

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, 2022**

Yale University

Table of Contents to Report on Federal Financial Assistance Programs in Accordance with the OMB Uniform Guidance June 30, 2022

	Page(s)
PART I – FINANCIAL STATEMENTS	
Report of Independent Auditors	I-1 – I-3
Consolidated Financial Statements and Footnotes	I-4 – I-41
PART II – SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS	
Schedule of Expenditures of Federal Awards	II-1 – II-77
Notes to Schedule of Expenditures of Federal Awards	II-78 – II-79
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 <i>Government Auditing Standards</i>	III-1 – III-2
Report of Independent Auditors on Compliance for Each Major Program and on Internal Control Over Compliance Required by Uniform Guidance	III-3 – III-5
PART IV – SCHEDULE OF FINDINGS AND QUESTIONED COSTS	
Summary of Auditor's Results	IV-1
Financial Statement Findings	IV-2
Federal Financial Assistance Findings and Questioned Costs	IV-3 – IV-4
Summary Schedule of Prior Audit Findings	IV-5 – IV-6
PART V – MANAGEMENT'S VIEWS AND CORRECTIVE ACTION PLAN	
Management's Views and Corrective Action Plan	V-1

PART I
FINANCIAL STATEMENTS

Yale University

Financial Statements
June 30, 2022 and 2021



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 (the “University”), which comprise the consolidated statements of financial position as of June 30, 2022 and 2021, and the related consolidated statements of activities for the year ended June 30, 2022 and of cash flows for the years ended June 30, 2022 and 2021, 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 and its subsidiaries as of June 30, 2022 and 2021, the changes in its net assets for the year ended June 30, 2022 and its cash flows for the years ended June 30, 2022 and 2021 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 audits. 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, 2021 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 25, 2021, 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, 2021 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.

PricewaterhouseCoopers LLP, 101 Seaport Boulevard, Boston, MA 02210
T: (617) 530 5000, F: (617) 530 5001, www.pwc.com/us



In preparing the 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 financial statements are issued.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the 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 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, 2022 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 21, 2022 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, 2022. 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 21, 2022

Yale University Consolidated Statements of Financial Position

as of June 30, 2022 and June 30, 2021 (\$ in thousands)

	2022	2021
Assets:		
Cash and cash equivalents	\$ 712,614	\$ 772,593
Accounts receivable, net	405,683	397,974
Contributions receivable, net	1,020,493	1,197,417
Notes receivable	89,912	96,509
Investments, at fair value	46,472,072	47,830,139
Right of use assets	179,645	182,694
Other assets	240,814	238,088
Land, buildings and equipment, net of accumulated depreciation	5,598,069	5,507,845
Total assets	\$ 54,719,302	\$ 56,223,259
Liabilities:		
Accounts payable and accrued liabilities	\$ 615,340	\$ 631,093
Advances under grants and contracts and other deposits	194,594	174,478
Lease liabilities	253,081	254,428
Other liabilities	1,368,728	1,957,123
Liabilities under split-interest agreements	130,816	149,105
Bonds and notes payable	5,164,430	5,199,573
Liabilities associated with investments	2,298,288	3,565,475
Total liabilities	\$ 10,025,277	\$ 11,931,275
Net Assets:		
Net assets without donor restrictions: Yale University	\$ 8,592,595	\$ 7,652,769
Net assets without donor restrictions: non-controlling interests	1,621	779
Total net assets without donor restrictions	8,594,216	7,653,548
Net assets with donor restrictions	36,099,809	36,638,436
Total net assets	\$ 44,694,025	\$ 44,291,984
Total liabilities and net assets	\$ 54,719,302	\$ 56,223,259

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

Yale University Consolidated Statement of Activities

for the year ended June 30, 2022 with summarized comparative totals for the year ended June 30, 2021 (\$ in thousands)

