	411,700	130,857
Biomedical Research and Research Training	1R01GM141192-01	93.859	418,066	-
Biomedical Research and Research Training	1R01GM136815	93.859	418,247	222,173
Biomedical Research and Research Training	1R35GM147039	93.859	418,544	-
Biomedical Research and Research Training	1R35GM128670	93.859	427,947	-
Biomedical Research and Research Training	R01GM123798	93.859	431,021	-
Biomedical Research and Research Training	R01GM134148	93.859	431,705	-
Biomedical Research and Research Training	2R01GM112781	93.859	432,063	-
Biomedical Research and Research Training	R35GM138341	93.859	432,608	-
Biomedical Research and Research Training	R35GM137956-02	93.859	434,432	-
Biomedical Research and Research Training	R01CA240418	93.859	447,355	-
Biomedical Research and Research Training	R25GM114000	93.859	461,101	214,889
Biomedical Research and Research Training	1R35GM137952	93.859	467,523	-
Biomedical Research and Research Training	2T32GM067543-16	93.859	470,356	-
Biomedical Research and Research Training	5R35GM138185-02	93.859	471,639	-
Biomedical Research and Research Training	2T32GM008283	93.859	474,429	-
Biomedical Research and Research Training	1R01GM141350	93.859	476,587	-
Biomedical Research and Research Training	1R35GM144105-01	93.859	481,849	-
Biomedical Research and Research Training	1R35GM142687	93.859	489,931	-
Biomedical Research and Research Training	1R35GM138299-01	93.859	491,756	-
Biomedical Research and Research Training	1R35GM142825-01	93.859	495,517	-
Biomedical Research and Research Training	2R01GM100930	93.859	498,029	-
Biomedical Research and Research Training	1R01GM137031	93.859	500,547	-
Biomedical Research and Research Training	1R01GM136969	93.859	510,559	-
Biomedical Research and Research Training	5R01GM131319	93.859	552,214	33,881
Biomedical Research and Research Training	3R35GM133573-05S1	93.859	575,372	-
Biomedical Research and Research Training	R35GM136656	93.859	582,750	-
Biomedical Research and Research Training	2R01GM073857	93.859	584,505	227,625
Biomedical Research and Research Training	1R01GM140481-01	93.859	606,325	-

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Biomedical Research and Research Training	1R35GM142875	93.859	\$ 608,552	\$ -
Biomedical Research and Research Training	1R35GM131714	93.859	608,976	-
Biomedical Research and Research Training	R35GM142959	93.859	618,382	-
Biomedical Research and Research Training	R35GM136346-01	93.859	638,233	-
Biomedical Research and Research Training	R01GM138856	93.859	640,610	204,193
Biomedical Research and Research Training	2T32GM007499-41	93.859	652,237	-
Biomedical Research and Research Training	R35GM131687	93.859	668,324	-
Biomedical Research and Research Training	1R35GM132092	93.859	674,313	-
Biomedical Research and Research Training	DGM137414A	93.859	676,305	-
Biomedical Research and Research Training	1R35GM131715	93.859	677,679	-
Biomedical Research and Research Training	R35GM122485	93.859	702,979	-
Biomedical Research and Research Training	2R35GM122473	93.859	716,495	-
Biomedical Research and Research Training	2R35GM118159-06	93.859	751,393	-
Biomedical Research and Research Training	1R35GM131913	93.859	765,536	-
Biomedical Research and Research Training	1R35GM141961-01	93.859	767,649	-
Biomedical Research and Research Training	1R35GM136325-01	93.859	785,745	-
Biomedical Research and Research Training	1R35GM144096	93.859	824,526	-
Biomedical Research and Research Training	2R35GM122580-06	93.859	825,334	-
Biomedical Research and Research Training	1RM1GM141649	93.859	1,388,227	-
Biomedical Research and Research Training	T32GM136651	93.859	2,296,791	-
			47,802,592	1,491,166
Child Health and Human Development Extramural Research	R03HD103862	93.865	1	-
Child Health and Human Development Extramural Research	1R21HD089131-01A1	93.865	135	-
Child Health and Human Development Extramural Research	R21HD098031	93.865	464	-
Child Health and Human Development Extramural Research	1R01HD097808	93.865	6,079	-
Child Health and Human Development Extramural Research	1R03HD110741	93.865	8,692	-
Child Health and Human Development Extramural Research	1F30HD107932-01A1	93.865	9,882	-
Child Health and Human Development Extramural Research	1F30HD112087	93.865	11,339	-
Child Health and Human Development Extramural Research	1F32HD111328	93.865	18,766	-
Child Health and Human Development Extramural Research	7F32HD104542	93.865	19,122	-
Child Health and Human Development Extramural Research	1R01HD109326	93.865	20,775	-
Child Health and Human Development Extramural Research	R01HD092361	93.865	23,623	-
Child Health and Human Development Extramural Research	F31HD104415	93.865	30,171	-
Child Health and Human Development Extramural Research	F31HD104443-01	93.865	31,923	-
Child Health and Human Development Extramural Research	F30HD106692	93.865	32,471	-
Child Health and Human Development Extramural Research	1F31HD107950-01A1	93.865	32,919	-
Child Health and Human Development Extramural Research	7R21HD103931	93.865	35,058	-
Child Health and Human Development Extramural Research	K23HD109508	93.865	36,018	-
Child Health and Human Development Extramural Research	1F31HD109060	93.865	36,665	-
Child Health and Human Development Extramural Research	5K99HD101653-02	93.865	47,965	-
Child Health and Human Development Extramural Research	F30HD105440	93.865	49,398	-
Child Health and Human Development Extramural Research	1F32HD108935-01	93.865	55,656	-
Child Health and Human Development Extramural Research	1R21HD102565	93.865	56,540	17,870
Child Health and Human Development Extramural Research	1F32HD106666	93.865	65,643	-
Child Health and Human Development Extramural Research	1K23HD107178-01A1	93.865	67,324	-
Child Health and Human Development Extramural Research	R21HD099318-02	93.865	84,758	-

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Child Health and Human Development Extramural Research	R03HD100883	93.865	\$ 115,212	\$ -
Child Health and Human Development Extramural Research	1R21HD100751-02	93.865	117,299	-
Child Health and Human Development Extramural Research	1K99HD105001-01A1	93.865	119,308	-
Child Health and Human Development Extramural Research	1R21HD107609-01A1	93.865	121,297	37,413
Child Health and Human Development Extramural Research	K23HD104907	93.865	147,369	-
Child Health and Human Development Extramural Research	1R21HD110110	93.865	151,595	-
Child Health and Human Development Extramural Research	1R01HD100369-01	93.865	154,652	14,300
Child Health and Human Development Extramural Research	1R01HD110059-01A1	93.865	163,778	-
Child Health and Human Development Extramural Research	7R01HD085853	93.865	182,388	108,819
Child Health and Human Development Extramural Research	1R21HD102174	93.865	196,061	-
Child Health and Human Development Extramural Research	5R01HD101475-02/3R01HD101475-02S1	93.865	206,465	34,144
Child Health and Human Development Extramural Research	4R00HD101653	93.865	215,105	-
Child Health and Human Development Extramural Research	1R01HD106359-01	93.865	246,664	41,073
Child Health and Human Development Extramural Research	1R01HD097368	93.865	272,185	-
Child Health and Human Development Extramural Research	4R37HD042012	93.865	273,924	-
Child Health and Human Development Extramural Research	1R01HD103692-01	93.865	283,105	-
Child Health and Human Development Extramural Research	7R01HD088626	93.865	296,527	72,234
Child Health and Human Development Extramural Research	5R01HD100563-02/3R01HD100563-02S1	93.865	307,231	49,890
Child Health and Human Development Extramural Research	2K12HD047018	93.865	320,174	-
Child Health and Human Development Extramural Research	T32HD007149-41A1	93.865	338,900	-
Child Health and Human Development Extramural Research	1DP2HD108774-01	93.865	356,204	-
Child Health and Human Development Extramural Research	R01HD093608	93.865	382,788	-
Child Health and Human Development Extramural Research	R01HD098128-01A1	93.865	392,318	-
Child Health and Human Development Extramural Research	1DP2HD112040-01	93.865	422,048	-
Child Health and Human Development Extramural Research	R01HD096745	93.865	441,221	-
Child Health and Human Development Extramural Research	1R01HD106326-01	93.865	452,202	65,418
Child Health and Human Development Extramural Research	1R01HD092185	93.865	473,849	197,558
Child Health and Human Development Extramural Research	1R01HD100468-01A1	93.865	488,632	46,603
Child Health and Human Development Extramural Research	2R01HD076248	93.865	513,580	-
Child Health and Human Development Extramural Research	R01HD102537-01	93.865	565,197	140,003
Child Health and Human Development Extramural Research	5R01HD102186-03	93.865	597,010	-
Child Health and Human Development Extramural Research	R01HD028016	93.865	695,927	10,031
Child Health and Human Development Extramural Research	5R01HD100035	93.865	712,894	-
Child Health and Human Development Extramural Research	R01HD103512	93.865	808,817	533,188
Child Health and Human Development Extramural Research	R01HD100336	93.865	889,312	-
Child Health and Human Development Extramural Research	R01HD102030-10	93.865	960,156	-
Child Health and Human Development Extramural Research	1R01HD105267	93.865	1,141,618	106,387
			15,304,399	1,474,931
Aging Research	1K01AG053408-01A1	93.866	12	-
Aging Research	1P30AG066508-02	93.866	120	-
Aging Research	R13AG069385-01	93.866	3,300	-
Aging Research	1F31AG074627	93.866	5,885	-
Aging Research	1F31AG062099	93.866	14,951	-
Aging Research	1R21AG067335-01	93.866	15,167	-
Aging Research	1F31AG081110	93.866	15,979	-
Aging Research	RF1AG081413	93.866	16,981	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
<b>I. Research and Development Cluster</b>				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Aging Research	1R21AG073897	93.866	\$ 18,283	\$ -
Aging Research	1F31AG069490-01A1	93.866	33,619	-
Aging Research	2U01AG032284	93.866	34,373	-
Aging Research	F30AG074629	93.866	37,463	-
Aging Research	F31AG079606	93.866	42,062	-
Aging Research	2P30AG021342-16	93.866	42,322	-
Aging Research	1RF1AG082216	93.866	46,200	-
Aging Research	F30AG066371	93.866	50,283	-
Aging Research	1K99AG078503-01	93.866	54,644	-
Aging Research	1RF1AG082190	93.866	58,887	-
Aging Research	2R56AG053495-06	93.866	62,130	-
Aging Research	R21AG079145	93.866	68,578	-
Aging Research	R03AG073988	93.866	72,321	-
Aging Research	1R03AG078942	93.866	77,209	-
Aging Research	5R25ES029052	93.866	80,988	-
Aging Research	T35AG049685	93.866	82,875	-
Aging Research	R03AG073991	93.866	90,156	-
Aging Research	1R21AG067024-01	93.866	93,763	-
Aging Research	5R01AG048918	93.866	98,551	-
Aging Research	K01AG078126	93.866	115,577	-
Aging Research	R03AG074067-01	93.866	119,366	-
Aging Research	1R21AG067347-01A1	93.866	130,391	128,175
Aging Research	1K23A057794	93.866	134,830	-
Aging Research	1R03AG074063	93.866	138,430	-
Aging Research	1K76AG057023	93.866	145,158	-
Aging Research	1R01AG052560-01A1	93.866	173,713	-
Aging Research	5K24AG042489-08	93.866	180,383	-
Aging Research	3R33AG069822-03S1	93.866	183,966	19,851
Aging Research	1R56AG076681-01	93.866	192,188	-
Aging Research	R56AG071201	93.866	202,540	-
Aging Research	1K76AG059987	93.866	215,088	-
Aging Research	K23AG059919	93.866	225,695	-
Aging Research	K76AG074905	93.866	240,442	-
Aging Research	1R01AG078926	93.866	245,411	-
Aging Research	1R21AG072961-01	93.866	255,779	64,728
Aging Research	1K76AG064548	93.866	260,512	-
Aging Research	1RF1AG080948-01	93.866	267,184	94,082
Aging Research	1R21AG075778-01	93.866	272,875	-
Aging Research	2R01AG017560-21	93.866	280,339	-
Aging Research	R01AG059607	93.866	288,045	30,931
Aging Research	1R01AG073969	93.866	292,637	-
Aging Research	R01AG065474	93.866	308,790	-
Aging Research	R21AG076239	93.866	311,301	-
Aging Research	1R21AG074238-01	93.866	312,393	35,568

**Yale University**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Aging Research	1R01AG060084-01	93.866	\$ 332,398	\$ -
Aging Research	1R01AG076782	93.866	337,253	-
Aging Research	T32AG019134	93.866	342,303	-
Aging Research	1R01AG077529	93.866	346,763	-
Aging Research	1R01AG062210-01	93.866	353,134	-
Aging Research	R01AG068285	93.866	362,855	-
Aging Research	5R01AG056728	93.866	380,978	-
Aging Research	P30AG066508	93.866	400,869	-
Aging Research	1R56AG079086-01	93.866	425,392	-
Aging Research	1R01AG057912	93.866	436,341	146,789
Aging Research	1R01AG071528	93.866	443,221	122,937
Aging Research	5R01AG068863	93.866	467,514	-
Aging Research	R33AG058926	93.866	482,598	199,149
Aging Research	R01AG056628	93.866	504,334	-
Aging Research	1R01AG074657-01	93.866	516,827	-
Aging Research	1R01AG067329-02	93.866	525,052	-
Aging Research	R01AG065917	93.866	606,878	247,503
Aging Research	R01AG076154-01	93.866	654,079	-
Aging Research	RF1AG070926	93.866	654,683	-
Aging Research	R01AG065403	93.866	673,996	446,585
Aging Research	R01AG066447-01	93.866	700,041	-
Aging Research	RF1AG068191-01A1	93.866	726,110	250,652
Aging Research	R01AG067533	93.866	757,302	46,810
Aging Research	1R01AG058565-03	93.866	763,878	64,669
Aging Research	R01AG034924-11	93.866	794,535	-
Aging Research	R01AG061190	93.866	799,947	-
Aging Research	R01AG074609	93.866	818,922	-
Aging Research	R01AG066165	93.866	839,005	-
Aging Research	5R01AG073177-02	93.866	861,528	-
Aging Research	R56AG074015	93.866	869,878	-
Aging Research	U01AG058608	93.866	912,824	-
Aging Research	1RF1AG074341-01	93.866	1,019,549	-
Aging Research	R61AG069822	93.866	1,122,640	639,070
Aging Research	5P30AG021342-20	93.866	1,194,688	2,062
Aging Research	2P01AG051459	93.866	1,273,810	-
Aging Research	1R01AG062668	93.866	1,281,907	26,000
Aging Research	R01AG069921	93.866	1,300,016	-
Aging Research	5DP1AG066590	93.866	1,604,570	-
Aging Research	5R01AG062276-03	93.866	1,662,620	-
Aging Research	P30AG066508	93.866	2,778,822	-
			38,040,195	2,565,561
Vision Research	1K99EY029375-01	93.867	101	-
Vision Research	R21EY029820	93.867	8,711	-
Vision Research	1K99EY030550-01	93.867	12,830	-
Vision Research	F31EY032793	93.867	13,434	-
Vision Research	1K99EY030549-01	93.867	21,014	-
Vision Research	1F30EY034380	93.867	23,005	-
Vision Research	F32EY031133-01	93.867	34,416	-
Vision Research	F30EY032338	93.867	35,086	-
Vision Research	2T32EY022312-08	93.867	35,955	-

The accompanying notes are an integral part of this schedule



**Yale University**  
**Schedule of Expenditures of Federal Awards**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
Vision Research	4R00EY025026-03	93.867	\$ 39,119	\$ -
Vision Research	1R01EY034697	93.867	44,296	-
Vision Research	1K99EY031743-01	93.867	46,631	-
Vision Research	1R21EY035090	93.867	54,527	-
Vision Research	F32EY032389	93.867	79,520	-
Vision Research	1P30EY026878-01	93.867	128,122	-
Vision Research	1R01EY029323-01	93.867	146,866	41,197
Vision Research	1R21EY031512-01A1	93.867	251,113	18,656
Vision Research	K23EY030530	93.867	301,885	-
Vision Research	1R01EY030854-01A1	93.867	322,999	-
Vision Research	1R01EY033333-01A1	93.867	344,666	-
Vision Research	R01EY014454	93.867	347,326	113,915
Vision Research	R01EY034234	93.867	356,263	-
Vision Research	1R01EY032555-01A1	93.867	403,766	-
Vision Research	2R01EY026065	93.867	416,528	-
Vision Research	2R01EY026555	93.867	427,355	-
Vision Research	R01EY031751	93.867	485,657	29,861
Vision Research	P30EY026878	93.867	520,908	-
Vision Research	2R01EY022951	93.867	527,541	-
Vision Research	5R01EY032396-02	93.867	590,278	205,493
Vision Research	2R01EY015788-14A1	93.867	631,488	-
Vision Research	DP1EY033975	93.867	1,136,759	-
			<u>7,788,165</u>	<u>409,122</u>
Medical Library Assistance	2T15LM007056-32	93.879	1,416	-
Medical Library Assistance	7R01LM013712	93.879	81,089	-
Medical Library Assistance	1G08LM013801	93.879	109,016	-
Medical Library Assistance	1R01LM014087-01	93.879	144,017	-
Medical Library Assistance	2T15LM007056	93.879	563,966	-
Medical Library Assistance	1R01LM013477-01	93.879	656,640	75,069
			<u>1,556,144</u>	<u>75,069</u>
Special Projects of National Significance	U90HA393410101	93.928	<u>762,930</u>	<u>243,542</u>
			<u>762,930</u>	<u>243,542</u>
International Research and Research Training	R21TW010998	93.989	-	25,717
International Research and Research Training	1D43TW012492	93.989	7,877	-
International Research and Research Training	1D43TW012262-01A1	93.989	14,953	-
International Research and Research Training	7D43TW007120	93.989	24,386	-
International Research and Research Training	1R21TW011663-01	93.989	27,195	14,191
International Research and Research Training	R21TW011762	93.989	64,832	765
International Research and Research Training	2R25TW007700-07	93.989	101,705	16,874
International Research and Research Training	1D43TW012202	93.989	144,833	75,268
International Research and Research Training	1U2RTW012231	93.989	180,385	34,647
International Research and Research Training	R33TW011663	93.989	203,506	-
International Research and Research Training	2D43TW009607	93.989	219,441	153,053
International Research and Research Training	1D43TW011324	93.989	331,968	115,618
International Research and Research Training	D43TW011526	93.989	428,380	211,392

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I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
Direct: (Continued)				
International Research and Research Training	2D43TW010540	93.989	\$ 695,230	\$ 185,698
			2,444,691	833,223
	Subtotal - Department of Health & Human Services - Direct		577,970,004	76,601,932
Pass-through				
University of Missouri-Columbia - Department Of Health And Human Services	PAR-18-646	93.RD	(31,669)	-
Children's Hospital of Philadelphia (The) - Department Of Health And Human Services	PROTOCOL ACCL1633	93.RD	1	-
Connecticut Dept. of Mental Health and Addiction Services - Department Of Health And Human Services	23MHA6092	93.RD	1	-
Public Health Institute - Department Of Health And Human Services	Yale 05152021	93.RD	1	-
University of Utah - Department Of Health And Human Services	10065912-01-Yale	93.RD	1	-
University of California, Los Angeles (UCLA) - Department Of Health And Human Services	1850 G IA777	93.RD	1	-
University of Vermont - Department Of Health And Human Services	5R01HD101475-03	93.RD	1	-
Brigham and Women's Hospital - Department Of Health And Human Services	128797	93.RD	1	-
University of Connecticut - Department Of Health And Human Services	R01HD101842	93.RD	1	-
University of Connecticut - Department Of Health And Human Services	178261519	93.RD	1	-
Stanford University - Department Of Health And Human Services	63117654-272590	93.RD	1	-
Georgetown University - Department Of Health And Human Services	HD-037082	93.RD	1	-
University of Connecticut - Department Of Health And Human Services	178278688	93.RD	1	-
University of Texas Health Science at Houston - Department Of Health And Human Services	SA0003699	93.RD	1	-
HealthPartners Institute For Education & Research - Department Of Health And Human Services	X1717200-Yale	93.RD	5,955	-
Brigham and Women's Hospital - Department Of Health And Human Services	120077	93.RD	6,387	-
University of Tennessee Health Science Center - Department Of Health And Human Services	23-3734-YALE	93.RD	6,558	-
COVID-19 HealthPartners Institute For Education & Research - Department Of Health And Human Services	X2024100 - Yale	93.RD	7,952	-
Emergency Medicine Foundation - Department Of Health And Human Services	E.20124	93.RD	8,749	-
Task Force for Global Health, Inc. - Department Of Health And Human Services	PI-CD33-CODI	93.RD	8,810	-
University of Toledo - Department Of Health And Human Services	F-2022-38	93.RD	9,066	-
COVID-19 Children's Hospital Boston - Department Of Health And Human Services	GENFD0001834672	93.RD	9,350	-
Oregon Health Sciences University - Department Of Health And Human Services	1004086-001 YALE	93.RD	10,415	-
University of Pittsburgh - Department Of Health And Human Services	CNVA00056666 (413614-26)	93.RD	11,700	-
Brigham and Women's Hospital - Department Of Health And Human Services	120077	93.RD	23,689	-
Public Health Institute - Department Of Health And Human Services	Yale 03012021	93.RD	23,699	-
University of Connecticut - Department Of Health And Human Services	7R21TW011665	93.RD	26,673	-
Task Force for Global Health, Inc. - Department Of Health And Human Services	PI-CD33-CODI	93.RD	28,054	-
Massachusetts General Hospital - Department Of Health And Human Services	237496	93.RD	32,444	-
University of Virginia - Department Of Health And Human Services	GB10691 PO#2133380	93.RD	34,792	-
Washington University in St. Louis - Department Of Health And Human Services	WU-23-0368	93.RD	39,007	-
University of Miami - Department Of Health And Human Services	0S00001119	93.RD	40,772	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Department Of Health And Human Services	0258-A443-4609	93.RD	43,826	-
Emory University - Department Of Health And Human Services	A305103	93.RD	64,051	-
COVID-19 HealthPartners Institute For Education & Research - Department Of Health And Human Services	X2024200 - Yale	93.RD	64,675	-
Regents of the University of Michigan - Department Of Health And Human Services	SUBK00017593	93.RD	69,263	-
Boston University - Department Of Health And Human Services	4500004633	93.RD	76,676	-
Harvard University - Department Of Health And Human Services	136051-5117182	93.RD	77,788	-

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance</u>		
		<u>Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
<u>Pass-through: (Continued)</u>				
	Pennsylvania State University - Department Of Health And Human Services	S001387-DHHS	93.RD	\$ 80,036 \$ -
	Tempus Labs - Department Of Health And Human Services	20201021	93.RD	87,458 -
COVID-19	Stanford University - Department Of Health And Human Services	62877982-250198	93.RD	109,958 -
	Stanford University - Department Of Health And Human Services	62877982-250198	93.RD	(13,900) -
COVID-19	Rush University Medical Center - Department Of Health And Human Services	20042803-Sub01	93.RD	114,503 -
	University of California, San Diego - Department Of Health And Human Services	705794	93.RD	131,177 -
	Dartmouth College - Department Of Health And Human Services	R1399	93.RD	132,217 -
	Massachusetts General Hospital - Department Of Health And Human Services	242018	93.RD	139,410 -
	University of California, Los Angeles (UCLA) - Department Of Health And Human Services	2000 G YD004	93.RD	173,637 -
	The University of Sciences, Techniques and Technologies of Bamako (USTTB) - Department Of Health And Human Services	R01NS118522	93.RD	177,831 -
	University of California, San Diego - Department Of Health And Human Services	KR 705551	93.RD	178,453 40,020
	BC Cancer Research Institute - Department Of Health And Human Services	2023-0538	93.RD	184,622 -
	Washington University in St. Louis - Department Of Health And Human Services	WU-21-0449	93.RD	203,140 -
	Salk Institute for Biological Studies - Department Of Health And Human Services	18-0061-S002	93.RD	207,844 -
	Icahn School of Medicine at Mount Sinai (ISMMS) - Department Of Health And Human Services	0258-A457-4609	93.RD	223,189 -
	Vanderbilt University Medical Center - Department Of Health And Human Services	VUMC106413	93.RD	244,500 -
	Eigen - Department Of Health And Human Services	R42CA224888	93.RD	279,608 -
	University of Washington, Seattle - Department Of Health And Human Services	UWSC10520	93.RD	338,627 -
COVID-19	City of New Haven - Department Of Health And Human Services	A21-2370	93.RD	357,137 -
COVID-19	Rush University Medical Center - Department Of Health And Human Services	20042803-Sub01	93.RD	568,710 -
	Flambeau Diagnostics, LLC. - Department Of Health And Human Services	Wyllie - SOW Amendment	93.RD	661,531 -
				5,278,383 40,020
	University of Michigan - Family Smoking Prevention and Tobacco Control Act Regulatory Research	SUBK00014315	93.077	798 -
	Duke University - Family Smoking Prevention and Tobacco Control Act Regulatory Research	A033887	93.077	36,984 -
	American University of Beirut - Family Smoking Prevention and Tobacco Control Act Regulatory Research	104211-Subcontract1-Yale	93.077	188,017 -
	Regents of the University of Michigan - Family Smoking Prevention and Tobacco Control Act Regulatory Research	SUBK00007978	93.077	389,398 -
				615,197 -
	Children's Hospital Corporation, (formerly CHB) - Blood Disorder Program: Prevention, Surveillance, and Research	GENFD0002095154	93.080	5,610 -
	Children's Hospital Corporation, (formerly CHB) - Blood Disorder Program: Prevention, Surveillance, and Research	GENFD0002095154/GENFD0002269888	93.080	13,523 -
				19,133 -
	Institute for Advanced Clinical Trials for Children - Food and Drug Administration_Research	I-ACT 1U18FD006297-01	93.103	1 -
				1 -
	Children's Hospital Los Angeles - Maternal and Child Health Federal Consolidated Programs	CHAT-1901	93.110	6,351 -
	Icahn School of Medicine at Mount Sinai (ISMMS) - Maternal and Child Health Federal Consolidated Programs	0253-7151-4609	93.110	15,978 -
				22,329 -
	Duke University - Environmental Health	A03-2603	93.113	10,341 -
	Washington University in St. Louis - Environmental Health	WU-23-0302	93.113	48,465 -
	Emory University - Environmental Health	A014068	93.113	53,753 -
	University of Arizona - Environmental Health	579610	93.113	74,904 -

**Yale University**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
<u>Pass-through: (Continued)</u>				
University of California, Berkeley - Environmental Health	00010812	93.113	\$ 120,624	\$ -
			308,087	-
University of Washington, Seattle - Oral Diseases and Disorders Research	UWSC13466	93.121	48,963	-
University of Connecticut Health Center - Oral Diseases and Disorders Research	UCHC7-160763058	93.121	108,155	-
University of North Carolina - Oral Diseases and Disorders Research	5113679	93.121	239,005	-
			396,123	-
University of California, Davis - Emergency Medical Services for Children	A20-1236-S002	93.127	3,298	-
University of Texas at Austin - Emergency Medical Services for Children	UTA20-000621	93.127	450,479	117,172
			453,777	117,172
University of Kentucky - NIEHS Superfund Hazardous Substances_Basic Research and Education	3210002371-23-121	93.143	1,175	-
Harvard School of Public Health - NIEHS Superfund Hazardous Substances_Basic Research and Education	113146-5111923	93.143	10,349	-
Harvard School of Public Health - NIEHS Superfund Hazardous Substances_Basic Research and Education	113146-5111852	93.143	22,379	-
Harvard School of Public Health - NIEHS Superfund Hazardous Substances_Basic Research and Education	113146-5111852	93.143	50,314	-
University of Louisville Research Fdn, Inc - NIEHS Superfund Hazardous Substances_Basic Research and Education	ULRF-21-0642J1-01	93.143	258,450	-
			342,667	-
University of Massachusetts, Worcester - HIV-Related Training and Technical Assistance	OSP29994-08	93.145	9,401	-
University of Massachusetts, Worcester - HIV-Related Training and Technical Assistance	OSP29994-08	93.145	377,328	-
			386,729	-
Stanford University - Human Genome Research	62690934-208880	93.172	1	-
Oregon Health Sciences University - Human Genome Research	1020958_YALE	93.172	1	-
Jackson Laboratory - Human Genome Research	210368-0224-09	93.172	4,911	-
Jackson Laboratory - Human Genome Research	210314-0523-02	93.172	35,707	-
Jackson Laboratory - Human Genome Research	210354-0823-07	93.172	37,012	-
University of California, Santa Cruz - Human Genome Research	A20-0450-5007	93.172	45,394	-
Washington University in St. Louis - Human Genome Research	WU-21-174	93.172	72,851	-
Jackson Laboratory - Human Genome Research	210314-0523-11	93.172	105,206	-
Oregon Health Sciences University - Human Genome Research	1020958_YALE	93.172	113,234	-
University of Massachusetts - Human Genome Research	OSP2017187	93.172	139,112	-
Northeastern University - Human Genome Research	500694-78050	93.172	144,527	-
Washington University in St. Louis - Human Genome Research	WU-21-191	93.172	217,033	-
European Bioinformatics Institute - EMBL-EBI - Human Genome Research	5U24HG007234-10 YALE-4559-02	93.172	306,738	-
Washington University in St. Louis - Human Genome Research	WU-23-0290	93.172	329,929	-
Stanford University - Human Genome Research	U24HG012012/62690935-208880	93.172	357,440	-
			1,909,096	-
Sacred Heart University - Research Related to Deafness and Communication Disorders	21-62138-21-116	93.173	635	-
The Trustees of Columbia University in the City of New York - Research Related to Deafness and Communication Disorders	5(GG015069-03)	93.173	121,190	-
Columbia University - Research Related to Deafness and Communication Disorders	2(GG015069-01)	93.173	186,221	-
			308,046	-
University of Texas at Austin - Immunization Research, Demonstration, Public Information and Education_Training and Clinica	UTA20-000942/UTAUS-SUB00000110AM1	93.185	27,250	-
University of Texas at Austin - Immunization Research, Demonstration, Public Information and Education_Training and Clinica	UTA20-000942 PARENT 26220280	93.185	133,789	-
Centers for Disease Control and Prevention (CDC)/DHHS - Immunization Research, Demonstration, Public Information and E	1U01IP001110-01-00	93.185	291,068	12,395
			452,107	12,395
New York University - Research and Training in Complementary and Integrative Health	17-A0-00-008501	93.213	8,868	-
Northern California Institute for Research & Education - Research and Training in Complementary and Integrative Health	SEAL2242-01	93.213	10,034	-
Northern California Institute for Research & Education - Research and Training in Complementary and Integrative Health	SEAL2242-01	93.213	83,545	40,099

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**Yale University**  
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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing Number	Expenditures	Subrecipient Expenditures
		Number		
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
Palmer College Foundation - Research and Training in Complementary and Integrative Health	12274	93.213	\$ 398,079	\$ -
			500,526	40,099
Johns Hopkins University - Research on Healthcare Costs, Quality and Outcomes	2004987469	93.226	738	-
Johns Hopkins University - Research on Healthcare Costs, Quality and Outcomes	2004987469	93.226	10,230	-
Regents of the University of Michigan - Research on Healthcare Costs, Quality and Outcomes	SUBK00018211	93.226	81,426	-
New York University School of Medicine - Research on Healthcare Costs, Quality and Outcomes	19-A0-00-003674	93.226	178,324	-
			270,718	-
New York University - National Center on Sleep Disorders Research	21-A0-00-1006478/Project #118604	93.233	136,219	-
			136,219	-
Research Foundation of State University of New York (SUNY) - Mental Health Research Grants	76296	93.242	47	-
Cornell University - Mental Health Research Grants	144729-21932	93.242	1,917	-
Research Foundation of State University of New York (SUNY) - Mental Health Research Grants	100-1160744-87896	93.242	3,177	-
University of Iowa - Mental Health Research Grants	S02816-01	93.242	3,511	-
Rutgers (the State University of New Jersey) - Mental Health Research Grants	0821	93.242	5,025	-
Washington University in St. Louis - Mental Health Research Grants	WU-21-183-MOD-2	93.242	9,095	-
University of Maryland - Mental Health Research Grants	97339-Z0315202	93.242	11,690	-
Johns Hopkins University - Mental Health Research Grants	2004870606	93.242	12,053	-
Hartford Hospital - Mental Health Research Grants	126370-Y1	93.242	12,089	-
Rutgers (the State University of New Jersey) - Mental Health Research Grants	2012	93.242	12,240	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-G801-4609	93.242	13,912	-
University of Massachusetts Medical School - Mental Health Research Grants	SUB00000215	93.242	15,572	-
University of New Mexico - Mental Health Research Grants	3RNY7	93.242	16,069	-
George Washington University - Mental Health Research Grants	21-M80	93.242	17,721	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-E822-4609	93.242	19,294	-
Hartford Hospital - Mental Health Research Grants	126379-Y	93.242	23,192	-
COVID-19 Regents University of California, San Francisco - Mental Health Research Grants	14213sc	93.242	23,338	-
University of Vermont - Mental Health Research Grants	34337SUB00000223	93.242	25,413	-
Florida International University - Mental Health Research Grants	000335	93.242	29,382	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-E532-4609	93.242	31,617	-
Columbia University - Mental Health Research Grants	2(GG014816-01)	93.242	34,284	-
Boston University - Mental Health Research Grants	4500003636	93.242	36,095	-
Johns Hopkins University - Mental Health Research Grants	2005239823	93.242	44,336	-
Research Foundation for Mental Hygiene - Mental Health Research Grants	140830	93.242	44,624	-
University of Maryland - Mental Health Research Grants	1802424/3307/4007	93.242	45,312	-
University of Connecticut - Mental Health Research Grants	164529756	93.242	45,815	-
Rutgers (the State University of New Jersey) - Mental Health Research Grants	0459	93.242	52,624	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-E821-4609	93.242	59,056	-
Georgia State University Research Foundation - Mental Health Research Grants	SP00015049-02	93.242	65,121	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-F662-4609	93.242	65,293	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-C272-4609	93.242	66,663	-
The Florida International University Board of Trustees - Mental Health Research Grants	000639	93.242	67,189	-
University of Pennsylvania - Mental Health Research Grants	583167	93.242	70,413	-
University of California, San Diego - Mental Health Research Grants	KR 704696	93.242	79,329	-
Regents University of California, San Francisco - Mental Health Research Grants	10936sc	93.242	84,531	-
Hartford Hospital - Mental Health Research Grants	126360-Y1	93.242	89,062	-
University of Pennsylvania - Mental Health Research Grants	583978	93.242	94,172	-

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing		Subrecipient Expenditures
		Number	Expenditures	
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-8053-4609	93.242	\$ 108,499	\$ -
Columbia University - Mental Health Research Grants	1(GG015103-01)	93.242	112,163	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-3711-4609	93.242	120,114	-
University of Massachusetts - Mental Health Research Grants	OSP2018096	93.242	121,579	-
The Trustees of Columbia University in the City of New York - Mental Health Research Grants	1(GG017773-01)	93.242	121,684	-
Children's Hospital of Philadelphia (The) - Mental Health Research Grants	20412544/GRT-00002437	93.242	131,824	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-C271-4609	93.242	155,576	-
NEW YORK GENOME CENTER, INC. - Mental Health Research Grants	2021-0050-Yale-01	93.242	165,273	-
Indiana University - Mental Health Research Grants	8818-YU	93.242	166,235	-
Research Foundation of State University of New York (SUNY) - Mental Health Research Grants	100-1087883-91809	93.242	173,058	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-F381-4609	93.242	177,641	-
University of California, Los Angeles (UCLA) - Mental Health Research Grants	2000 G WF250	93.242	180,005	-
Duke University - Mental Health Research Grants	A034583	93.242	240,475	-
Feinstein Institute for Medical Research (The) - Mental Health Research Grants	AWD00001140-YU	93.242	318,105	-
University of Virginia - Mental Health Research Grants	GR100562.SUB00000198 / AWD-004197.GR100562	93.242	328,380	-
Florida International University - Mental Health Research Grants	800010268-01	93.242	468,834	-
Regents University of California, San Francisco - Mental Health Research Grants	13997sc	93.242	590,875	-
			5,010,593	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Occupational Safety and Health Program	0254-5984-4609	93.262	142	-
			142	-
Virginia Commonwealth University - Alcohol Research Programs	R01DA047880	93.273	1	-
Syracuse University - Alcohol Research Programs	30505-05408-S01	93.273	16,901	-
University of Louisville Research Fdn, Inc - Alcohol Research Programs	ULRF_21-0656-01	93.273	21,069	-
Vanderbilt University Medical Center - Alcohol Research Programs	VUMC95888	93.273	34,991	-
Virginia Commonwealth University - Alcohol Research Programs	FP00009867_SA003	93.273	50,679	-
University of Kentucky - Alcohol Research Programs	3200005087-23-089	93.273	85,578	-
Mayo Clinic of Rochester - Alcohol Research Programs	YAL-243530-04	93.273	134,526	-
New York University School of Medicine - Alcohol Research Programs	19-A1-00-1001516/112563	93.273	136,598	-
New York University School of Medicine - Alcohol Research Programs	19-A0-00-1002752	93.273	161,276	-
New York University - Alcohol Research Programs	22-A0-00-1007862/Project #260926	93.273	181,125	-
University of California, Irvine - Alcohol Research Programs	2022-1779	93.273	256,294	-
			1,079,038	-
University of California, Los Angeles (UCLA) - Drug Abuse and Addiction Research Programs	1445 G XB107	93.279	(37,976)	-
Partnership to End Addiction - Drug Abuse and Addiction Research Programs	NIDA R24DA051946	93.279	1,450	-
Boston Medical Center - Drug Abuse and Addiction Research Programs	BMC #6738	93.279	2,489	-
University of California, San Diego - Drug Abuse and Addiction Research Programs	705676	93.279	3,769	-
Dartmouth College - Drug Abuse and Addiction Research Programs	R1663	93.279	9,222	-
University of California, Los Angeles (UCLA) - Drug Abuse and Addiction Research Programs	1935 G VA649	93.279	10,700	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	582578	93.279	11,604	-
University of California, Davis - Drug Abuse and Addiction Research Programs	A22-1977-S002	93.279	12,855	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Drug Abuse and Addiction Research Programs	0255-F875-4609	93.279	14,918	-
University of Connecticut - Drug Abuse and Addiction Research Programs	146488263	93.279	21,653	-
RAND Corporation - Drug Abuse and Addiction Research Programs	SCON-00000442	93.279	24,500	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Drug Abuse and Addiction Research Programs	0255-F873-4609	93.279	25,408	-
RTI International - Drug Abuse and Addiction Research Programs	1-312-0217761-66296L	93.279	27,764	-
Massachusetts General Hospital - Drug Abuse and Addiction Research Programs	241902	93.279	28,118	-
Simon Fraser University - Drug Abuse and Addiction Research Programs	20099	93.279	29,231	-

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**Yale University**  
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		Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
University of Pennsylvania - Drug Abuse and Addiction Research Programs	582578	93.279	\$ 34,450	\$ -
National Institute on Drug Abuse (NIDA)/NIH/DHHS - Drug Abuse and Addiction Research Programs	169866	93.279	35,147	-
New York University School of Medicine - Drug Abuse and Addiction Research Programs	22-A0-00-1008538	93.279	39,474	-
Dartmouth College - Drug Abuse and Addiction Research Programs	R1469	93.279	43,773	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Drug Abuse and Addiction Research Programs	0255-C601-4609	93.279	47,244	-
RTI International - Drug Abuse and Addiction Research Programs	1-312-0217653-66170L	93.279	48,224	-
Center for Social Innovation - Drug Abuse and Addiction Research Programs	NIDA-OASIS	93.279	48,937	-
Boston Medical Center - Drug Abuse and Addiction Research Programs	BMC #6738	93.279	50,987	-
New York University School of Medicine - Drug Abuse and Addiction Research Programs	17-A1-00006921	93.279	57,431	-
Washington University in St. Louis - Drug Abuse and Addiction Research Programs	WU-23-0073	93.279	68,859	-
Hennepin Healthcare Research Institute - Drug Abuse and Addiction Research Programs	15477-02	93.279	73,547	-
Board of Trustees of Leland Stanford Junior University - Drug Abuse and Addiction Research Programs	63017761-257650	93.279	74,905	-
Research Triangle Institute - Drug Abuse and Addiction Research Programs	1-312-0216573-65364L	93.279	89,963	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	585172	93.279	99,591	-
Indiana University - Drug Abuse and Addiction Research Programs	9246_YALE	93.279	110,071	-
University of Massachusetts - Drug Abuse and Addiction Research Programs	S51110000040533	93.279	114,210	-
Stanford University - Drug Abuse and Addiction Research Programs	62097889-26345	93.279	124,436	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	585172	93.279	137,993	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	585172	93.279	145,621	-
Research Foundation for Mental Hygiene - Drug Abuse and Addiction Research Programs	158463	93.279	166,109	-
University of Connecticut - Drug Abuse and Addiction Research Programs	420109/KFS #5663920	93.279	172,003	-
Hennepin Healthcare Research Institute - Drug Abuse and Addiction Research Programs	15390-02	93.279	287,794	-
New York University School of Medicine - Drug Abuse and Addiction Research Programs	18-A0-001001703/111675	93.279	844,193	-
			3,100,667	-
Connecticut Dept. of Public Health (DPH) - Centers for Disease Control and Prevention_Investigations and Technical Assistar	2023-0103	93.283	2,164,212	-
Connecticut Dept. of Public Health (DPH) - Centers for Disease Control and Prevention_Investigations and Technical Assistar	2017-0026-6	93.283	2,181,718	-
			4,345,930	-
Board of Trustees of Leland Stanford Junior University - Discovery and Applied Research for Technological Innovations to Improve Human Health	62244871-159445	93.286	802	-
University of California, San Diego - Discovery and Applied Research for Technological Innovations to Improve Human Health	704653	93.286	9,823	-
Vanderbilt University - Discovery and Applied Research for Technological Innovations to Improve Human Health	OSA00000188	93.286	25,674	-
Pennsylvania State University - Discovery and Applied Research for Technological Innovations to Improve Human Health	YUEB014641	93.286	74,569	-
University of Minnesota - Discovery and Applied Research for Technological Innovations to Improve Human Health	N006264805	93.286	235,917	-
			346,785	-
Beth Israel Deaconess Medical Center - Teenage Pregnancy Prevention Program	GRT65038	93.297	46,495	-
			46,495	-
Brigham and Women's Hospital - Minority Health and Health Disparities Research	127174	93.307	55,510	-
Morehouse School of Medicine - Minority Health and Health Disparities Research	RCC-001 YALE (parent)	93.307	118,547	-
			174,057	-
Baylor College of Medicine - Trans-NIH Research Support	7000001324	93.310	1,027	-
Regents of the University of Minnesota - Trans-NIH Research Support	P010409603	93.310	4,023	-
Duke University - Trans-NIH Research Support	303001799	93.310	11,381	-
Rutgers (the State University of New Jersey) - Trans-NIH Research Support	SUB00002751	93.310	19,608	-
University of North Carolina - Trans-NIH Research Support	5127717	93.310	31,210	-
University of North Carolina - Trans-NIH Research Support	5121993	93.310	36,903	-