	Without Donor Restrictions	With Donor Restrictions	2022	2021
Operating				
<i>Revenues and releases:</i>				
Net tuition, room and board	\$ 461,513	\$ -	\$ 461,513	\$ 295,972
Grant and contract income, primarily for research and training	962,088	-	962,088	876,936
Medical services income	1,327,268	-	1,327,268	1,250,086
Contributions	18,457	214,125	232,582	247,471
Allocation of endowment spending from financial capital	449,993	1,118,449	1,568,442	1,512,601
Other investment income	59,158	10,573	69,731	163,076
Other income	188,447	48	188,495	232,963
Total revenues	3,466,924	1,343,195	4,810,119	4,579,105
Net assets released from restrictions	1,173,387	(1,173,387)	-	-
Total revenues and releases	\$ 4,640,311	\$ 169,808	\$ 4,810,119	\$ 4,579,105
<i>Expenses:</i>				
Salaries and wages	\$ 2,114,898	\$ -	\$ 2,114,898	\$ 1,971,143
Employee benefits	759,791	-	759,791	741,114
Depreciation, amortization and interest	407,795	-	407,795	407,673
Other operating expenditures	1,257,816	-	1,257,816	1,081,613
Total expenses	4,540,300	-	4,540,300	4,201,543
Increase in net assets from operating activities	100,011	169,808	269,819	377,562
Non-operating				
Contributions	1,625	379,910	381,535	698,720
Total endowment return	50,332	215,548	265,880	12,052,824
Allocation of endowment spending to operations	(278,461)	(1,289,981)	(1,568,442)	(1,512,601)
Other investment income	501,102	755	501,857	433,841
Change in funding status of defined benefit plans	503,181	-	503,181	671,287
Other increases (decreases)	46,941	428	47,369	(60,849)
Net assets released from restrictions	15,095	(15,095)	-	-
Increase in net assets from non-operating activities	839,815	(708,435)	131,380	12,283,222
Total increase in net assets - Yale University	939,826	(538,627)	401,199	12,660,784
Change in non-controlling interests	842	-	842	(100,754)
Total increase (decrease) in net assets	940,668	(538,627)	402,041	12,560,030
Net assets, beginning of year	7,653,548	36,638,436	44,291,984	31,731,954
Net assets, end of year	\$ 8,594,216	\$ 36,099,809	\$ 44,694,025	\$ 44,291,984

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, 2022 and 2021 (\$ in thousands)

	2022	2021
Operating activities:		
Change in net assets	\$ 402,041	\$ 12,560,030
Adjustments to reconcile change in net assets to net cash used in operating activities:		
Depreciation and amortization	340,039	332,458
Realized and unrealized gain on other investments	(512,958)	(459,059)
Net endowment investment loss (gain)	106,046	(11,888,742)
Change in non-controlling interests	(842)	100,754
Change in funding status of defined benefit plans	(503,181)	(671,287)
Non-operating contributions	(381,535)	(698,720)
Contributed securities	(118,421)	(212,670)
Proceeds from sale of donated securities	44,640	38,273
Other adjustments	(9,898)	74,980
Changes in assets and liabilities that (use) provide cash:		
Accounts receivable	(7,709)	(33,122)
Contributions receivable	3,962	(46,276)
Other operating assets	(1,435)	(7,355)
Accounts payable and accrued expenses	(191,042)	224,342
Advances under grants and contracts and other deposits	20,116	(9,899)
Other liabilities	94,516	170,986
Net cash used in operating activities	(715,661)	(525,307)
Investing activities:		
Student loans repaid	12,021	13,461
Student loans granted	(5,578)	(5,611)
Purchases related to capitalized software costs and other assets	(26,560)	(47,426)
Proceeds from sales and maturities of investments	10,593,403	15,468,766
Purchases of investments	(10,189,985)	(15,174,268)
Purchases of land, buildings and equipment	(424,953)	(381,017)
Net cash used in investing activities	(41,652)	(126,095)
Financing activities:		
Proceeds from restricted contributions	554,497	406,029
Proceeds from sale of contributed securities restricted for endowment	73,781	174,397
Contributions received for split-interest agreements	9,027	4,434
Payments made under split-interest agreements	(15,840)	(17,345)
Repayments of long-term debt	(16,489)	(50,966)
Repayments to the Federal government for student loans	(2,858)	(3,128)
Net cash provided by financing activities	602,118	513,421
Net decrease in cash and cash equivalents	(155,195)	(137,981)
Cash and cash equivalents, beginning of year	931,177	1,069,158
Cash and cash equivalents, end of year	\$ 775,982	\$ 931,177