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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance		
		Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
COVID-19 Rutgers (the State University of New Jersey) - Trans-NIH Research Support	1818	93.310	\$ 39,596	\$ -
Black Hills Center for American Indian Health - Trans-NIH Research Support	S06GM146079A	93.310	45,257	-
Vanderbilt University - Trans-NIH Research Support	10T2OD035404-01	93.310	52,000	-
Baylor College of Medicine - Trans-NIH Research Support	70000001053	93.310	52,640	-
University of North Carolina - Trans-NIH Research Support	5124052/5118241/5120021	93.310	80,813	-
University of North Carolina - Trans-NIH Research Support	5125795 (previously 5121993)	93.310	213,114	-
			587,572	-
COVID-19 Women & Infants Hospital of Rhode Island - NIH Office of Research on Women's Health	RECOVER	93.313	17,683	-
			17,683	-
New York University School of Medicine - National Center for Advancing Translational Sciences	3UL1TR001445-05S3	93.350	1	-
New York University School of Medicine - National Center for Advancing Translational Sciences	Clinical Study Protocol s20-00541; 20-A0-S1-004185,	93.350	60,057	-
Mayo Clinic of Rochester - National Center for Advancing Translational Sciences	YAL-254500-03/PO #68227172	93.350	85,130	-
Mayo Clinic of Rochester - National Center for Advancing Translational Sciences	YAL-254500-04/PO #68942259	93.350	115,687	-
National Jewish Health - National Center for Advancing Translational Sciences	20115904	93.350	165,386	-
			426,261	-
COVID-19 University of Massachusetts, Worcester - Research Infrastructure Programs	SUB00000073	93.351	11,897	-
			11,897	-
Duke University - 21st Century Cures Act - Beau Biden Cancer Moonshot	A034458	93.353	18,470	-
H. Lee Moffitt Cancer Center & Research Institute, Inc. - 21st Century Cures Act - Beau Biden Cancer Moonshot	10-19767-04-02-G1	93.353	31,627	-
			50,097	-
University of Colorado, Denver - Nursing Research	FY22.105.008	93.361	12,738	-
COVID-19 New York University - Nursing Research	F1970-01	93.361	104,775	-
University of Colorado, Denver - Nursing Research	FY22.342.014 / R01NR019989	93.361	194,894	-
			312,407	-
Emory University - Cancer Cause and Prevention Research	A763736	93.393	7,045	-
New York University - Cancer Cause and Prevention Research	21-A1-00-1004038	93.393	12,156	-
Johns Hopkins University - Cancer Cause and Prevention Research	2005629758	93.393	12,948	-
Georgetown University - Cancer Cause and Prevention Research	425346_GR425204_YU-New	93.393	13,978	-
Johns Hopkins University - Cancer Cause and Prevention Research	2004811763	93.393	15,567	-
University of Michigan - Cancer Cause and Prevention Research	SUBK00012361	93.393	20,577	-
University of Massachusetts, Worcester - Cancer Cause and Prevention Research	OSP32495-01	93.393	24,645	-
University of Southern California - Cancer Cause and Prevention Research	SCON-00003530	93.393	27,773	-
University of Southern California - Cancer Cause and Prevention Research	SCON-00003764	93.393	123,914	-
Medical University of South Carolina - Cancer Cause and Prevention Research	A21-0022-S001	93.393	142,936	-
Washington University in St. Louis - Cancer Cause and Prevention Research	WU-23-0361	93.393	235,935	-
			637,474	-
University of California, San Francisco - Cancer Detection and Diagnosis Research	10731sc	93.394	1,507	-
University of California, San Francisco - Cancer Detection and Diagnosis Research	10730SC	93.394	1,507	-
Washington University in St. Louis - Cancer Detection and Diagnosis Research	WU-22-0181	93.394	2,053	-
Hutchinson (Fred) Cancer Research Center - Cancer Detection and Diagnosis Research	0001130578	93.394	19,385	-
Washington University in St. Louis - Cancer Detection and Diagnosis Research	WU-23-0260	93.394	54,173	-
Mayo Clinic of Rochester - Cancer Detection and Diagnosis Research	YAL-275155	93.394	64,884	-
Dana Farber Cancer Institute - Cancer Detection and Diagnosis Research	1292701	93.394	102,846	-
			246,355	-

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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing		Subrecipient Expenditures
		Number	Expenditures	
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
Public Health Institute - Cancer Treatment Research	AR13090	93.395	\$ 1	\$ -
Public Health Institute - Cancer Treatment Research	AR03259	93.395	1	-
George Washington University - Cancer Treatment Research	22-M09	93.395	1,319	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Petrylak	93.395	2,447	-
Mayo Clinic of Rochester - Cancer Treatment Research	YAL-289763-01/P.O.69096777	93.395	4,545	-
ECOG-ACRIN Cancer Research Group - Cancer Treatment Research	U10CA180820-06-YALE1C	93.395	6,629	-
US Department of Health and Human Services (DHHS) - Cancer Treatment Research	AR10408	93.395	6,677	-
Public Health Institute - Cancer Treatment Research	AR13090	93.395	6,677	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Herbst	93.395	6,770	-
Research Foundation of State University of New York (SUNY) - Cancer Treatment Research	R1275687	93.395	7,218	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Chiang	93.395	11,033	-
ECOG-ACRIN Cancer Research Group - Cancer Treatment Research	U10CA180820-06-YALE1C	93.395	13,343	-
Mayo Clinic of Rochester - Cancer Treatment Research	YTY-289763	93.395	14,285	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Politi	93.395	14,739	-
Mayo Clinic of Rochester - Cancer Treatment Research	YLE-289763	93.395	17,794	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Petrylak	93.395	22,027	-
Children's Hospital of Philadelphia (The) - Cancer Treatment Research	PO960236RSUB	93.395	26,202	-
Oregon Health Sciences University - Cancer Treatment Research	1013080-006_Yale	93.395	28,465	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Politi	93.395	33,425	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE	93.395	55,230	-
University of Minnesota - Cancer Treatment Research	N008125903	93.395	65,606	-
Ohio State University - Cancer Treatment Research	SPC-1000006107	93.395	66,730	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE	93.395	74,081	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_Yale	93.395	86,063	-
University of Alabama at Birmingham - Cancer Treatment Research	000531215	93.395	100,486	-
Alliance for Clinical Trials in Oncology - Cancer Treatment Research	125263	93.395	122,846	-
Medical University of South Carolina - Cancer Treatment Research	A00-2799-S001 / MUSC16-084-8C234	93.395	182,798	-
Mayo Clinic of Rochester - Cancer Treatment Research	YUN-289763/P.O. #68352733	93.395	296,087	-
US Department of Health and Human Services (DHHS) - Cancer Treatment Research	7R01CA237652	93.395	452,080	-
Bessor Pharma, LLC - Cancer Treatment Research	R44CA224463	93.395	673,178	-
			2,398,782	-
University of Connecticut - Cancer Biology Research	148263429	93.396	2,223	-
University of Chicago - Cancer Biology Research	AWD101836 (SUB00000496)	93.396	3,785	-
University of Chicago - Cancer Biology Research	AWD102783 (SUB00000644)	93.396	15,297	-
Columbia University - Cancer Biology Research	2(GG0013365-05)	93.396	16,480	-
Brown University - Cancer Biology Research	00002230	93.396	17,277	-
Dana Farber Cancer Institute - Cancer Biology Research	1174104	93.396	38,153	-
	CINCY CHILDREN'S HOSPITAL MEDICAL CENTER			
Cincinnati Children's Hospital Medical Center - Cancer Biology Research	SUBAWARD FOR MODELING MYELODYSPLASIA	93.396	71,974	-
Sage Bionetworks - Cancer Biology Research	2022.10	93.396	84,944	-
Brown University - Cancer Biology Research	00001917	93.396	130,781	-

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		Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
Washington University in St. Louis - Cancer Biology Research	WU-20-404	93.396	\$ 162,087	\$ -
University of Arizona - Cancer Biology Research	586645	93.396	207,873	-
Cincinnati Children's Hospital Medical Center - Cancer Biology Research	313686	93.396	241,976	-
Dana Farber Cancer Institute - Cancer Biology Research	1174203/1174204	93.396	401,964	-
National Cancer Institute (NCI)/NIH/DHHS - Cancer Biology Research	1R01CA237037	93.396	453,288	-
			1,848,102	-
University of Pittsburgh - Cancer Centers Support Grants	AWD00006483 (800037-1)	93.397	19,962	-
Dana Farber Cancer Institute - Cancer Centers Support Grants	1230509	93.397	21,946	-
Dana Farber Cancer Institute - Cancer Centers Support Grants	1305009	93.397	21,973	-
Johns Hopkins University - Cancer Centers Support Grants	2005391976	93.397	46,900	-
Institute for Systems Biology - Cancer Centers Support Grants	2022.0012 P060672	93.397	58,036	-
Institute for Systems Biology - Cancer Centers Support Grants	2022.0012 P060669	93.397	64,944	-
Johns Hopkins University - Cancer Centers Support Grants	2005391976	93.397	86,610	-
			320,371	-
Dana Farber Cancer Institute - Cancer Research Manpower	1243004	93.398	1,597	-
			1,597	-
ECOG-ACRIN Cancer Research Group - Cancer Control	UG1CA189828-09-YALE1	93.399	19,992	-
Oregon Health Sciences University - Cancer Control	1014562_YALE	93.399	29,286	-
			49,278	-
Brown University - Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health	00002314	93.421	12,822	-
Yale New Haven Health Systems - Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health	CK22-2203-YSM-ID-01	93.421	119,798	-
			132,620	-
Boston University - Public Health Training Centers Program	4500004369	93.516	120,024	-
			120,024	-
State of CT Dept of Mental Health and Addiction Services - Emergency Grants to Address Mental and Substance Use Disorders During COVID-19	22MHA1015	93.665	93,585	-
State of CT Dept of Mental Health and Addiction Services - Emergency Grants to Address Mental and Substance Use Disorders During COVID-19	22MHA1016	93.665	238,529	-
			332,114	-
BioGraft, Inc. - Cardiovascular Diseases Research	2022-162397-3	93.837	1,005	-
SUNY Downstate Medical Center - Cardiovascular Diseases Research	100-1091654-93310	93.837	1,594	-
Ohio State University - Cardiovascular Diseases Research	GR124557/PO #SPC-1000005405	93.837	1,723	-
Ohio State University - Cardiovascular Diseases Research	GR129950/PO #SPC-1000011810	93.837	1,798	-
Inova Health Care Services - Cardiovascular Diseases Research	OSPRSD-537	93.837	2,243	-
John B. Pierce Laboratory Inc. (The) - Cardiovascular Diseases Research	281-B	93.837	3,708	-

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**Schedule of Expenditures of Federal Awards**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
<u>Pass-through: (Continued)</u>				
Research Institute at Nationwide Children's Hospital (The) - Cardiovascular Diseases Research	700250-0324-00	93.837	\$ 5,786	\$ -
Children's Hospital Boston - Cardiovascular Diseases Research	GENFD0002297444	93.837	8,966	-
Massachusetts General Hospital - Cardiovascular Diseases Research	A5332	93.837	10,236	-
Weill Medical College of Cornell University - Cardiovascular Diseases Research	226310	93.837	10,453	-
Research Institute at Nationwide Children's Hospital (The) - Cardiovascular Diseases Research	700284-0324-00	93.837	11,822	-
University of Alabama at Birmingham - Cardiovascular Diseases Research	000503570-SC048	93.837	13,191	-
Cincinnati Children's Hospital Medical Center - Cardiovascular Diseases Research	Sub# Project 313945 / Agreement #OS0003149	93.837	14,000	-
Brigham and Women's Hospital - Cardiovascular Diseases Research	2020A015252	93.837	14,390	-
University of Pittsburgh - Cardiovascular Diseases Research	AWD00003099 (135921-1)	93.837	15,262	-
Research Institute at Nationwide Children's Hospital (The) - Cardiovascular Diseases Research	700250-0323-00	93.837	16,655	-
Vanderbilt University Medical Center - Cardiovascular Diseases Research	VUMC84785	93.837	18,303	-
Weill Medical College of Cornell University - Cardiovascular Diseases Research	220683	93.837	19,124	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Cardiovascular Diseases Research	0255-A348-4605	93.837	20,795	-
MedStar Health Research Institute - Cardiovascular Diseases Research	5002425001	93.837	21,388	-
Regents of the University of California - Cardiovascular Diseases Research	1718 G LA224	93.837	21,499	-
University of Alabama at Birmingham - Cardiovascular Diseases Research	000530812-SC017	93.837	21,836	-
The Trustees of Columbia University in the City of New York - Cardiovascular Diseases Research	5(G0012878-01)	93.837	22,175	-
John B. Pierce Laboratory Inc. (The) - Cardiovascular Diseases Research	300-A	93.837	22,884	-
University of California, San Francisco - Cardiovascular Diseases Research	13220sc	93.837	26,300	-
Vitalant Research Institute - Cardiovascular Diseases Research	11745YU148	93.837	27,624	-
Research Institute at Nationwide Children's Hospital (The) - Cardiovascular Diseases Research	700284-0323-00	93.837	31,145	-
Case Western Reserve University - Cardiovascular Diseases Research	RES514115	93.837	31,546	-
Board of Trustees of Leland Stanford Junior University - Cardiovascular Diseases Research	63064713-208825	93.837	32,675	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Cardiovascular Diseases Research	0255-A421-4609	93.837	38,946	-
Temple University - Cardiovascular Diseases Research	265891-04-YU / 265891	93.837	41,067	-
Emory University - Cardiovascular Diseases Research	A591443	93.837	41,357	-
Cincinnati Children's Hospital Medical Center - Cardiovascular Diseases Research	313945 / OS0002609	93.837	48,904	-
Rutgers, the State University of New Jersey - Cardiovascular Diseases Research	2357/2927	93.837	51,108	-
Cincinnati Children's Hospital Medical Center - Cardiovascular Diseases Research	313945	93.837	54,049	-
Regents of the University of Michigan - Cardiovascular Diseases Research	SUB00012350	93.837	68,494	-
The Miriam Hospital - Cardiovascular Diseases Research	710-7147188	93.837	70,783	-
University of Miami - Cardiovascular Diseases Research	OS00000899	93.837	71,526	-
Massachusetts General Hospital - Cardiovascular Diseases Research	240133	93.837	71,659	-
Vanderbilt University Medical Center - Cardiovascular Diseases Research	VUMC95997	93.837	83,475	-
University of Connecticut Health Center - Cardiovascular Diseases Research	UCHC7-159820958	93.837	87,868	-
Georgia Institute of Technology - Cardiovascular Diseases Research	RK055-G1/AWD-102065-G1	93.837	88,690	-
Emory University - Cardiovascular Diseases Research	A575016	93.837	97,019	-
New York University School of Medicine - Cardiovascular Diseases Research	17-A1-00-005849-01, Project 111219	93.837	99,969	-
The Trustees of Columbia University in the City of New York - Cardiovascular Diseases Research	4(G0012878-01)	93.837	103,967	-
University of Illinois at Urbana-Champaign - Cardiovascular Diseases Research	097337-17689	93.837	191,346	-

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>Department of Health &amp; Human Services</u>				
<u>Pass-through: (Continued)</u>				
New York University School of Medicine - Cardiovascular Diseases Research	17-A1-00-005849-01; Project 111223	93.837	\$ 266,353	\$ -
Texas A&M University - Cardiovascular Diseases Research	M2002222	93.837	278,768	-
Northeastern University - Cardiovascular Diseases Research	500836-78050	93.837	280,970	-
New York University School of Medicine - Cardiovascular Diseases Research	17-A1-00-005849-01	93.837	301,128	-
			<u>2,887,572</u>	<u>-</u>
University of California, San Diego - Lung Diseases Research	R01HL161362	93.838	1	-
University of Pennsylvania - Lung Diseases Research	1-R01-HL-168202-01	93.838	1	-
Brigham and Women's Hospital - Lung Diseases Research	127057	93.838	13,153	-
University of Miami - Lung Diseases Research	OS00001149	93.838	14,550	-
Medical University of South Carolina - Lung Diseases Research	A22-0205-S001	93.838	26,472	-
Children's Research Institute - Lung Diseases Research	30006708-01	93.838	31,604	-
Vanderbilt University Medical Center - Lung Diseases Research	VUMC73926	93.838	76,254	-
Rutgers, the State University of New Jersey - Lung Diseases Research	OT2HL161847-01	93.838	90,000	-
North Shore University Health System - Lung Diseases Research	EH17-325-S3	93.838	92,627	-
University of North Carolina - Lung Diseases Research	5125917-H3YALEUNIV	93.838	100,933	-
Duke University - Lung Diseases Research	303001253	93.838	193,846	-
COVID-19 University of California, San Diego - Lung Diseases Research	KR 705106	93.838	204,417	-
University of California, San Diego - Lung Diseases Research	705870	93.838	287,390	-
			<u>1,131,248</u>	<u>-</u>
Research Institute at Nationwide Children's Hospital (The) - Blood Diseases and Resources Research	700277-0223-00	93.839	1	-
Washington University in St. Louis - Blood Diseases and Resources Research	WU-18-416	93.839	6,441	-
University of Texas M.D. Anderson Cancer Center - Blood Diseases and Resources Research	3001584796	93.839	13,316	-
Boston Medical Center - Blood Diseases and Resources Research	7375	93.839	51,199	-
National Institute of Allergy and Infectious Diseases (NIAID)/NIH/DHHS - Blood Diseases and Resources Research	1R21AI164106	93.839	107,476	-
			<u>178,433</u>	<u>-</u>
University of Pittsburgh - Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	AWD00002957 (136570-1)	93.840	8,660	-
Infectious Diseases Research Collaboration - Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	IDRC0002sc	93.840	16,715	-
Infectious Diseases Research Collaboration - Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	IDRC0006sc	93.840	28,265	-
Vanderbilt University Medical Center - Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	VUMC 92554	93.840	216,192	-
			<u>269,832</u>	<u>-</u>
University of Pittsburgh - Arthritis, Musculoskeletal and Skin Diseases Research	AWD00006473 (138826-3)	93.846	7,511	-
Jackson Laboratory - Arthritis, Musculoskeletal and Skin Diseases Research	210320-1122-02	93.846	23,879	-
Thomas Jefferson University - Arthritis, Musculoskeletal and Skin Diseases Research	080-13000-S49001	93.846	38,382	-
Johns Hopkins University - Arthritis, Musculoskeletal and Skin Diseases Research	2003134842	93.846	47,809	-
New York University School of Medicine - Arthritis, Musculoskeletal and Skin Diseases Research	21-A1-00-1004532	93.846	123,960	-
US Department of Health and Human Services (DHHS) - Arthritis, Musculoskeletal and Skin Diseases Research	K08AR073933	93.846	173,443	-
Regents of the University of Michigan - Arthritis, Musculoskeletal and Skin Diseases Research	SUBK00014523	93.846	276,206	-
		93.846	<u>691,190</u>	<u>-</u>
Bessor Pharma, LLC - Diabetes, Digestive, and Kidney Diseases Extramural Research	2R44DK111251	93.847	(15,243)	-
Northern California Institute for Research & Education - Diabetes, Digestive, and Kidney Diseases Extramural Research	EST2375-01	93.847	1	-
Oregon Health Sciences University - Diabetes, Digestive, and Kidney Diseases Extramural Research	1020881_YALE	93.847	316	-
Maine Medical Center Research Institute - Diabetes, Digestive, and Kidney Diseases Extramural Research	ROSEN R24-01	93.847	1,232	-
George Washington University - Diabetes, Digestive, and Kidney Diseases Extramural Research	17-D20	93.847	6,314	-
University of Texas Southwestern Medical Center (The) - Diabetes, Digestive, and Kidney Diseases Extramural Research	GMO-161122	93.847	6,464	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance		
		Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
University of Connecticut Health Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	UCHC7-137141562	93.847	\$ 6,584	\$ -
Johns Hopkins University - Diabetes, Digestive, and Kidney Diseases Extramural Research	2004809308	93.847	7,408	-
University of North Carolina - Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK123227	93.847	7,715	-
Case Western Reserve University - Diabetes, Digestive, and Kidney Diseases Extramural Research	RES516365	93.847	8,168	-
Regents University of California, San Francisco - Diabetes, Digestive, and Kidney Diseases Extramural Research	11967sc	93.847	9,990	-
Drexel University - Diabetes, Digestive, and Kidney Diseases Extramural Research	800159	93.847	11,045	-
University of Utah - Diabetes, Digestive, and Kidney Diseases Extramural Research	10055841-26-Yale	93.847	11,825	-
New York Blood Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	RCP-NIH563	93.847	11,936	-
Stanford University - Diabetes, Digestive, and Kidney Diseases Extramural Research	62981087-247133	93.847	12,995	-
University of Connecticut Health Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	UCHC7-166643587	93.847	14,818	-
University of Utah - Diabetes, Digestive, and Kidney Diseases Extramural Research	10055841-31-YALE	93.847	15,604	-
Ann & Robert H. Lurie Children's Hospital - Diabetes, Digestive, and Kidney Diseases Extramural Research	901628- Yale	93.847	18,047	-
University of Maryland at Baltimore - Diabetes, Digestive, and Kidney Diseases Extramural Research	20835	93.847	19,832	-
Case Western Reserve University - Diabetes, Digestive, and Kidney Diseases Extramural Research	RES516476	93.847	21,992	-
University of Maryland at Baltimore - Diabetes, Digestive, and Kidney Diseases Extramural Research	F303286-1	93.847	23,809	-
New York Blood Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	RCP - NIH560	93.847	26,127	-
George Washington University - Diabetes, Digestive, and Kidney Diseases Extramural Research	S-GRD2122-LL37	93.847	27,360	-
Temple University - Diabetes, Digestive, and Kidney Diseases Extramural Research	268595-Yale	93.847	34,212	-
University of Utah - Diabetes, Digestive, and Kidney Diseases Extramural Research	10055841-20-YU	93.847	36,553	-
University of California, San Diego - Diabetes, Digestive, and Kidney Diseases Extramural Research	KR 705632	93.847	38,953	-
George Washington University - Diabetes, Digestive, and Kidney Diseases Extramural Research	S-GRD2223-LL37	93.847	43,849	-
University of Washington, Seattle - Diabetes, Digestive, and Kidney Diseases Extramural Research	UWSC12516	93.847	93,839	-
Hartford Hospital - Diabetes, Digestive, and Kidney Diseases Extramural Research	126357-SY	93.847	113,679	-
Johns Hopkins University - Diabetes, Digestive, and Kidney Diseases Extramural Research	2005282686	93.847	137,810	-
University of South Florida - Diabetes, Digestive, and Kidney Diseases Extramural Research	6163-1082-30-CD	93.847	161,398	-
Broad Institute, Inc - Diabetes, Digestive, and Kidney Diseases Extramural Research	5000850-5500001124	93.847	177,113	-
Case Western Reserve University - Diabetes, Digestive, and Kidney Diseases Extramural Research	RES600214	93.847	182,550	-
Johns Hopkins University - Diabetes, Digestive, and Kidney Diseases Extramural Research	2005726379	93.847	208,404	-
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)/NIH/DHHS - Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK125718-01A1	93.847	215,030	-
University of South Florida - Diabetes, Digestive, and Kidney Diseases Extramural Research	6163-1082-10-CC	93.847	321,242	-
Northern California Institute for Research & Education - Diabetes, Digestive, and Kidney Diseases Extramural Research	EST2375-01	93.847	362,558	-
Cincinnati Children's Hospital Medical Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	312604	93.847	394,029	-
University of Wisconsin-Madison - Diabetes, Digestive, and Kidney Diseases Extramural Research	0000000961	93.847	444,721	-
			3,220,279	-
Mayo Clinic Jacksonville Florida - Extramural Research Programs in the Neurosciences and Neurological Disorders	Carotid Revascularization YAL-224063-06	93.853	(908)	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M35	93.853	1	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M34	93.853	1	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M36	93.853	1	-
Regents of the University of Michigan - Extramural Research Programs in the Neurosciences and Neurological Disorders	SUBK00017775	93.853	77	-
Regents of the University of California - Extramural Research Programs in the Neurosciences and Neurological Disorders	13589sc	93.853	904	-
Johns Hopkins University - Extramural Research Programs in the Neurosciences and Neurological Disorders	2005516748	93.853	1,391	-
Regents of the University of California - Extramural Research Programs in the Neurosciences and Neurological Disorders	12520sc	93.853	1,510	-
University College London - Extramural Research Programs in the Neurosciences and Neurological Disorders	WT PC 2298077 / CID 3685695	93.853	1,715	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M35	93.853	1,820	-

**Yale University**  
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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance			Subrecipient Expenditures
		Listing Number	Expenditures		
I. Research and Development Cluster					
Department of Health & Human Services					
Pass-through: (Continued)					
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M123	93.853	\$	1,914	\$ -
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS114001	93.853		3,426	-
Board of Trustees of Leland Stanford Junior University - Extramural Research Programs in the Neurosciences and Neurological Disorders	62854295-193654	93.853		4,228	-
Northeastern University - Extramural Research Programs in the Neurosciences and Neurological Disorders	500846-78050	93.853		4,688	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	013888-138225	93.853		6,600	-
Regents of the University of Michigan - Extramural Research Programs in the Neurosciences and Neurological Disorders	SUBK11056CSPR-002	93.853		8,903	-
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	235400	93.853		11,792	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M36	93.853		13,023	-
Board of Trustees of Leland Stanford Junior University - Extramural Research Programs in the Neurosciences and Neurological Disorders	62161887-136511	93.853		13,250	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	012044-138225	93.853		13,648	-
Cornell University - Extramural Research Programs in the Neurosciences and Neurological Disorders	142208-21596	93.853		15,062	-
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS120901	93.853		16,266	-
Texas A&M University - Extramural Research Programs in the Neurosciences and Neurological Disorders	M2000369	93.853		17,569	-
Virginia Commonwealth University - Extramural Research Programs in the Neurosciences and Neurological Disorders	FP00015072-SA001	93.853		20,436	-
University of Utah - Extramural Research Programs in the Neurosciences and Neurological Disorders	10050533-17	93.853		20,661	-
Regents of the University of California - Extramural Research Programs in the Neurosciences and Neurological Disorders	1580 G LA161	93.853		24,516	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	014059-138225	93.853		31,911	-
Cleveland Clinic Lerner College of Medicine of CWRU - Extramural Research Programs in the Neurosciences and Neurological Disorders	1409-SUB	93.853		32,363	-
University of Connecticut - Extramural Research Programs in the Neurosciences and Neurological Disorders	148681307	93.853		34,641	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	010785-138225	93.853		37,896	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M34	93.853		38,688	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21M99/U54NS115054	93.853		41,306	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	011337-138225	93.853		41,955	-
University of Rhode Island - Extramural Research Programs in the Neurosciences and Neurological Disorders	0009851/110322	93.853		52,696	-
University of Arizona - Extramural Research Programs in the Neurosciences and Neurological Disorders	517040	93.853		55,695	-
Johns Hopkins University - Extramural Research Programs in the Neurosciences and Neurological Disorders	2005516748	93.853		59,159	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	011961-138225	93.853		59,408	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	012043-138225	93.853		64,863	-
Regents of the University of California - Extramural Research Programs in the Neurosciences and Neurological Disorders	2022-1773	93.853		70,114	-
Rutgers, the State University of New Jersey - Extramural Research Programs in the Neurosciences and Neurological Disorders	2287	93.853		72,129	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	22-SA004	93.853		74,695	-
Mayo Clinic Jacksonville Florida - Extramural Research Programs in the Neurosciences and Neurological Disorders	YAL-232483	93.853		83,980	-
Marine Biological Laboratory - Extramural Research Programs in the Neurosciences and Neurological Disorders	54483	93.853		86,886	-
Brain Electrophysiology Laboratory Company - Extramural Research Programs in the Neurosciences and Neurological Disorders	R44NS120591	93.853		88,775	-
Marine Biological Laboratory - Extramural Research Programs in the Neurosciences and Neurological Disorders	54482	93.853		94,691	-
Cleveland Clinic Lerner College of Medicine of CWRU - Extramural Research Programs in the Neurosciences and Neurological Disorders	1423-SUB	93.853		104,605	-
University of Pennsylvania - Extramural Research Programs in the Neurosciences and Neurological Disorders	585181	93.853		118,071	-
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	239604	93.853		152,066	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M35	93.853		158,038	-

**Yale University**  
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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance	Subrecipient	
		Listing Number	Expenditures	Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	242113	93.853	\$ 162,352	\$ -
Children's Research Institute - Extramural Research Programs in the Neurosciences and Neurological Disorders	30006326-01	93.853	165,898	-
University of Southern California - Extramural Research Programs in the Neurosciences and Neurological Disorders	83618959/PO 50516046	93.853	182,518	-
Children's Hospital Boston - Extramural Research Programs in the Neurosciences and Neurological Disorders	GENFD0002164228	93.853	206,670	-
Johns Hopkins University - Extramural Research Programs in the Neurosciences and Neurological Disorders	2005103274	93.853	314,414	-
Marine Biological Laboratory - Extramural Research Programs in the Neurosciences and Neurological Disorders	54484	93.853	577,304	-
			3,466,281	-
Weill Medical College of Cornell University - Allergy and Infectious Diseases Research	231114	93.855	1	-
University of Pittsburgh - Allergy and Infectious Diseases Research	138059-10	93.855	1	-
Wistar Institute of Anatomy and Biology - Allergy and Infectious Diseases Research	25902-52-324	93.855	1	-
Leiden University Medical Center - Allergy and Infectious Diseases Research	1U01AI165745	93.855	1	-
La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20012-02-105-384	93.855	1	-
Emory University - Allergy and Infectious Diseases Research	A846689	93.855	1	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY22ITN183	93.855	193	-
Johns Hopkins University - Allergy and Infectious Diseases Research	PO #: 2003649391	93.855	609	-
Weill Medical College of Cornell University - Allergy and Infectious Diseases Research	226009	93.855	648	-
Johns Hopkins University - Allergy and Infectious Diseases Research	P.O. 2004195224	93.855	749	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY23ITN549	93.855	779	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY22ITN183	93.855	971	-
Massachusetts General Hospital - Allergy and Infectious Diseases Research	233034	93.855	2,261	-
Massachusetts General Hospital - Allergy and Infectious Diseases Research	236800	93.855	2,515	-
Jackson Laboratory - Allergy and Infectious Diseases Research	210310-0224-12	93.855	2,677	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-B003-4609	93.855	3,740	-
COVID-19 La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20013-01-105-284	93.855	4,797	-
Regents of the University of California - Allergy and Infectious Diseases Research	1560 B LC749	93.855	5,607	-
Leiden University Medical Center - Allergy and Infectious Diseases Research	1U01AI165745-01	93.855	7,292	-
Cornell University - Allergy and Infectious Diseases Research	203763	93.855	8,057	-
Jackson Laboratory - Allergy and Infectious Diseases Research	210310-0221-12	93.855	8,375	-
Albert Einstein College of Medicine - Allergy and Infectious Diseases Research	31192A	93.855	8,894	-
Curatix, LLC - Allergy and Infectious Diseases Research	Curatix-SBIR	93.855	9,125	-
Emory University - Allergy and Infectious Diseases Research	T938313	93.855	11,103	-
Emory University - Allergy and Infectious Diseases Research	A344820/A253802/ A511681	93.855	13,281	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-3225-4609	93.855	14,389	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-F071-4609	93.855	14,423	-
Duke University - Allergy and Infectious Diseases Research	303001641	93.855	14,805	-
Cedars-Sinai Medical Center - Allergy and Infectious Diseases Research	0002157383	93.855	15,088	-
University of Alabama at Birmingham - Allergy and Infectious Diseases Research	000537346-SP004-SC001	93.855	15,435	-
Beth Israel Deaconess Medical Center - Allergy and Infectious Diseases Research	01064145	93.855	15,471	-
Duke University - Allergy and Infectious Diseases Research	303000140	93.855	16,122	-
University of Utah - Allergy and Infectious Diseases Research	10062103-13-YU	93.855	16,453	-
Children's Hospital Boston - Allergy and Infectious Diseases Research	GENFD0002200126	93.855	17,159	-
COVID-19 La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20010-04-105-384	93.855	18,200	-
Kaiser Foundation Research Institute - Allergy and Infectious Diseases Research	211864-Yale-01	93.855	19,675	-
Johns Hopkins University - Allergy and Infectious Diseases Research	2005915331	93.855	20,686	-
Stanford University - Allergy and Infectious Diseases Research	61485128-124916	93.855	23,009	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY22ITN549	93.855	23,939	-
Harvard School of Public Health - Allergy and Infectious Diseases Research	117164-5113039	93.855	24,781	-
University of Chicago - Allergy and Infectious Diseases Research	AWD101500 (SUB00000777)	93.855	29,998	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-C815-4609	93.855	30,056	-
University of Pennsylvania - Allergy and Infectious Diseases Research	585399	93.855	32,693	-
J. David Gladstone Institutes - Allergy and Infectious Diseases Research	SC-00052	93.855	33,500	-
Cornell University - Allergy and Infectious Diseases Research	92710-20630	93.855	33,980	-
Emory University - Allergy and Infectious Diseases Research	A549955	93.855	36,448	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance</u>		<u>Subrecipient</u>
		<u>Listing</u>	<u>Expenditures</u>	<u>Expenditures</u>
<u>Number</u>				
<b>I. Research and Development Cluster</b>				
<u>Department of Health &amp; Human Services</u>				
Pass-through: (Continued)				
J. David Gladstone Institutes - Allergy and Infectious Diseases Research	SC-00053	93.855	\$ 38,141	\$ -
Massachusetts General Hospital - Allergy and Infectious Diseases Research	237011	93.855	39,936	-
Cornell University - Allergy and Infectious Diseases Research	222469	93.855	40,403	-
Virginia Commonwealth University - Allergy and Infectious Diseases Research	FP00015516_SA001	93.855	41,083	-
Rutgers, the State University of New Jersey - Allergy and Infectious Diseases Research	1997	93.855	42,287	-
Children's Hospital of Philadelphia (The) - Allergy and Infectious Diseases Research	3201750624	93.855	51,001	-
Dana Farber Cancer Institute - Allergy and Infectious Diseases Research	1277007	93.855	52,836	-
The University of Texas Health Science Center at Tyler - Allergy and Infectious Diseases Research	6054-SC22-21	93.855	52,921	-
Biotechnology Research Institute, KALRO - Allergy and Infectious Diseases Research	1R01AI169503	93.855	55,239	-
The Curators of the University of Missouri - Allergy and Infectious Diseases Research	C00079749-1	93.855	55,513	-
Albert Einstein College of Medicine - Allergy and Infectious Diseases Research	31192A	93.855	57,026	-
Johns Hopkins University - Allergy and Infectious Diseases Research	2005164209	93.855	59,913	-
University of Pittsburgh - Allergy and Infectious Diseases Research	AWD00005998 (139222-8)	93.855	63,371	-
East Carolina University - Allergy and Infectious Diseases Research	A18-0229-S001	93.855	64,423	-
Colorado State University - Allergy and Infectious Diseases Research	G-06145-01	93.855	64,639	-
Massachusetts Institute of Technology (MIT) - Allergy and Infectious Diseases Research	S5904 PO#836063	93.855	68,956	-
University of Utah - Allergy and Infectious Diseases Research	10062103-12-YU	93.855	69,225	-
La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20010-03-105-384	93.855	72,892	-
University of Connecticut Health Center - Allergy and Infectious Diseases Research	UCHC7-112779652	93.855	73,738	-
Northwestern University - Allergy and Infectious Diseases Research	60056914 YU	93.855	74,846	-
La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20012-01-105-284	93.855	75,375	-
Albert Einstein College of Medicine - Allergy and Infectious Diseases Research	311254	93.855	75,382	-
Columbia University - Allergy and Infectious Diseases Research	2(GG014397-01)	93.855	77,396	-
University of Massachusetts Medical School - Allergy and Infectious Diseases Research	OSP30213-YALE	93.855	82,306	-
National Institute of Allergy and Infectious Diseases (NIAID)/NIH/DHHS - Allergy and Infectious Diseases Research	5U19AI089681-15	93.855	85,748	13,484
State University of New York at Buffalo (SUNY) - Allergy and Infectious Diseases Research	R1193049	93.855	85,793	-
University of Pittsburgh - Allergy and Infectious Diseases Research	138059-10	93.855	87,462	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	1R41AI52904	93.855	93,600	-
Family Health International (FHI 360) - Allergy and Infectious Diseases Research	PO17001520	93.855	97,348	-
New York University - Allergy and Infectious Diseases Research	20-A0-00-1004049	93.855	104,244	-
Johns Hopkins University - Allergy and Infectious Diseases Research	2005166598	93.855	105,697	-
Regents of the University of Minnesota - Allergy and Infectious Diseases Research	N009869002	93.855	106,057	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	R41AI145778	93.855	107,772	-
Emory University - Allergy and Infectious Diseases Research	A699213	93.855	117,413	-
National Institute of Allergy and Infectious Diseases (NIAID)/NIH/DHHS - Allergy and Infectious Diseases Research	1R21AI157857	93.855	122,831	51,617
Weill Medical College of Cornell University - Allergy and Infectious Diseases Research	222658	93.855	126,060	-
Wistar Institute of Anatomy and Biology - Allergy and Infectious Diseases Research	25901-52-324	93.855	132,803	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	1R41AI157014-01A1	93.855	165,478	-
Brigham and Women's Hospital - Allergy and Infectious Diseases Research	127563	93.855	172,963	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY19ITN356-FY22ITN356	93.855	173,831	-



**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance	Subrecipient	
		Listing Number	Expenditures	Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
Colorado State University - Allergy and Infectious Diseases Research	G-70079-01	93.855	\$ 176,081	\$ -
University of Chicago - Allergy and Infectious Diseases Research	SUB00000752	93.855	182,625	-
Emory University - Allergy and Infectious Diseases Research	A651106	93.855	185,773	-
COVID-19 Emory University - Allergy and Infectious Diseases Research	A547677	93.855	197,262	-
COVID-19 National Institute of Allergy and Infectious Diseases (NIAID)/NIH/DHHS - Allergy and Infectious Diseases Research	1K08AI163493-01	93.855	204,832	-
University of California, Irvine - Allergy and Infectious Diseases Research	2018-3660	93.855	208,081	-
Drexel University - Allergy and Infectious Diseases Research	910001	93.855	240,244	-
La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20012-01-105-384	93.855	240,651	-
Regents of the University of Michigan - Allergy and Infectious Diseases Research	SUBK00011478	93.855	247,370	-
University of Maryland at Baltimore - Allergy and Infectious Diseases Research	20766	93.855	265,667	-
University of Utah - Allergy and Infectious Diseases Research	10062103-13-YU	93.855	315,543	-
University of Utah - Allergy and Infectious Diseases Research	10062103-12-YU	93.855	334,502	-
J. David Gladstone Institutes - Allergy and Infectious Diseases Research	SC-00053	93.855	353,322	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	2R44AI136118-02	93.855	365,558	-
Family Health International (FHI 360) - Allergy and Infectious Diseases Research	PO20000547	93.855	382,557	-
University of Pittsburgh - Allergy and Infectious Diseases Research	AWD00005998 (138059-8)	93.855	397,848	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	2R42AI142846	93.855	420,148	-
University of Maryland - Allergy and Infectious Diseases Research	64882-Z0158203	93.855	504,356	-
Family Health International (FHI 360) - Allergy and Infectious Diseases Research	PO23000491	93.855	655,701	-
			9,770,058	65,101
University of Pittsburgh - Biomedical Research and Research Training	CNVA00056812 (136461-9)	93.859	3,189	-
University of Massachusetts - Biomedical Research and Research Training	20-015448 A02	93.859	6,009	-
University of Puerto Rico en Cayey - Biomedical Research and Research Training	Sub 1R25GM121270	93.859	6,541	-
Fox Chase Cancer Center - Biomedical Research and Research Training	15119-01	93.859	10,757	-
University of Utah - Biomedical Research and Research Training	10044932-09	93.859	12,551	-
New York University School of Medicine - Biomedical Research and Research Training	23-A0-00-1009150	93.859	17,402	-
Pennsylvania State University - Biomedical Research and Research Training	S003022-YU	93.859	20,000	-
University of Arkansas, Little Rock - Biomedical Research and Research Training	230214-21 Yale	93.859	22,232	-
University of Pittsburgh - Biomedical Research and Research Training	CNVA00056812 (136461-6)	93.859	23,269	-
Johns Hopkins University - Biomedical Research and Research Training	2005729125	93.859	25,482	-
Brown University - Biomedical Research and Research Training	00002185	93.859	29,212	-
University of Pennsylvania - Biomedical Research and Research Training	581297	93.859	58,602	-
Drexel University - Biomedical Research and Research Training	910001	93.859	62,571	-
Stanford University - Biomedical Research and Research Training	63089403-244574	93.859	63,256	-
Michigan State University - Biomedical Research and Research Training	RC110379YU	93.859	64,932	-
Rice University - Biomedical Research and Research Training	X03059930	93.859	67,261	-
Purdue University - Biomedical Research and Research Training	4102-83303	93.859	70,149	-
University of Rhode Island - Biomedical Research and Research Training	0009865/12142022	93.859	85,193	-
Princeton University - Biomedical Research and Research Training	SUB0000405	93.859	144,085	-
			792,693	-
Johns Hopkins University - Child Health and Human Development Extramural Research	2005845430	93.865	1	-
University of Pittsburgh - Child Health and Human Development Extramural Research	AWD00001006 (133278-3)	93.865	2,129	-
University of South Florida - Child Health and Human Development Extramural Research	R01HD06221/5112-5506-00-A	93.865	2,465	-
The Trustees of Columbia University in the City of New York - Child Health and Human Development Extramural Research	1(GG017754-01)	93.865	2,774	-
University of California, Los Angeles (UCLA) - Child Health and Human Development Extramural Research	1644 G WA054	93.865	2,800	-
Duke University - Child Health and Human Development Extramural Research	A033207	93.865	7,173	-
Board of Trustees of Leland Stanford Junior University - Child Health and Human Development Extramural Research	62369298-136965	93.865	7,300	-

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance		
		Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
University of Alabama at Birmingham - Child Health and Human Development Extramural Research	000529934-SC003	93.865	\$ 7,333	\$ -
Board of Trustees of Leland Stanford Junior University - Child Health and Human Development Extramural Research	61420432-120659	93.865	8,588	-
Research Foundation for Mental Hygiene - Child Health and Human Development Extramural Research	1018293/1/28227	93.865	9,527	-
Women & Infants Hospital of Rhode Island - Child Health and Human Development Extramural Research	9585-5000555	93.865	12,871	-
The Trustees of Columbia University in the City of New York - Child Health and Human Development Extramural Research	7(GG018819-01)	93.865	13,182	-
Ann & Robert H. Lurie Children's Hospital - Child Health and Human Development Extramural Research	901615- Yale University	93.865	16,636	-
University of California, San Francisco - Child Health and Human Development Extramural Research	9774sc	93.865	23,321	-
Massachusetts General Hospital - Child Health and Human Development Extramural Research	241200	93.865	24,036	-
University of Colorado, Denver - Child Health and Human Development Extramural Research	1559816	93.865	27,020	-
Massachusetts General Hospital - Child Health and Human Development Extramural Research	241843	93.865	29,843	-
Louisiana State University - Child Health and Human Development Extramural Research	PO-0000143113	93.865	32,521	-
Boston University - Child Health and Human Development Extramural Research	4500004421	93.865	42,891	-
University of Colorado, Denver - Child Health and Human Development Extramural Research	FY19.571.001/2-5-A7254	93.865	47,438	-
Imperial College School of Medicine - Child Health and Human Development Extramural Research	P78100	93.865	52,839	-
Haskins Laboratories, Inc. - Child Health and Human Development Extramural Research	A222	93.865	56,010	-
Johns Hopkins University - Child Health and Human Development Extramural Research	2004681455	93.865	70,217	-
University of Massachusetts - Child Health and Human Development Extramural Research	OSP2018143	93.865	76,517	-
The Curators of the University of Missouri - Child Health and Human Development Extramural Research	C00080517-1	93.865	105,258	-
Weill Medical College of Cornell University - Child Health and Human Development Extramural Research	224014-16	93.865	119,880	-
Weill Medical College of Cornell University - Child Health and Human Development Extramural Research	223953-4	93.865	120,013	-
Emory University - Child Health and Human Development Extramural Research	A248527	93.865	127,420	-
University of Utah - Child Health and Human Development Extramural Research	10051369-13	93.865	127,620	-
University of Florida - Child Health and Human Development Extramural Research	SUB00003716	93.865	434,456	-
US Department of Health and Human Services (DHHS) - Child Health and Human Development Extramural Research	2R01HD053112	93.865	563,360	11,829
			2,173,439	11,829
University of Southern California - Aging Research	129138899/PO #50886624	93.866	(185,951)	-
Regents of the University of California - Aging Research	1558 G WA348	93.866	1	-
University of Southern California - Aging Research	SCON-00004539	93.866	2	-
University of Southern California - Aging Research	125896878/PO #50886859	93.866	16	-
University of Southern California - Aging Research	SCON-00004388	93.866	891	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-0045-4609	93.866	1,791	-
Research Foundation of CUNY - Aging Research	CM00008280-01	93.866	1,896	-
University of California, San Diego - Aging Research	72751728 / 72752638	93.866	2,963	-
University of Rhode Island - Aging Research	0009805/0032323	93.866	3,399	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-B541-4609	93.866	3,702	-
Brown University - Aging Research	00001622	93.866	4,673	4,673
University of Southern California - Aging Research	79658009	93.866	5,329	-
University of North Carolina - Aging Research	5116216	93.866	5,555	-
Research Foundation for Mental Hygiene - Aging Research	158665	93.866	5,555	-
Research Foundation of CUNY - Aging Research	CM00008280-00	93.866	8,333	-
Washington University in St. Louis - Aging Research	WU-22-0359	93.866	8,470	-
University of Florida - Aging Research	SUB00003672	93.866	9,143	-
The Curators of the University of Missouri - Aging Research	C00079176-1	93.866	9,872	-

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing		Subrecipient
		Number	Expenditures	Expenditures
I. Research and Development Cluster				
Department of Health & Human Services				
Pass-through: (Continued)				
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-B551-4609	93.866	\$ 13,870	\$ -
Washington University in St. Louis - Aging Research	WU-23-0253	93.866	16,019	-
Northern California Institute for Research & Education - Aging Research	STE2196-33	93.866	16,673	-
Ohio State University - Aging Research	GR124920   SPC-1000005839	93.866	17,954	-
University of Southern California - Aging Research	139456908	93.866	18,856	-
Albert Einstein College of Medicine - Aging Research	312066	93.866	18,906	-
University of Alabama at Birmingham - Aging Research	000526683-SC001	93.866	19,219	-
Johns Hopkins University - Aging Research	2005634811	93.866	22,229	-
American Federation for Aging Research - Aging Research	19-CSTAR-YALE	93.866	22,244	-
Johns Hopkins University - Aging Research	5R01AG069930-02	93.866	23,129	-
COVID-19 Northwestern University - Aging Research	60062199 YALE	93.866	23,554	-
University of Southern California - Aging Research	75686199-PO10458952	93.866	24,974	-
University of Washington, Seattle - Aging Research	UWSC13018	93.866	26,825	-
Oregon Health Sciences University - Aging Research	1011170_YALE	93.866	27,231	-
Board of Trustees of Leland Stanford Junior University - Aging Research	62926176-236617	93.866	28,012	-
Kaiser Foundation Hospitals - Aging Research	RNG210267-02	93.866	28,608	-
Johns Hopkins University - Aging Research	2005880019	93.866	31,113	-
Research Foundation of State University of New York (SUNY) - Aging Research	230-1178230-95667	93.866	33,278	-
Regents of the University of Michigan - Aging Research	SUBK00015454	93.866	36,792	-
University of Southern California - Aging Research	140478298	93.866	38,881	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-0044-4609	93.866	38,885	-
Cognition Therapeutics, Inc. - Aging Research	R01AG065248	93.866	42,680	-
Board of Trustees of Leland Stanford Junior University - Aging Research	61666772-45510	93.866	45,460	-
University of Massachusetts Medical School - Aging Research	OSP2018109	93.866	48,401	-
Beth Israel Deaconess Medical Center - Aging Research	01062008	93.866	48,639	-
University of New Haven - Aging Research	FD45-S001	93.866	49,883	-
Pennsylvania State University - Aging Research	YALEAG072484	93.866	50,037	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-E261-4609	93.866	52,375	-
Emory University - Aging Research	A695566	93.866	55,651	-
Brigham and Women's Hospital - Aging Research	111014	93.866	57,871	-
University of Alabama at Birmingham - Aging Research	000528982-SC001	93.866	66,241	-
Kaiser Foundation Research Institute - Aging Research	RNG212097-01	93.866	72,578	-
University of Southern California - Aging Research	107936659	93.866	75,294	-
University of Pennsylvania - Aging Research	583356	93.866	75,853	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-8443-4609	93.866	86,042	-
Oregon Health Sciences University - Aging Research	1013624_YALE	93.866	86,060	-
Board of Regents of the University of Wisconsin System on Behalf of the University of Wisconsin-Madison - Aging Research	0000001240	93.866	90,521	-
Duke University - Aging Research	A032814 - Trial # 7916 Preventable - Site #1804	93.866	92,916	-
Johns Hopkins University - Aging Research	2005596199	93.866	93,991	-
University of Minnesota - Aging Research	N010326001	93.866	95,645	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-F201-4609	93.866	107,250	-
Indiana University - Aging Research	9047_YU	93.866	118,716	-
Indiana University - Aging Research	9048_YU	93.866	131,651	-
Dartmouth College - Aging Research	R1032	93.866	140,631	-
University of Southern California - Aging Research	129210955/PO #50888848	93.866	154,976	-
University of Southern California - Aging Research	105746775	93.866	199,397	-
Massachusetts General Hospital - Aging Research	233344	93.866	250,933	-
Brown University - Aging Research	00001365	93.866	294,231	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-E701-4609	93.866	451,086	-
Regents of the University of California - Aging Research	1558 G WA348	93.866	482,749	-
University of Southern California - Aging Research	120126042/PO #50886674	93.866	897,379	-
			4,928,029	4,673

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
<b>I. Research and Development Cluster</b>				
<u>Department of Health &amp; Human Services</u>				
<u>Pass-through: (Continued)</u>				
Icahn School of Medicine at Mount Sinai (ISMMS) - Vision Research	0255-C691-4609	93.867	\$ 8,126	\$ -
Icahn School of Medicine at Mount Sinai (ISMMS) - Vision Research	0255-C691-4609	93.867	64,929	-
University of Alabama at Birmingham - Vision Research	000527995-SC001	93.867	71,379	-
Duke University - Vision Research	A034048	93.867	84,805	-
University of Nebraska Medical Center - Vision Research	34-5270-2024-023	93.867	141,882	-
University of Maryland - Vision Research	92379-Z0300201	93.867	315,377	-
			<u>686,498</u>	<u>-</u>
Rutgers, the State University of New Jersey - Medical Library Assistance	2021	93.879	2,667	-
Rutgers, the State University of New Jersey - Medical Library Assistance	SUB00002627	93.879	13,510	-
University of Pennsylvania - Medical Library Assistance	583085	93.879	31,816	-
Temple University - Medical Library Assistance	265483-YALE	93.879	54,871	-
			<u>102,864</u>	<u>-</u>
Baystate Medical Center - PPHF Geriatric Education Centers	FED712-19163-N3	93.969	25,516	-
			<u>25,516</u>	<u>-</u>
Centro Internacional de Entrenamiento e Investigaciones Medicas (CIDIEM) - International Research and Research Training	001-2020	93.989	19,270	-
University of California, Berkeley - International Research and Research Training	00009519	93.989	29,539	23,760
The Trustees of Columbia University in the City of New York - International Research and Research Training	1(GG017766-01)	93.989	31,065	-
University of Texas Medical Branch - International Research and Research Training	21-85448-06	93.989	33,764	-
Kathmandu University - International Research and Research Training	1R21TW011718-01	93.989	54,634	-
Fogarty International Center (FIC)/NIH/DHHS - International Research and Research Training	1K01TW011194	93.989	124,570	-
			<u>292,842</u>	<u>23,760</u>
Subtotal - Department of Health & Human Services - Pass Through			63,612,253	315,049
Subtotal - Department of Health & Human Services			641,582,257	76,916,981
<u>Department of Justice</u>				
<u>Direct:</u>				
OWV Research and Evaluation Program	2018-SI-AX-0005	16.026	7,813	-
OWV Research and Evaluation Program	15JOVW-22-GG-04755-STOP	16.026	56,603	-
			<u>64,416</u>	<u>-</u>
Subtotal - Department of Justice - Direct			64,416	-
<u>Department of Justice</u>				
<u>Pass-Through:</u>				
University of Pittsburgh - National Institute of Justice Research, Evaluation, and Development Project Grants	CNVA00059288 (413841-2)	16.560	280,593	-
			<u>280,593</u>	<u>-</u>
Subtotal - Department of Justice - Pass Through			280,593	-
Subtotal - Department of Justice			345,009	-
<u>Department of the Interior</u>				
<u>Direct:</u>				
Water Desalination Research and Development	R21AC10502-00	15.506	142,403	-
			<u>142,403</u>	<u>-</u>
Subtotal - Department of the Interior- Direct			142,403	-
Subtotal - Department of the Interior			142,403	-

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**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
<b>I. Research and Development Cluster</b>				
<u>Department of State</u>				
Direct:				
Public Diplomacy Programs	SSU40020GR0028	19.040	\$ 20,520	\$ -
Public Diplomacy Programs	SJO10021GR3024	19.040	99,299	30,165
			119,819	30,165
	Subtotal - Department of State - Direct		119,819	30,165
<u>Department of State</u>				
Pass Through:				
Environmental Systems Research Institute, Inc - U.S Department of State	00309075.0	19.RD	1,510,166	-
			1,510,166	-
	Subtotal- Department of State - Pass Through		1,510,166	-
	Subtotal - Department of State		1,629,985	30,165
<u>Department of Transportation</u>				
Direct:				
Department of Transportation	DTNH2216C00022	20.RD	204,743	199,171
			204,743	199,171
	Subtotal - Department of Transportation - Direct		204,743	199,171
	Subtotal - Department of Transportation		204,743	199,171
<u>Environmental Protection Agency</u>				
Direct:				
Environmental Protection Agency	4987-RFA20-1A/21-10	66.RD	264,093	161,928
Science To Achieve Results (STAR) Research Program	RD83587101	66.509	477,100	285,368
P3 Award: National Student Design Competition for Sustainability	84016501	66.516	5,913	-
			747,106	447,296
	Subtotal - Environmental Protection Agency - Direct		747,106	447,296
<u>Environmental Protection Agency</u>				
Pass Through:				
RTI International - Environmental Protection Agency	12-312-0217117-66587L	66.RD	39,864	-
Health Effects Institute - Environmental Protection Agency	4984-RFA20-1B/21-7-2	66.RD	147,884	29,768
Greater Dwight Development Corporation - Environmental Justice Small Grant Program	EPA# 00A00600	66.604	13,791	-
			201,539	29,768
	Subtotal - Environmental Protection Agency - Pass Through		201,539	29,768
	Subtotal - Environmental Protection Agency		948,645	477,064
<u>National Aeronautics &amp; Space Administration</u>				
Direct:				
National Aeronautics & Space Administration	HST-GO-15852.001-A	43.RD	333	-
National Aeronautics & Space Administration	HST-GO-15851.001-A	43.RD	1,212	-
National Aeronautics & Space Administration	HST-GO-15850.001	43.RD	4,020	-
National Aeronautics & Space Administration	JWST-GO-01706.008-A	43.RD	23,038	-
National Aeronautics & Space Administration	HST-GO-16912.001-A	43.RD	39,205	-
National Aeronautics & Space Administration	HST-GO-16284.004-A	43.RD	55,441	-
National Aeronautics & Space Administration	HST-GO-16259.004-A	43.RD	79,201	-
National Aeronautics & Space Administration	HST-GO-16678.001-A	43.RD	79,597	-
National Aeronautics & Space Administration	80NSSC20K0511	43.RD	163,293	-
			445,340	-

The accompanying notes are an integral part of this schedule

**Yale University**  
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Federal Agency/Pass-Through Entity/Program Title		Direct / Pass-Through Number	Federal Assistance Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster					
National Aeronautics & Space Administration					
Direct:					
Science	80NSSC18K1396	43.001	\$	750	\$ -
Science	80NSSC20K1538	43.001		6,125	-
Science	FL6GV84CKN57	43.001		6,604	-
Science	XMM-NEWTON AO-19	43.001		7,377	-
Science	80NSSC19K0638	43.001		7,943	-
Science	80NSSC21K2032	43.001		11,054	-
Science	80NSSC22K0793	43.001		15,091	-
Science	80NSSC20K1634	43.001		19,266	-
Science	80NSSC21K1034	43.001		24,566	-
Science	80NSSC22K1686	43.001		30,031	-
Science	80NSSC22K1134	43.001		36,147	-
Science	80NSSC22K1614	43.001		38,057	-
COVID-19 Science	80NSSC22K1535	43.001		40,370	-
Science	80NSSC21K2041	43.001		41,165	-
Science	80NSSC21K1095	43.001		48,177	-
Science	80NSSC22K1077	43.001		50,941	-
Science	80NSSC 22K1666	43.001		51,979	125
Science	80NSSC22K0657	43.001		55,046	-
Science	80NSSC21K0558	43.001		81,427	-
Science	80NSSC18K0418	43.001		94,134	-
Science	80NSSC20K0483	43.001		114,006	-
Science	80NSSC21K1509	43.001		183,881	-
Space Operations	80NSSC19K1634	43.007		964,137	125
				28,002	-
				28,002	-
Space Technology	80NSSC17K0553	43.012		616	-
Space Technology	80NSSC20M0098	43.012		18,835	-
Space Technology	80NSSC19K1131	43.012		44,485	-
Space Technology	80NSSC22K1188	43.012		72,742	-
Space Technology	80NSSC21K1269	43.012		89,317	-
				225,995	-
Subtotal - National Aeronautics & Space Administration - Direct				1,663,474	125
National Aeronautics & Space Administration					
Pass Through:					
Space Telescope Science Institute (STSCI)/NASA - National Aeronautics & Space Administration	HST-GO-15977.003-A	43.RD		1,220	-
Jet Propulsion Laboratory (JPL)/NASA - National Aeronautics & Space Administration	#1665641	43.RD		4,806	-
University of Miami - National Aeronautics & Space Administration	80NSSC23K0488	43.RD		15,216	-
Space Telescope Science Institute (STSCI)/NASA - National Aeronautics & Space Administration	STScI - Subcontract 52846	43.RD		39,043	-
Johns Hopkins University - National Aeronautics & Space Administration	174769	43.RD		47,743	-
Arizona State University - National Aeronautics & Space Administration	17-252	43.RD		73,820	-
Space Telescope Science Institute (STSCI)/NASA - National Aeronautics & Space Administration	HST-HF2-51486.001-A	43.RD		118,580	-
InnoSense, LLC - National Aeronautics & Space Administration	ISL-YALE-3138-030322	43.RD		134,083	-
				434,511	-
University of California, Riverside - Science	S-001143	43.001		751	-
Jet Propulsion Laboratory (JPL)/NASA - Science	RSA 2384	43.001		5,427	-
Massachusetts Institute of Technology (MIT) - Science	S5044 - PO 454253	43.001		5,944	-
Smithsonian Astrophysical Observatory - Science	GOO-21039A	43.001		12,101	-
Smithsonian Astrophysical Observatory - Science	TM3-24007X	43.001		19,521	-
Universities Space Research Association (USRA) - Science	05211-01	43.001		19,963	-
University of Washington, Seattle - Science	UWSC10433	43.001		20,009	-
- Science	R99019LJ	43.001		21,092	-

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**Yale University**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>National Aeronautics &amp; Space Administration</u>				
Pass Through: (Continued)				
Space Science Institute - Science	000994	43.001	\$ 25,161	\$ -
Virginia Polytechnic Institute and State University (Virginia Tech) - Science	426754-19162	43.001	27,081	-
University of California, Riverside - Science	S-001433	43.001	166,898	-
Rensselaer Polytechnic Institute - Science	A19-0117-S001	43.001	179,482	-
Jet Propulsion Laboratory (JPL)/NASA - Science	1675801	43.001	514,638	-
			<u>1,018,068</u>	<u>-</u>
University of Hartford - Education	P-1706	43.008	116	-
University of Hartford - Education	P-1561	43.008	374	-
University of Hartford - Education	1932	43.008	3,333	-
University of Hartford - Education	P-1698	43.008	4,146	-
University of Hartford - Education	1850	43.008	4,929	-
University of Hartford - Education	P-1776	43.008	5,333	-
University of Hartford - Education	P-1780	43.008	6,289	-
University of Hartford - Education	1887	43.008	7,300	-
			<u>31,820</u>	<u>-</u>
			<u>1,484,399</u>	<u>-</u>
Subtotal - National Aeronautics & Space Administration - Pass Through				
Subtotal - National Aeronautics & Space Administration			3,147,873	125
<u>National Science Foundation</u>				
Direct:				
National Science of Foundation	2141275	47.RD	1	-
			<u>1</u>	<u>-</u>
Engineering Grants	CBET-1749742	47.041	509	-
Engineering Grants	CMMI-1901959	47.041	1,545	-
Engineering Grants	CBET-1936183	47.041	13,015	-
Engineering Grants	1953959	47.041	20,544	-
Engineering Grants	CBET-1903342	47.041	25,922	-
Engineering Grants	ECCS-1930601	47.041	33,745	-
Engineering Grants	ECCS-1917879	47.041	35,299	-
Engineering Grants	2132823	47.041	48,879	-
Engineering Grants	CBET-1751971	47.041	49,033	-
Engineering Grants	CBET-2002782	47.041	59,134	-
Engineering Grants	CMMI-1653160	47.041	69,681	-
Engineering Grants	1853150	47.041	77,497	-
Engineering Grants	CBET-2120418	47.041	78,367	-
Engineering Grants	CBET-2055416	47.041	81,125	-
Engineering Grants	CMMI-2232649	47.041	85,062	-
Engineering Grants	CBET-2011362	47.041	86,488	-
Engineering Grants	CBET-1955793	47.041	95,913	-
Engineering Grants	CBET-2110138	47.041	97,409	-
Engineering Grants	CBET-2038439	47.041	98,156	2,040
Engineering Grants	ECCS-2150561	47.041	98,187	-
Engineering Grants	IIS- 2143109	47.041	103,020	-
Engineering Grants	CBET-2024473	47.041	103,167	-
Engineering Grants	CBET-2210894	47.041	118,686	-
Engineering Grants	CMMI-2046120	47.041	141,351	-
Engineering Grants	CBET-2001219	47.041	151,098	-
Engineering Grants	2129963	47.041	160,710	46,126
Engineering Grants	1830870	47.041	189,423	83,024
Engineering Grants	1830904	47.041	225,105	-

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I. Research and Development Cluster				
<u>National Science Foundation</u>				
Direct: (Continued)				
Engineering Grants	CBET2028351	47.041	\$ 258,662	\$ -
Engineering Grants	CMMI-2029756	47.041	266,897	175,926
Engineering Grants	CMMI-2118988	47.041	349,123	-
Engineering Grants	CMMI-1928448	47.041	411,416	-
Engineering Grants	1832795	47.041	470,547	386,165
			<u>4,104,715</u>	<u>693,281</u>
Mathematical and Physical Sciences	DMR-2103730	47.049	32	-
Mathematical and Physical Sciences	DMS-1916246	47.049	288	-
Mathematical and Physical Sciences	CHE-1808422	47.049	3,184	-
Mathematical and Physical Sciences	DMS-2000533	47.049	4,387	-
Mathematical and Physical Sciences	CHE-2203527	47.049	4,655	-
Mathematical and Physical Sciences	SOSPA9-002	47.049	7,548	-
Mathematical and Physical Sciences	DMS-2200713	47.049	8,010	-
Mathematical and Physical Sciences	AST 1714710	47.049	11,712	-
Mathematical and Physical Sciences	DMS-2001139	47.049	13,298	-
Mathematical and Physical Sciences	1849892	47.049	19,852	-
Mathematical and Physical Sciences	DMS-2134315	47.049	21,453	-
Mathematical and Physical Sciences	1905465	47.049	23,431	-
Mathematical and Physical Sciences	1743235	47.049	25,621	-
Mathematical and Physical Sciences	DMS-2209685	47.049	35,279	-
Mathematical and Physical Sciences	DMS-1916251	47.049	36,008	-
Mathematical and Physical Sciences	DMS-2301474	47.049	36,181	-
Mathematical and Physical Sciences	DMS-1951394	47.049	37,473	-
Mathematical and Physical Sciences	DMS-1940932	47.049	37,621	-
Mathematical and Physical Sciences	2042888	47.049	40,154	-
Mathematical and Physical Sciences	2154840	47.049	40,756	-
Mathematical and Physical Sciences	2015397	47.049	44,492	-
Mathematical and Physical Sciences	2206055	47.049	44,665	-
Mathematical and Physical Sciences	DMS-2141529	47.049	48,343	-
Mathematical and Physical Sciences	2107929	47.049	49,830	-
Mathematical and Physical Sciences	DMS-1900743	47.049	50,043	-
Mathematical and Physical Sciences	1955237	47.049	51,567	-
Mathematical and Physical Sciences	DMR-1724923	47.049	57,259	-
Mathematical and Physical Sciences	DMR-2003875	47.049	57,482	-
Mathematical and Physical Sciences	2239171-DMR	47.049	57,980	-
Mathematical and Physical Sciences	AST-1751763	47.049	63,781	-
Mathematical and Physical Sciences	2140196	47.049	64,206	-
Mathematical and Physical Sciences	1954348	47.049	64,492	-
Mathematical and Physical Sciences	CHE-1845184	47.049	65,127	-
Mathematical and Physical Sciences	DMS-1952751	47.049	66,155	-
Mathematical and Physical Sciences	DMS-2050398	47.049	70,571	-
Mathematical and Physical Sciences	DMS-2153059	47.049	73,769	-
Mathematical and Physical Sciences	2142476	47.049	74,734	-
Mathematical and Physical Sciences	DMS-2137909	47.049	76,388	-
Mathematical and Physical Sciences	2103902	47.049	77,800	-
Mathematical and Physical Sciences	CHE-2203589	47.049	81,581	-
Mathematical and Physical Sciences	DMS-2005328	47.049	83,181	-
Mathematical and Physical Sciences	DMR 2237469	47.049	85,230	-
Mathematical and Physical Sciences	2205006	47.049	86,647	-
Mathematical and Physical Sciences	PHY - 2145223	47.049	88,499	-
Mathematical and Physical Sciences	DMS-1900101	47.049	88,879	-



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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>National Science Foundation</u>				
Direct: (Continued)				
Mathematical and Physical Sciences	2002275	47.049	\$ 94,962	\$ -
Mathematical and Physical Sciences	2006911	47.049	97,742	-
Mathematical and Physical Sciences	CHE-2108681	47.049	102,368	-
Mathematical and Physical Sciences	DMS-2005312	47.049	104,524	-
Mathematical and Physical Sciences	2112711	47.049	106,297	-
Mathematical and Physical Sciences	CHE-1900119	47.049	107,746	-
Mathematical and Physical Sciences	2154724	47.049	109,729	43,534
Mathematical and Physical Sciences	CHE-1905169	47.049	109,793	-
Mathematical and Physical Sciences	1945324	47.049	111,017	-
Mathematical and Physical Sciences	2012406	47.049	114,577	-
Mathematical and Physical Sciences	DMS-2146997	47.049	120,931	-
Mathematical and Physical Sciences	1954254	47.049	122,514	-
Mathematical and Physical Sciences	DMS-2112918	47.049	126,125	-
Mathematical and Physical Sciences	PHY- 2210464	47.049	131,122	-
Mathematical and Physical Sciences	DMR-1846109	47.049	133,063	-
Mathematical and Physical Sciences	AST-2108341	47.049	136,980	-
Mathematical and Physical Sciences	1954319	47.049	137,590	-
Mathematical and Physical Sciences	2034345	47.049	138,290	-
Mathematical and Physical Sciences	2205026	47.049	143,603	-
Mathematical and Physical Sciences	1954453	47.049	145,029	-
Mathematical and Physical Sciences	DMR-2114081	47.049	157,078	-
Mathematical and Physical Sciences	DMS-1918925	47.049	158,047	-
Mathematical and Physical Sciences	CHE-2108690	47.049	166,935	-
Mathematical and Physical Sciences	CHE-1904813	47.049	167,072	-
Mathematical and Physical Sciences	CHE-1651717	47.049	171,742	-
Mathematical and Physical Sciences	2109329	47.049	193,948	-
Mathematical and Physical Sciences	AST-2009528	47.049	195,185	-
Mathematical and Physical Sciences	2110303	47.049	198,420	-
Mathematical and Physical Sciences	DMS-2054841	47.049	199,067	-
Mathematical and Physical Sciences	1953708	47.049	211,712	-
Mathematical and Physical Sciences	2132343-DMR	47.049	216,253	-
Mathematical and Physical Sciences	1913742	47.049	242,072	-
Mathematical and Physical Sciences	CHE-1900160	47.049	253,635	-
Mathematical and Physical Sciences	DMR-2104316	47.049	263,047	-
Mathematical and Physical Sciences	PHY-2102789	47.049	390,632	-
Mathematical and Physical Sciences	2011357	47.049	436,930	-
Mathematical and Physical Sciences	2124511	47.049	535,244	262,239
Mathematical and Physical Sciences	OMA-2137740	47.049	620,564	229,140
			9,251,229	534,913
Geosciences	EAR-1929597	47.050	53	-
Geosciences	EAR-1650313	47.050	2,199	-
Geosciences	AGS-1764126	47.050	3,673	777

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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
I. Research and Development Cluster				
<u>National Science Foundation</u>				
Direct: (Continued)				
Geosciences	EAR-1800923	47.050	\$ 11,586	\$ -
Geosciences	2102853	47.050	13,295	-
Geosciences	ICER-2023113	47.050	15,896	-
Geosciences	2147536	47.050	15,965	-
Geosciences	2102777	47.050	16,465	-
Geosciences	2220234	47.050	21,935	-
Geosciences	OCE-1829835	47.050	31,700	-
Geosciences	EAR-1926421	47.050	32,880	-
Geosciences	2024574	47.050	34,093	-
Geosciences	1818792	47.050	34,857	-
Geosciences	2049090	47.050	43,477	-
Geosciences	EAR-2026917	47.050	47,556	-
Geosciences	2026843	47.050	47,986	-
Geosciences	2001339	47.050	49,497	-
Geosciences	1953549	47.050	78,284	-
Geosciences	2153688	47.050	79,338	-
Geosciences	1820815	47.050	90,125	-
Geosciences	AGS-2131084	47.050	92,630	-
Geosciences	2140281	47.050	94,468	-
Geosciences	2053096	47.050	97,602	-
Geosciences	1933630	47.050	120,766	-
Geosciences	OPP-1737687	47.050	124,270	-
Geosciences	AGS-1903528	47.050	141,249	-
Geosciences	2208229	47.050	146,486	-
Geosciences	ICER-1824770	47.050	212,980	150,779
Geosciences	2021319	47.050	235,934	-
			1,937,245	151,556
Computer and Information Science and Engineering	CNS-2227133	47.070	642	-
Computer and Information Science and Engineering	CNS_2129202	47.070	5,000	-
Computer and Information Science and Engineering	CCF-1521523	47.070	5,025	-
Computer and Information Science and Engineering	CCF-2019529	47.070	8,000	-
Computer and Information Science and Engineering	IIS-1942257	47.070	9,600	-
Computer and Information Science and Engineering	1815115	47.070	11,592	-
Computer and Information Science and Engineering	IIS-1637647	47.070	16,505	-
Computer and Information Science and Engineering	CNS-2212235	47.070	28,789	-
Computer and Information Science and Engineering	CNS-1815676	47.070	36,439	-
Computer and Information Science and Engineering	CNS-2240207	47.070	39,184	-
Computer and Information Science and Engineering	CNS-2128530	47.070	43,588	-
Computer and Information Science and Engineering	IIS-1900681	47.070	43,726	-
Computer and Information Science and Engineering	CNS-1945541	47.070	58,419	-
Computer and Information Science and Engineering	CCF-2219995	47.070	61,349	-
Computer and Information Science and Engineering	CNS-2054957	47.070	62,220	-
Computer and Information Science and Engineering	CCF-1900507	47.070	67,901	-
Computer and Information Science and Engineering	CCF-1651588	47.070	68,243	-
Computer and Information Science and Engineering	CNS-2211945	47.070	72,116	-
Computer and Information Science and Engineering	CCF-1947826	47.070	72,564	-
Computer and Information Science and Engineering	CCF-2131356	47.070	76,315	-

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I. Research and Development Cluster				
<u>National Science Foundation</u>				
Direct: (Continued)				
Computer and Information Science and Engineering	CNS-1955204	47.070	\$ 76,425	\$ -
Computer and Information Science and Engineering	CNS-1651945	47.070	78,853	-
Computer and Information Science and Engineering	CNS-2132573	47.070	84,489	-
Computer and Information Science and Engineering	CCF-2106845	47.070	86,755	-
Computer and Information Science and Engineering	CNS-2153768	47.070	95,124	-
Computer and Information Science and Engineering	IIS-1822650	47.070	104,586	-
Computer and Information Science and Engineering	CCF-2019285	47.070	108,693	-
Computer and Information Science and Engineering	2047856	47.070	114,264	-
Computer and Information Science and Engineering	IIS-2132280	47.070	117,211	-
Computer and Information Science and Engineering	CCF-2118851	47.070	118,527	-
Computer and Information Science and Engineering	CNS-1901901	47.070	122,487	-
Computer and Information Science and Engineering	CCF-2131466	47.070	129,881	-
Computer and Information Science and Engineering	IIS-1845032	47.070	137,918	-
Computer and Information Science and Engineering	2045951-IIS	47.070	142,634	-
Computer and Information Science and Engineering	CCF-1942583	47.070	177,886	-
Computer and Information Science and Engineering	IIS-1924802	47.070	185,063	-
Computer and Information Science and Engineering	CNS-2047220	47.070	191,360	-
Computer and Information Science and Engineering	CCF-1763399	47.070	193,109	-
Computer and Information Science and Engineering	IIS-2007283	47.070	193,980	-
Computer and Information Science and Engineering	2147946	47.070	207,252	-
Computer and Information Science and Engineering	1918784	47.070	209,459	-
Computer and Information Science and Engineering	IIS-2106690	47.070	231,960	-
Computer and Information Science and Engineering	CNS-2130257	47.070	240,647	-
Computer and Information Science and Engineering	IIS-1955225	47.070	251,378	-
Computer and Information Science and Engineering	IIS-1954591	47.070	273,909	-
Computer and Information Science and Engineering	OAC-2018873	47.070	381,176	276,445
Computer and Information Science and Engineering	CCF-2131476	47.070	395,713	-
Computer and Information Science and Engineering	CNS-2216030	47.070	687,369	-
			6,125,325	276,445
Biological Sciences	1950498	47.074	1,839	-
Biological Sciences	DBI-1802270	47.074	4,523	3,163
Biological Sciences	DEB-2224317	47.074	7,100	-
Biological Sciences	DEB-1929533	47.074	8,312	-
Biological Sciences	2231765	47.074	9,385	-
Biological Sciences	DEB-1753727	47.074	10,079	-
Biological Sciences	2203958	47.074	11,448	-
Biological Sciences	DBI-1701769	47.074	16,844	-
Biological Sciences	2032073	47.074	17,590	-
Biological Sciences	MCB-1749662	47.074	25,433	-
Biological Sciences	IOS-2151063	47.074	27,785	-
Biological Sciences	IOS-1754662	47.074	33,083	-
Biological Sciences	DEB-2330792	47.074	35,163	-
Biological Sciences	DBI-1935771	47.074	40,176	-
Biological Sciences	DBI-2027228	47.074	41,285	-
Biological Sciences	DBI-2021988	47.074	43,605	-
Biological Sciences	IOS - 2031806	47.074	45,943	-
Biological Sciences	2223675	47.074	48,226	-
Biological Sciences	IOS-2015622	47.074	59,424	-
Biological Sciences	IOS-1923321	47.074	62,307	-

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Federal Agency/Pass-Through Entity/Program Title	Direct / Pass-Through Number	Federal Assistance Listing Number	Expenditures	Subrecipient Expenditures
I. Research and Development Cluster				
National Science Foundation				
Direct: (Continued)				
Biological Sciences	DBI-1660648	47.074	\$ 67,331	\$ -
Biological Sciences	1840243	47.074	74,248	63,212
Biological Sciences	EF-1802453	47.074	83,998	-
Biological Sciences	IOS-1856452	47.074	86,342	-
Biological Sciences	DEB-2102750	47.074	89,541	-
Biological Sciences	DEB-1856279	47.074	90,030	73,955
Biological Sciences	2128034	47.074	92,329	-
Biological Sciences	DEB-1845403	47.074	108,199	-
Biological Sciences	IOS-1754286	47.074	109,845	-
Biological Sciences	EF-1935120	47.074	111,670	-
Biological Sciences	1846010	47.074	115,232	-
Biological Sciences	DEB-2039476	47.074	117,804	-
Biological Sciences	DEB-214720	47.074	117,814	-
Biological Sciences	DEB-1926482	47.074	133,690	12,662
Biological Sciences	IOS-1923127	47.074	149,454	-
Biological Sciences	DBI- 2104149	47.074	167,599	35,822
Biological Sciences	IOS-1916137	47.074	168,255	-
Biological Sciences	IOS-1953903	47.074	180,052	-
Biological Sciences	2140322	47.074	194,362	-
Biological Sciences	2046868	47.074	201,443	-
Biological Sciences	DEB-2017987	47.074	202,515	-
Biological Sciences	DEB2011884	47.074	203,875	-
Biological Sciences	2114084	47.074	228,536	-
Biological Sciences	DEB-2054569	47.074	243,326	-
Biological Sciences	DBI-2050777	47.074	251,849	-
Biological Sciences	MCB-2210473	47.074	403,085	-
Biological Sciences	DBI-2015276	47.074	1,501,644	547,367
			6,043,618	736,181
Social, Behavioral, and Economic Sciences	1823119	47.075	811	-
Social, Behavioral, and Economic Sciences	2244673	47.075	3,232	-
Social, Behavioral, and Economic Sciences	BCS-1928750	47.075	3,459	-
Social, Behavioral, and Economic Sciences	SES-1954016	47.075	3,804	-
Social, Behavioral, and Economic Sciences	BCS-2138007	47.075	6,216	-
Social, Behavioral, and Economic Sciences	2214972	47.075	7,040	-
Social, Behavioral, and Economic Sciences	SES-1758262	47.075	7,310	-
Social, Behavioral, and Economic Sciences	BCS-2231806	47.075	12,417	-
Social, Behavioral, and Economic Sciences	SES-1917993	47.075	13,518	-
Social, Behavioral, and Economic Sciences	2116661	47.075	14,159	-
Social, Behavioral, and Economic Sciences	BCS-2023376	47.075	15,838	-
Social, Behavioral, and Economic Sciences	BCS-2211151	47.075	17,492	-
Social, Behavioral, and Economic Sciences	SES-1949374	47.075	20,343	-
Social, Behavioral, and Economic Sciences	SMA-1659085	47.075	24,395	-
Social, Behavioral, and Economic Sciences	BCS-2114307	47.075	24,570	-
Social, Behavioral, and Economic Sciences	BCS-2051220	47.075	25,161	-
Social, Behavioral, and Economic Sciences	BCS 2024335	47.075	29,960	-
Social, Behavioral, and Economic Sciences	BCS-2017837	47.075	31,239	-
Social, Behavioral, and Economic Sciences	SMS-1659085	47.075	32,692	-
Social, Behavioral, and Economic Sciences	BCS - 2323360	47.075	36,085	-
Social, Behavioral, and Economic Sciences	BCS-1848954	47.075	36,479	-
Social, Behavioral, and Economic Sciences	SES-1949522	47.075	38,910	27,282
Social, Behavioral, and Economic Sciences	1823763	47.075	45,191	29,895
Social, Behavioral, and Economic Sciences	SES-1850860	47.075	45,853	-

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<b>I. Research and Development Cluster</b>					
<u><b>National Science Foundation</b></u>					
<b>Direct: (Continued)</b>					
Social, Behavioral, and Economic Sciences	BCS-1829439	47.075	\$ 49,971	\$ -	
Social, Behavioral, and Economic Sciences	SES-2117288	47.075	51,671	23,906	
Social, Behavioral, and Economic Sciences	SES-2237790	47.075	59,559	-	
Social, Behavioral, and Economic Sciences	BCS-1757018	47.075	60,360	-	
Social, Behavioral, and Economic Sciences	SES-1948336	47.075	64,570	-	
Social, Behavioral, and Economic Sciences	BCS-2322850	47.075	67,902	-	
Social, Behavioral, and Economic Sciences	SES-2149223	47.075	81,514	-	
Social, Behavioral, and Economic Sciences	SES-2143098	47.075	82,545	-	
Social, Behavioral, and Economic Sciences	SES-1851524	47.075	83,767	-	
Social, Behavioral, and Economic Sciences	2050390	47.075	87,967	-	
Social, Behavioral, and Economic Sciences	1751483	47.075	88,600	-	
Social, Behavioral, and Economic Sciences	BCS-2121697	47.075	94,454	21,822	
Social, Behavioral, and Economic Sciences	2230957	47.075	109,789	-	
Social, Behavioral, and Economic Sciences	BCS-1941651	47.075	110,651	-	
Social, Behavioral, and Economic Sciences	SES-2149418	47.075	124,326	-	
Social, Behavioral, and Economic Sciences	BCS-2045778	47.075	135,792	-	
Social, Behavioral, and Economic Sciences	2145372-BCS	47.075	146,813	-	
Social, Behavioral, and Economic Sciences	BCS-1955653	47.075	149,515	-	
Social, Behavioral, and Economic Sciences	BCS-1919321	47.075	149,743	-	
Social, Behavioral, and Economic Sciences	BCS-2116164	47.075	185,753	-	
Social, Behavioral, and Economic Sciences	SES-2117362	47.075	190,541	-	
			2,671,977	102,905	
Education and Human Resources	DUE -2235968	47.076	2,074	-	
Education and Human Resources	DGE-1752134	47.076	4,996	-	
Education and Human Resources	DRL-2247807	47.076	6,706	-	
COVID-19 Education and Human Resources	DUE-2027658	47.076	16,035	-	
Education and Human Resources	DUE-1856150	47.076	47,844	-	
Education and Human Resources	2005812	47.076	53,012	-	
Education and Human Resources	DUE-2216019	47.076	53,051	-	
Education and Human Resources	DUE-2000417	47.076	86,551	-	
Education and Human Resources	DUE-2126613	47.076	97,213	-	
Education and Human Resources	DGE-2139841	47.076	4,335,158	-	
			4,702,640	-	
Polar Programs	OPP-2113399	47.078	11,682	-	
Polar Programs	1950077	47.078	86,937	-	
Polar Programs	2053003	47.078	113,513	-	
			212,132	-	
Office of International Science and Engineering	2107116	47.079	20,351	-	
Office of International Science and Engineering	OISE-1952072	47.079	92,242	-	
			112,593	-	
Office of Integrative Activities	2219181	47.083	116,433	-	
			116,433	-	
	Subtotal - National Science Foundation - Direct		35,277,908	2,495,281	
<b>Pass-through:</b>					
Computing Research Association - National Science of Foundation	2021CIF-Yale-32	47.RD	21,988	-	
University of Massachusetts, Lowell - National Science of Foundation	S52100000055432	47.RD	24,480	-	
Computing Research Association - National Science of Foundation	2021CIF-Yale-31	47.RD	133,674	-	
			180,142	-	

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I. Research and Development Cluster				
<u>National Science Foundation</u>				
<u>Pass-through: (Continued)</u>				
North Carolina State University - Engineering Grants	2017-1718-01	47.041	\$ 7,260	\$ -
Abalone Bio, Inc. - Engineering Grants	IIP-1853147	47.041	9,545	-
Environmental Law Institute - Engineering Grants	2203189	47.041	12,453	-
Ohio State University - Engineering Grants	60061666	47.041	24,852	-
Alva Health, Inc. - Engineering Grants	IIP-2039532	47.041	29,130	-
University of Utah - Engineering Grants	10058563	47.041	73,201	-
North Carolina State University - Engineering Grants	2020-2946-01	47.041	111,614	-
American Society for Engineering Education - Engineering Grants	769-2071	47.041	130,619	-
University of Arizona - Engineering Grants	581207	47.041	458,959	-
Rice University - Engineering Grants	R3F80C	47.041	639,663	-
			<u>1,497,296</u>	-
University of Colorado, Denver - Mathematical and Physical Sciences	1554887/PO 1000779642	47.049	10,049	-
Drexel University - Mathematical and Physical Sciences	920104	47.049	11,199	-
University of Pennsylvania - Mathematical and Physical Sciences	581708	47.049	12,899	-
National Radio Astronomy Observatory (NRAO)/NSF - Mathematical and Physical Sciences	SOSPA6-025	47.049	34,573	-
Northwestern University - Mathematical and Physical Sciences	60062823 Yale	47.049	48,694	-
University of Maryland - Mathematical and Physical Sciences	105667-Z3846201	47.049	120,058	-
University of California, San Diego - Mathematical and Physical Sciences	109242238	47.049	125,463	-
University of California, Berkeley - Mathematical and Physical Sciences	00010388-2002182	47.049	408,766	-
			<u>771,701</u>	-
University of Massachusetts, Amherst - Geosciences	22-016550-A	47.050	19	-
The Trustees of Columbia University in the City of New York - Geosciences	64B(GG009393-04)	47.050	9,489	-
Georgia Institute of Technology - Geosciences	AWD-002863-G2	47.050	160,843	-
			<u>170,351</u>	-
Duke University - Computer and Information Science and Engineering	333-000073	47.070	1,036	-
US Ignite - Computer and Information Science and Engineering	CNS-1719547	47.070	5,450	-
University of California, Los Angeles (UCLA) - Computer and Information Science and Engineering	0160 G ZD226	47.070	11,070	-
Rice University - Computer and Information Science and Engineering	R3H299	47.070	86,134	-
North Carolina State University - Computer and Information Science and Engineering	2023-1053-01	47.070	124,998	-
Computing Research Association - Computer and Information Science and Engineering	CIF2020-YU-21	47.070	131,929	-
University of California, San Diego - Computer and Information Science and Engineering	KR 704616	47.070	352,567	-
Duke University - Computer and Information Science and Engineering	333-2826	47.070	783,106	-
			<u>1,496,290</u>	-
University of Tennessee - Biological Sciences	A21-0345-S004	47.074	13,222	-
COVID-19 University of Maryland at Baltimore - Biological Sciences	20768	47.074	31,555	-
Delaware Museum of Natural History - Biological Sciences	2001523-01	47.074	32,791	-
University of Florida - Biological Sciences	SUB00002457	47.074	50,893	-
			<u>128,461</u>	-
National Bureau of Economic Research - Social, Behavioral, and Economic Sciences	36335.00.00.00.7700	47.075	4,070	-

The accompanying notes are an integral part of this schedule

**Yale University**  
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<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
<b>I. Research and Development Cluster</b>				
<b><u>National Science Foundation</u></b>				
<b>Pass-through: (Continued)</b>				
University of Texas at Dallas - Social, Behavioral, and Economic Sciences	2008652	47.075	\$ 14,668	\$ -
University of North Carolina - Social, Behavioral, and Economic Sciences	5115018	47.075	21,139	-
			39,877	-
University of Massachusetts - Education and Human Resources	18-009960 A 02	47.076	2,141	-
			2,141	-
Subtotal - National Science Foundation - Pass Through			4,286,259	-
Subtotal - National Science Foundation			39,564,167	2,495,281
<b><u>U.S. Agency for International Development</u></b>				
<b>Direct:</b>				
Agency for International Development	7200AA22FA00027	98.RD	32,116	-
Agency for International Development	7200AA21FA00016	98.RD	952,249	923,398
Agency for International Development	7200AA21CA00010	98.RD	4,108,807	3,207,102
			5,093,172	4,130,500
Subtotal - U.S. Agency for International Development - Direct			5,093,172	4,130,500
<b>Pass-through:</b>				
University of Colorado, Denver - USAID Foreign Assistance for Programs Overseas	1559392	98.001	16,591	-
Family Health International (FHI 360) - USAID Foreign Assistance for Programs Overseas	21002085	98.001	210,427	-
			227,018	-
Subtotal - U.S. Agency for International Development - Pass Through			227,018	-
Subtotal - U.S. Agency for International Development			5,320,190	4,130,500
<b><u>Office of National Drug Control Policy</u></b>				
<b>Pass-through:</b>				
University of Maryland at Baltimore - Research and Data Analysis	26	95.007	62,071	-
			62,071	-
Subtotal - Office of National Drug Control Policy - Pass Through			62,071	-
Subtotal - Office of National Drug Control Policy			62,071	-
<b><u>Veterans Affairs</u></b>				
<b>Direct:</b>				
Department Of Veterans' Affairs	36C24E22P0001	64.RD	2,830	-
			2,830	-
Subtotal - Veterans Affairs - Direct			2,830	-
Subtotal - Veterans Affairs			2,830	-
<b>Total Research &amp; Development Cluster</b>			<b>747,676,322</b>	<b>87,990,852</b>

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<b>II. Student Financial Assistance Cluster</b>				
<u>Department of Education</u>				
<b>Federal Supplemental Education Opportunity Grant Program</b>				
Direct:				
Federal Supplemental Educational Opportunity Grants	P007A210809	84.007	\$ (18,355)	\$ -
Federal Supplemental Educational Opportunity Grants	P007A220809	84.007	849,901	-
			<u>831,546</u>	<u>-</u>
	Subtotal - Federal Supplemental Education Opportunity Grant Program		<u>831,546</u>	<u>-</u>
<b>Federal Work Study Program</b>				
Direct:				
Federal Work-Study Program	P033A220809	84.033	1,700,267	-
			<u>1,700,267</u>	<u>-</u>
	Subtotal - Federal Work Study Program		<u>1,700,267</u>	<u>-</u>
<b>Federal Perkins Loan Program</b>				
Outstanding loans as of July 1, 2022		84.038	7,327,200	-
New loans issued during 2023		84.038	-	-
Administrative cost allowance		84.038	-	-
			<u>7,327,200</u>	<u>-</u>
	Subtotal - Federal Perkins Loan Program		<u>7,327,200</u>	<u>-</u>
<b>Federal Pell Grant Program</b>				
Direct:				
Federal Pell Grant Program	P063P211232	84.063	274,355	-
Federal Pell Grant Program	P063P221232	84.063	6,985,870	-
			<u>7,260,225</u>	<u>-</u>
	Subtotal - Federal Pell Grant Program		<u>7,260,225</u>	<u>-</u>
<b>Federal Direct Student Loan Program</b>				
Direct:				
Federal Direct Student Loan		84.268	85,365,591	-
			<u>85,365,591</u>	<u>-</u>
	Subtotal - Federal Direct Student Loan Program		<u>85,365,591</u>	<u>-</u>
	Subtotal - Department of Education		102,484,829	-
<b>Department of Health &amp; Human Services</b>				
<b>Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students</b>				
Direct:				
Primary Care Loan				
Outstanding loans as of July 1, 2022		93.342	81,211	-
Loans for Disadvantaged Students				
Outstanding loans as of July 1, 2022		93.342	1,111,015	-
New loans issued during 2023		93.342	-	-
Health Professions Student Loans				
Outstanding loans as of July 1, 2022		93.342	3,158	-
	Subtotal - Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students		<u>1,195,384</u>	<u>-</u>



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<b>II. Student Financial Assistance Cluster</b>				
<b>Nursing Student Loan Program</b>				
<b>Direct:</b>				
Nursing Student Loan		93.364	\$ 1,608,582	\$ -
Outstanding loans as of July 1, 2022		93.364	440,885	-
New loans issued during 2023			<u>2,049,467</u>	<u>-</u>
	Subtotal - Nursing Student Loan Program		<u>2,049,467</u>	<u>-</u>
	Subtotal - Department of Health & Human Services - Direct		<u>2,049,467</u>	<u>-</u>
	Subtotal - Department of Health & Human Services		3,244,851	-
	<b>Total Student Financial Assistance Cluster</b>		<u>105,729,680</u>	<u>-</u>
<b>III. Other Federal Assistance</b>				
<b><u>Department of Agriculture</u></b>				
<b>Direct:</b>				
Wholesale Farmers and Alternative Market Development	21-TMMSD-CT-0010	10.164	<u>15,020</u>	<u>-</u>
			<u>15,020</u>	<u>-</u>
Acer Access Development Program	AM200100XXXXG014	10.174	<u>77,450</u>	<u>-</u>
			<u>77,450</u>	<u>-</u>
	Subtotal - Department of Agriculture - Direct		<u>92,470</u>	<u>-</u>
	Subtotal - Department of Agriculture		92,470	-
<b><u>Department of Education</u></b>				
<b>Direct:</b>				
National Resource Centers Program	P015A180117	84.015A	<u>28,334</u>	<u>-</u>
			<u>28,334</u>	<u>-</u>
National Resource Centers Program	P015B180082	84.015B	<u>54,816</u>	<u>-</u>
National Resource Centers Program	P015B220102	84.015B	<u>207,187</u>	<u>-</u>
			<u>262,003</u>	<u>-</u>
Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program	P022A210043	84.022A	<u>89,545</u>	<u>-</u>
			<u>89,545</u>	<u>-</u>
Social and Behavioral Context for Academic Learning	R305A180293	84.305A	<u>345,176</u>	<u>154,382</u>
			<u>345,176</u>	<u>154,382</u>
	Subtotal - Department of Education - Direct		<u>725,058</u>	<u>154,382</u>
<b>Pass-through:</b>				
University of Virginia - Social and Behavioral Context for Academic Learning	GM10170.PO#2247557	84.305A	<u>14,590</u>	<u>-</u>
			<u>14,590</u>	<u>-</u>
	Subtotal - Department of Education - Pass Through		<u>14,590</u>	<u>-</u>
	Subtotal - Department of Education		739,648	154,382

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III. Other Federal Assistance				
Department of Health & Human Services				
Direct:				
Environmental Public Health and Emergency Response	2022-0071	93.070	\$ 19,268	\$ -
			19,268	-
Maternal and Child Health Federal Consolidated Programs	5 T20MC21953-07-00	93.110	5,886	-
			5,886	-
Injury Prevention and Control Research and State and Community Based Programs	R01CE002989	93.136	3,733	-
			3,733	-
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	21MHA6064	93.243	186,983	-
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	5H79SM081775/3H79SM081775	93.243	195,346	438,398
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	H79TI080736	93.243	206,870	28,875
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	1H79TI080561	93.243	338,870	61,759
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	H79SM085114	93.243	594,395	10,400
			1,522,464	539,432
Occupational Safety and Health Program	2T03OH008607	93.262	214,567	-
			214,567	-
COVID-19 Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	DPH2021-0071PSA	93.323	29	-
COVID-19 Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	2021-0071-3	93.323	493,308	-
			493,337	-
COVID-19 COVID-19 PHEP Crisis Response	2022-0104	93.354	643,118	-
			643,118	-
Mental and Behavioral Health Education and Training Grants	1T25HP376310100	93.732	507,842	-
			507,842	-
Opioid STR	23MHA6077	93.788	15,931	-
Opioid STR	23MHA6078	93.788	15,937	-
			31,868	-
Grants for Primary Care Training and Enhancement	T0BHP33107	93.884	425,904	-
			425,904	-
Special Projects of National Significance	1 H97HA46082701700	93.928	155,655	-
Special Projects of National Significance	1 U90HA33191	93.928	1,426,136	101,200
			1,581,791	101,200
PPHF Geriatric Education Centers	U1QHP28745-05	93.969	838,800	-
			838,800	-
	Subtotal - Department of Health & Human Services - Direct		6,288,578	640,632
Pass-through:				
Connecticut Children's Medical Center - Department Of Health And Human Services	20-185026-02	93.U01	(1,840)	-
Connecticut Children's Medical Center - Department Of Health And Human Services	19-185023-02	93.U02	1,067	-
Connecticut Children's Medical Center - Department Of Health And Human Services	21-185030-02	93.U03	8,892	-
Yale New Haven Health Systems - Department Of Health And Human Services	3500183055	93.U04	18,000	-
Yale New Haven Health Systems - Department Of Health And Human Services	2022-0081	93.U05	36,134	-
Southern Connecticut State University (SCSU) - Department Of Health And Human Services	HHS128-001	93.U06	101,634	-
American Academy of Addiction Psychiatry - Department Of Health And Human Services	MFG-21-5	93.U07	104,000	-
Connecticut Dept. of Mental Health and Addiction Services - Department Of Health And Human Services	20MHA1063	93.U08	154,405	-
State of CT Dept of Children and Family Services - Department Of Health And Human Services	P.S. 20DCF6919AA	93.U09	164,280	-
Mathematica Policy Research, Inc. - Department Of Health And Human Services	50718S07716	93.U10	167,928	-
			754,500	-
American College of Rheumatology - Chronic Diseases: Research, Control, and Prevention	5 NU58DP006908-02-00	93.068	4,000	-
			4,000	-
Stanford University - Prevention of Disease, Disability, and Death by Infectious Diseases	62338663-148206	93.084	49,384	-
Stanford University - Prevention of Disease, Disability, and Death by Infectious Diseases	62338663-148206	93.084	131,914	-
			181,298	-

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III. Other Federal Assistance				
<u>Department of Health &amp; Human Services</u>				
<u>Pass-through: (Continued)</u>				
Cure HHT Formerly: HHT Foundation International, Inc. - Maternal and Child Health Federal Consolidated Programs	1UP4MC46404-01-00	93.110	\$ 194	\$ -
Icahn School of Medicine at Mount Sinai (ISMMS) - Maternal and Child Health Federal Consolidated Programs	0253-7151-4609	93.110	1,414	-
University Hospitals Cleveland Medical Center - Maternal and Child Health Federal Consolidated Programs	1 U1IMC43532-01-00	93.110	370,016	-
			<u>371,624</u>	<u>-</u>
Griffin Hospital - Preventive Medicine and Public Health Residency Training Program, Integrative Medicine Program, and National Center for Integrative Primary Healthcare	D33HP31664	93.117	1,784	-
			<u>1,784</u>	<u>-</u>
Connecticut Children's Medical Center - Coordinated Services and Access to Research for Women, Infants, Children, and Youth	22-185033-02	93.153	75,862	-
			<u>75,862</u>	<u>-</u>
Child Health & Development Inst. of Connecticut - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	Early Child NCTSN Evaluation	93.243	(1,489)	-
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	PCSSMAT-26	93.243	3,302	-
University of Maryland at Baltimore - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	20451/ref no. 1382	93.243	5,042	-
University of Maryland at Baltimore - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	20450/ref no. 1364	93.243	9,516	-
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	MFG-18-1	93.243	14,405	-
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	PCSSMAT19-22-NCE	93.243	15,582	-
Cornell Scott-Hill Health Center - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	H79TI085083	93.243	15,827	-
Cornell Scott-Hill Health Center - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	MAT-PDOA Program	93.243	56,758	-
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	ATF Proposal: Opioid Response Network: Collaborating, Advancing, Responding, Educating (Care Team)	93.243	62,222	-
Connecticut Dept. of Mental Health and Addiction Services - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	19MHA6117	93.243	66,186	-
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	MFG-21-4	93.243	103,969	-
Yale New Haven Health Systems - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	3900192831-YSM-01	93.243	198,917	-
			<u>550,237</u>	<u>-</u>
Community Health Center, Inc. - Advanced Nursing Education Grant Program	100299	93.247	19,585	-
Community Health Center, Inc. - Advanced Nursing Education Grant Program	801300-100268	93.247	26,802	-
			<u>46,387</u>	<u>-</u>
Brigham and Women's Hospital - Health Systems Strengthening and HIV/AIDS Prevention, Care and Treatment under the President's Emergency Plan for AIDS Relief	116337	93.266	24,135	-
			<u>24,135</u>	<u>-</u>
COVID-19 Southern Connecticut State University (SCSU) - Nursing Research	HHS-126-001	93.391	76,399	-
			<u>76,399</u>	<u>-</u>
Washington University in St. Louis - Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health	WU-21-0512	93.421	5,279	-
Yale New Haven Health Systems - Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health	CK22-2203-YSEAS-01	93.421	18,488	-
Yale New Haven Health Systems - Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health	3900226631-YSPH	93.421	38,880	-
Yale New Haven Health Systems - Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health	CK22-2203-YSM-PEDS-01	93.421	149,927	-
			<u>212,574</u>	<u>-</u>
University of Washington, Seattle - National Harm Reduction Technical Assistance and Syringe Services Program (SSP) Monitoring and Evaluation Funding Opportunity (B)	UWSC12949	93.488	31,214	-
			<u>31,214</u>	<u>-</u>

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
III. Other Federal Assistance				
<u>Department of Health &amp; Human Services</u>				
<u>Pass-through: (Continued)</u>				
Boston University - Public Health Training Centers Program	4500004065	93.516	\$ 4,155	\$ -
			4,155	-
Southern Connecticut State University (SCSU) - PPHF: Racial and Ethnic Approaches to Community Health Program financed solely by Public Prevention and Health Funds	HHS118-003	93.738	10,628	-
Southern Connecticut State University (SCSU) - PPHF: Racial and Ethnic Approaches to Community Health Program financed solely by Public Prevention and Health Funds	HHS118-001	93.738	151,547	-
Southern Connecticut State University (SCSU) - PPHF: Racial and Ethnic Approaches to Community Health Program financed solely by Public Prevention and Health Funds	HHS076-3003	93.738	197,402	-
			359,577	-
American Academy of Addiction Psychiatry - Opioid STR	SOR-CARE-38	93.788	1,427	-
State of CT Dept of Mental Health and Addiction Services - Opioid STR	21MHA6065	93.788	177,150	-
			178,577	-
City of New Haven - HIV Emergency Relief Project Grants	A21-0828	93.914	(2)	-
City of New Haven - HIV Emergency Relief Project Grants	RFP 2021-11-1415 A23-0328	93.914	416,539	-
City of New Haven - HIV Emergency Relief Project Grants	A22-2211 (1700) (0840)	93.914	1,205,621	-
			1,622,158	-
Community Foundation for Greater New Haven - Healthy Start Initiative	NHHS - YR 5	93.926	12,114	-
Community Foundation for Greater New Haven - Healthy Start Initiative	NHHS Prog Yr 4	93.926	59,378	-
			71,492	-
AIDS United - Special Projects of National Significance	3031018-AU	93.928	196,306	-
			196,306	-
State of CT Dept of Public Health - HIV Prevention Activities Health Department Based	2019-0142	93.940	122,259	-
			122,259	-
North Carolina Department of Health and Human Services - Block Grants for Community Mental Health Services	00045032	93.958	129,728	-
			129,728	-
State of Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals - Block Grants for Prevention and Treatment of Substance Abuse	6B808T1083474-01M002	93.959	4,534	-
State of CT Dept of Mental Health and Addiction Services - Block Grants for Prevention and Treatment of Substance Abuse	22MHA1121	93.959	15,772	-
Liberty Community Services, Inc. - Block Grants for Prevention and Treatment of Substance Abuse	LCS Van Service	93.959	18,987	-
			39,293	-
	Subtotal - Department of Health & Human Services - Pass Through		5,053,559	-
	Subtotal - Department of Health & Human Services		11,342,137	640,632
<u>Department of Interior</u>				
<u>Direct:</u>				
Endangered Species Conservation Recovery Implementation Funds	F22AP02576-00	15.657	9,266	-
			9,266	-
	Subtotal - Department of Interior - Direct		9,266	-
	Subtotal - Department of Interior		9,266	-
<u>Department of Justice</u>				
<u>Direct:</u>				
Crime Victim Assistance	02-1817-39	16.575	10,089	-
			10,089	-
	Subtotal - Department of Justice - Direct		10,089	-
<u>Pass-through:</u>				
State of Connecticut Judicial Branch - Department of Justice	02-2202-45	16.575	184,540	-
			184,540	-
	Subtotal - Department of Justice - Pass Through		184,540	-
	Subtotal - Department of Justice		194,629	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
<b>III. Other Federal Assistance</b>				
<u>Department of State</u>				
Direct:				
U.S. Ambassadors Fund for Cultural Preservation	SNi01422GR0073	19.025	\$ 38,630	\$ -
			38,630	-
Public Diplomacy Programs	SKS70022CA0015	19.040	41,688	26,645
			41,688	26,645
Subtotal - Department of State - Direct			80,318	26,645
Subtotal - Department of State			80,318	26,645
<u>Federal Emergency Management Agency</u>				
Direct:				
COVID-19 Disaster Grants - Public Assistance		97.036	15,815,842	-
			15,815,842	-
Subtotal - Federal Emergency Management Agency - Direct			15,815,842	-
Subtotal - Federal Emergency Management Agency			15,815,842	-
<u>Institute of Museum and Library Services</u>				
Direct:				
Museums for America	MA-251634-OMS-22	45.301	35,915	-
			35,915	-
National Leadership Grants	LG-252288-OLS-22	45.312	90,849	-
			90,849	-
Laura Bush 21st Century Librarian Program	RE-36-19-0081-19	45.313	42,376	31,339
			42,376	31,339
Subtotal - Institute of Museum and Library Services - Direct			169,140	31,339
Subtotal - Institute of Museum and Library Services			169,140	31,339
<u>National Endowment for the Arts</u>				
Direct:				
Promotion of the Arts_Grants to Organizations and Individuals	1905825-32-23	45.024	30,000	-
Promotion of the Arts_Grants to Organizations and Individuals	1885701-44-21	45.024	40,000	-
			70,000	-
Subtotal - Endowment for the Humanities - Direct			70,000	-
Subtotal - Endowment for the Humanities			70,000	-
<u>National Endowment for the Humanities</u>				
Direct:				
Promotion of the Arts_Leadership Initiatives	1864032-32-21	45.026	20,000	-
			20,000	-
Promotion of the Humanities_Division of Preservation and Access	PW-264077-19	45.149	29	-
			29	-
Promotion of the Humanities_Office of Digital Humanities	HAA-266508-19	45.169	6,791	-
Promotion of the Humanities_Office of Digital Humanities	HND-284978-22	45.169	48,500	-
			55,291	-
Subtotal - Endowment for the Humanities - Direct			75,320	-
Pass-through:				
Bard College - Promotion of the Humanities_Division of Preservation and Access	2A0164-1	45.149	3,529	-
			3,529	-
Subtotal - Endowment for the Humanities - Pass Through			3,529	-
Subtotal - Endowment for the Humanities			78,849	-

The accompanying notes are an integral part of this schedule

**Yale University**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2023**

<u>Federal Agency/Pass-Through Entity/Program Title</u>	<u>Direct / Pass-Through Number</u>	<u>Federal Assistance Listing Number</u>	<u>Expenditures</u>	<u>Subrecipient Expenditures</u>
<b>III. Other Federal Assistance</b>				
<u><b>National Aeronautics &amp; Space Administration</b></u>				
Pass-through:				
University of Hartford - Education	1942	43.008	\$ 1,000	\$ -
			1,000	-
	Subtotal - National Aeronautics & Space Administration - Pass Through		1,000	-
	Subtotal - National Aeronautics & Space Administration		1,000	-
<u><b>U.S. Agency for International Development</b></u>				
Direct:				
Agency for International Development	7200AA21FA00014	98.U11	64,820	-
			64,820	-
	Subtotal - U.S. Agency for International Development - Direct		64,820	-
Pass-through:				
Chemonics International, Inc. - Agency for International Development	SUB-1199	98.U12	143,587	-
			143,587	-
Family Health International (FHI 360) - USAID Foreign Assistance for Programs Overseas	PO23000096	98.001	448,746	182,564
			448,746	182,564
	Subtotal - U.S. Agency for International Development - Pass Through		592,333	182,564
	Subtotal - U.S. Agency for International Development		657,153	182,564
<u><b>U.S. Treasury</b></u>				
Pass-through:				
Connecticut Dept. of Mental Health and Addiction Services - American Rescue Plan Act Funds	22MHA52ARPAR2	21.027	1,253	-
State of Connecticut Judicial Branch - American Rescue Plan Act Funds	02-2202-45	21.027	176,752	-
			178,005	-
	Subtotal - U.S. Treasury - Pass Through		178,005	-
	Subtotal - U.S. Treasury		178,005	-
	<b>Total Other Federal Assistance</b>		<b>29,428,457</b>	<b>1,035,562</b>
<b>IV. CCDF Cluster</b>				
<u><b>Department of Health &amp; Human Services</b></u>				
Pass-through:				
Education Development Center - Child Care and Development Block Grant	2022-0249	93.575	23,498	-
			23,498	-
	Subtotal - Department of Health & Human Services - Pass Through		23,498	-
	Subtotal - Department of Health & Human Services		23,498	-
	<b>Total CCDF Cluster</b>		<b>23,498</b>	<b>-</b>
	<b>Total Federal Expenditures</b>		<b>882,857,957</b>	<b>89,026,414</b>

# Yale University

## Notes to Schedule of Expenditures of Federal Awards

### Year Ended June 30, 2023

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#### 1. Significant Accounting Policies

##### Basis of Presentation

The Schedule of Expenditures of Federal Awards is a statement, prepared on the accrual basis of accounting, of Federal expenditures related to the current reporting period. It does not purport to present the results of operations or the net income or loss for the period as would a statement of activities or a statement of revenues and expenditures.

Federal expenditures for direct and indirect costs are recognized using the cost principles contained in 2 CFR Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. Under these cost principles, certain types of expenditures are not allowable or are limited as to reimbursement.

##### Facilities and Administrative Rates

Expenditures include a portion of costs associated with general University activities (facilities and administrative) which are allocated to federal awards under negotiated formulas commonly referred to as facilities and administrative rates. The University applies its predetermined approved facilities and administrative rate 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.

Full Federal Assistance Listing numbers and pass-through numbers are included when available.

#### 2. Student Loan Programs

The following schedule presents outstanding loan balances for federal student loan programs and federally guaranteed loan programs. These programs are administered directly by the University and balances and transactions relating to these programs are included in the University's consolidated financial statements. Loans outstanding at the beginning of the year, loans made during the year, and the administrative cost allowance (if applicable) are included in the federal expenditures presented in the Schedule of Expenditures of Federal Awards. The principal balance of loans outstanding at June 30, 2023 consists of:

	Federal Assistance Listing Numbers	Year End Loan Balance
Perkins	84.038	\$ 4,102,769
Primary Care Loan (PCL) and Health Professions Student Loans (HPSL)	93.342	3,158
Nursing Student Loan (NSL)	93.364	1,504,960
Loans for Disadvantaged Students (LDS)	93.342	950,810
		<u>\$ 6,561,697</u>

#### 3. Federal Emergency Management Agency (FEMA) Disaster Grants

The University applied for reimbursement of certain expenses related to the COVID-19 pandemic under Assistance Listing #97.036, FEMA Public Assistance through the state of Connecticut. Expenditures are and will be reflected in the Schedule in the year in which a project application is obligated. The Schedule thus includes \$15,815,842 of expenditures incurred in fiscal years 2021 and 2022, which were obligated in fiscal year 2023.

## **PART III**

### **REPORTS ON INTERNAL CONTROL AND COMPLIANCE**





## **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 President and Fellows of  
Yale 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 Yale University and its subsidiaries (the "University"), which comprise the consolidated statement of financial position as of June 30, 2023, and the related consolidated statements of activities and of cash flows for the year then ended, including the related notes (collectively referred to as the "consolidated financial statements"), and have issued our report thereon dated October 27, 2023.

### **Report on 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) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or 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 or significant deficiencies may exist that were not identified.

### **Report on Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the University's consolidated financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with



those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

### **Purpose of this Report**

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

*PricewaterhouseCoopers LLP*

Boston, Massachusetts  
October 27, 2023



## **Report of Independent Auditors on Compliance for Each Major Program and on Internal Control Over Compliance Required by Uniform Guidance**

To the President and Fellows of  
Yale University:

### **Report on Compliance for Each Major Federal Program**

#### ***Opinion on Each Major Federal Program***

We have audited Yale University and its subsidiaries' (the "University") compliance with the types of compliance requirements identified as subject to audit 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, 2023. 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.

In our opinion, the University complied, in all material respects, with the 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, 2023.

#### ***Basis for Opinion on Each Major Federal Program***

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (US GAAS); 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). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditors' Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the University's compliance with the compliance requirements referred to above.

#### ***Responsibilities of Management for Compliance***

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts or grant agreements applicable to the University's federal programs.



### ***Auditors' Responsibilities for the Audit of Compliance***

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the University's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material, if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the University's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with US GAAS, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the University's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the University's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances 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 the University's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

### ***Other Matters***

As indicated in Part I to the accompanying Schedule of Findings and Questioned Costs, we have audited the Student Financial Assistance cluster as a major program. Also, as indicated in the first paragraph of this report, we performed our audit of compliance using the compliance requirements contained in the OMB Compliance Supplement, including those contained in Part V 5.3, Compliance Requirement N, Special Tests and Provisions, Section 12 "Gramm-Leach-Bliley Act-Student Information Security." This section includes two suggested audit procedures with respect to verification that the institution (1) designated a Qualified Individual responsible for implementing and monitoring the institution's information security program, and (2) has a written information security program that addresses the remaining six required minimum elements that are detailed in the OMB Compliance Supplement, Part Five, Student Financial Assistance Cluster, Special Tests and Provisions, item 12, Gramm-Leach-Bliley Act – Student Information Security. Our procedures in relation to these two items were limited to inquiry of and obtaining written representation from management and obtaining and reading management's



documentation related to these two items. Our procedures did not include an analysis of the adequacy or completeness of the minimum required elements of the institution's information security program.

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 item 2023-001. Our opinion on each major federal program is not modified with respect to these matters.

*Government Auditing Standards* requires the auditor to perform limited procedures on the University's response to the noncompliance findings identified in our audit described in the accompanying management's views and corrective action plan. The University's response was not subjected to the other auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

### **Report on 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 Auditors' Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

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.

*PricewaterhouseCoopers LLP*

Boston, Massachusetts  
December 8, 2023

## **PART IV**

### **SCHEDULE OF FINDINGS AND QUESTIONED COSTS**

**Yale University**  
**Schedule of Findings and Questioned Costs**  
**For the Year Ended June 30, 2023**

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**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 ☒ no
- Significant deficiency(ies) identified that are not considered to be material weaknesses? ☐ yes ☒ none reported

Noncompliance material to financial statements noted? ☐ yes ☒ no

**Federal Awards**

Internal control over major programs:

- Material weakness(es) identified? ☐ yes ☒ no
- Significant deficiency(ies) identified that are not considered to be material weaknesses? ☐ yes ☒ none reported

Type of auditor’s report issued on compliance for major programs: Unmodified

Any audit findings disclosed that are required to be reported in accordance with Section 200.516(a) of the Uniform Guidance? ☒ yes ☐ no

Identification of major programs:

**Federal Assistance Listing  
Number(s)**

**Name of Federal Program or Cluster**

Various

Research and Development Cluster

Various

Student Financial Assistance Cluster

93.914

City of New Haven - HIV Emergency Relief  
Project Grants

97.036

Federal Emergency Management Agency  
(FEMA) Disaster Grants

Dollar threshold used to distinguish between type A and type B programs:

\$3,000,000

Auditee qualified as low-risk auditee? ☒ yes ☐ no

**Yale University**  
**Schedule of Findings and Questioned Costs**  
**For the Year Ended June 30, 2023**

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**Section II – Consolidated Financial Statement Findings**

No findings were identified related to the financial statements that are required to be reported.



# Yale University

## Schedule of Findings and Questioned Costs

### For the Year Ended June 30, 2023

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#### Section III – Federal Financial Assistance Findings and Questioned Costs

##### Finding No. 2023-001 – Student Financial Aid – Documentation and Execution of Policies

###### Award Information

**Cluster:** Student Financial Assistance

**Grantor:** Department of Education

**Award Name:** Federal Supplemental Educational Opportunity Grant, Federal Work-Study, Federal Pell Grant, Federal Direct Student Loan, Primary Care Loan, Loan for Disadvantaged Students, Health Professions Student Loans, Nursing Student Loan

**Award Year:** FY2023

**CFDA Number:** 84.007, 84.033, 84.063, 84.268, 93.342, 93.342, 93.342, 93.364

###### Criteria

The University has a centralized office of student financial assistance, as well as individual offices at various schools within the University. Through testing of various compliance requirements, PwC noted improvements are needed to the documentation and execution of certain student financial aid requirements throughout the University. Specific criteria related to areas that need improvement are as follows:

- An institution is required to establish written policies and procedures that incorporate the provisions of 34 CFR 668.51 through 668.61 for verifying applicant information for those applicants selected for verification by the Department of Education (ED). The institution shall require each applicant whose application is selected by ED to verify the information required for the Verification Tracking Group to which the applicant is assigned.
- *The Electronic Signatures in Global and National Commerce Act* (“E-Sign Act”) states that a school must obtain a student’s voluntary consent to participate in electronic transactions.
- University policy is to maintain a formal Title IV calculation form when a student withdraws or takes a leave of absence from the University.
- An institution must communicate Campus-Level and Program-Level enrollment data when there is a student status change (34 CFR 674.19).
- An institution must establish a reasonable satisfactory academic progress policy for determining whether an otherwise eligible student is making satisfactory academic progress in his or her educational program and may receive assistance under the Title IV, HEA programs (CFR 668.34).

###### Condition

As part of PwC’s testing over the student financial assistance cluster, they noted the following:

- PwC selected 25 students who were selected by the Department of Education for verification. For six out of the 25 students selected, the University was required to obtain a statement of identity. The University could not provide documentation that evidenced a statement of identity was obtained.

# **Yale University**

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

### **For the Year Ended June 30, 2023**

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- In examining 25 student records, the University did not receive a student's consent to participate in electronic transactions for one of the selections. After further investigation by the University, it was determined there were a total of 361 students that did not sign the voluntary consent, inclusive of the one PwC selected.
- PwC selected 16 students that required a Return of Title IV calculation. For two of the selected students, the University did not formally document the refund calculation performed. For one student, a return of Title IV funds was not needed and for the other student, the required return of Title IV funds was appropriately made within the required timeframe.
- PwC selected 25 students that had a student status change. For two of the selections, the University enrollment change was communicated to the NSLDS accurately and timely, however the program level data was not communicated as required by the regulations.
- PwC reviewed the University's policies over satisfactory academic progress. There were four schools within the University that did not document procedures for disbursements to students on financial aid warning status or financial aid probation status. Additionally, there was one school that did not document policies stating that students who (1) have not achieved the required GPA, (2) are not successfully completing their program of study at the required pace (if required), or (3) have not completed the program within the maximum time frame will no longer be eligible for Title IV aid.

#### **Questioned Costs**

None noted.

#### **Cause**

The University does not have consistent policies and procedures in place that require the appropriate documentation to be maintained to support compliance with the regulatory requirements.

#### **Effect**

Failure to maintain, distribute and enforce uniform policies and procedures across the University may result in appropriate documentation not being maintained for compliance purposes.

#### **Recommendation**

PwC recommends the University establish consistent policies and procedures for all compliance areas and hold trainings to ensure that student financial aid staff are aware of the required policies.

#### **Management's Views and Corrective Action Plan**

Management's views and corrective action plan is included in Section V.

# **Yale University**

## **Summary Schedule of Prior Audit Findings**

### **For the Year Ended June 30, 2023**

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#### **Finding No. 2022-001 – Reporting**

##### **Award Information**

**Grantor:** Department of Education

**Award Name:** HEERF II Institutional Grants

**Award Year:** 4/19/2021 – 4/18/2022

**Federal Assistance Listing Number:** 84.425F, HEERF II Institutional Grants

**Pass Through Number:** Not applicable

##### **Condition**

Yale expended both institutional and student funds received under the Higher Education Emergency Relief Fund in the form of student grants. Yale reported its institutional expenditures in conjunction with its student expenditures. However, the regulations required a separate report for student and institutional expenditures. As a result of the combined reporting, Yale did not publicly post the institutional quarterly public report for the quarter ending June 30, 2021 that was due no later than July 10, 2021.

##### **University Update**

All required reports including the final HEERF close-out report at the beginning of this year were successfully completed and filed.

## **PART V**

### **MANAGEMENT'S VIEWS AND CORRECTIVE ACTION PLAN**

## **Finding No. 2023-001 – Student Financial Aid – Documentation and Execution of Policies**

### **Views of Responsible Officials and Corrective Action Plan**

The University acknowledges the need for consistent policies, procedures, and the application of these requirements and has already begun to put in place corrective actions to address these issues for the 2023-24 academic year. Outlined below are corrective actions and proposed changes to align Yale with the stated recommendations:

- **Verification** – Implementation of a university-wide document posting process with an expected implementation date by the end of the fiscal year 2024. This process will auto-populate federally required documents into Yale's financial aid system, based on FAFSA/ISIR comment codes, in a way that will prevent disbursement to a student's account unless collected. Schools will receive training from the University Financial Aid Office ("UFAO") in concurrence with the implementation of this new automated population regarding the collection of the new university-wide form and the proper acceptance of identity requirements.
- **Electronic Transactions** – Beginning in June of 2023, all financial aid recipients, not just Federal Financial Aid recipients, are asked to complete E-Consent on the new Student Portal Yale Hub. Students cannot view award offers, electronic documents that must be completed online, or personal historical financial aid data until the E-Consent question is answered.
- **Return of Title IV** – Creation and implementation of a university-wide Return to Title IV funds policy and procedure is currently in process. This implementation will begin before the end of calendar year 2023 and will include training of several additional Financial Aid staff members across the university on the updated policies and procedures to create redundancies for timely and consistent processing of R2T4's.
- **NSLDS Enrollment Reporting** – The University Registrar is working with ITS to correct the custom Banner NSC extract job to ensure that not just the enrollment status is updated, but also the program level status. An additional staff member in the registrar's office will be deployed to focus on compliance and enrollment reporting.
- **Satisfactory Academic Progress ("SAP")** – The University Financial Aid Office has begun a school-by-school review of SAP policies. Review and implementation of updated SAP policies will be concluded by June 2024 schoolwide. UFAO will set up an SAP review process for new programs as well as an annual review for each school.

#### **University contact:**

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