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"), 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, twelve 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, 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:

	2022	2021
Total assets, at year end	\$ 54,719,302	\$ 56,223,259
Less nonfinancial assets:		
Land, buildings and equipment, net of accumulated depreciation	5,598,069	5,507,845
Other assets	240,814	238,088
Right of use assets	179,645	182,694
Financial assets, at year end	48,700,774	50,294,632
Less those unavailable for general expenditure within one year due to contractual or donor-imposed restrictions:		
Restricted by donor with time or purpose restrictions	914,040	1,095,679
Subject to appropriation and satisfaction of donor restrictions including board-designated endowments	43,255,859	44,779,408
Other long-term notes receivable	89,912	96,509
Financial assets available to meet cash needs for general expenditures within one year	\$ 4,440,963	\$ 4,323,036

The university has \$4,441.0 million of financial assets that are available within one year of the date of the 2022 consolidated statement of financial position to meet cash needs for general expenditure consisting of cash of \$712.6 million, accounts receivable of \$405.7 million, contributions receivable of \$106.5 million, and short-term investments of \$3,216.2 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 \$7,189.6 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 \$1,556.3 million and \$1,187.9 million at June 30, 2022 and 2021, 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:

	2022	2021
Cash paid during the year for interest	\$ 166,862	\$ 170,086
Noncash investing activities:		
Land, buildings and equipment purchases payable to vendor	\$ 46,148	\$ 53,568

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

	2022	2021
Cash paid for amounts included in measurement of liabilities:		
Operating cash flows from financing leases	\$ 7,719	\$ 7,730
Operating cash flows from operating leases	9,798	10,422
Financing cash flows from financing leases	6,691	4,783
Non-cash lease related items:		
ROU assets obtained in exchange for new financing liabilities	\$ -	\$ 41,561
ROU assets obtained in exchange for new operating liabilities	20,572	3,178

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.

	2022	2021
Cash and cash equivalents	\$ 712,614	\$ 772,593
Cash included in Investments, at fair value	63,368	158,584
Total cash and cash equivalents shown in the consolidated statements of cash flows	\$ 775,982	\$ 931,177

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, 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. There were no endowment funds in a deficit position at June 30, 2021.

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 2022 and 2021, when measured against the previous year's June 30th endowment fair value, was 3.8% and 5.0%, 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, 2022 and 2021.

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 an 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 14,600 and 12,100 in 2022 and 2021, 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 58.5% and 49.9% of total tuition, room and board revenue in 2022 and 2021, 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 \$416.6 million and \$354.4 million in 2022 and 2021, 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, 2022 and 2021, the university has research activities which are contractually authorized by the sponsor, but for which costs have not yet been incurred, totaling \$1,612.3 million and \$1,775.8 million, respectively.

In 2022 and 2021, grant and contract income from the federal government totaled \$743.3 million and \$668.6 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 will expire on June 30, 2023. New rates will be negotiated 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:

	2022		2021	
Gross Revenue	\$	2,337,674	\$	2,257,944
Allowances and discounts		(1,628,166)		(1,572,897)
Total patient care revenue	\$	709,508	\$	685,047

In 2022 and 2021, net patient revenue, included in income from medical services, totaled \$515.5 million and \$494.5 million from insurance companies, \$192.9 million and \$182.9 million from Medicare, \$74.6 million and \$74.0 million from Medicaid, and \$88.9 million and \$80.9 million from other third parties, 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 Tax Cuts and Jobs Act (the "Act"), enacted on December 22, 2017, impacts the university in several ways, including the introduction of 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. Management will continue to monitor regulatory developments and assess the future impact of the relevant provisions of the Act on the university's consolidated financial statements.

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, 2020, the university adopted new accounting guidance relating to the accounting for collections. The new guidance provides for an updated definition of collections and was not significant to the university's consolidated financial statements.

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. Reclassifications

Certain amounts from 2021 have been reclassified to conform to the current year presentation.

v. Summarized 2021 Financial Information

The 2022 consolidated financial statements include selected comparative summarized financial information for 2021. 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 2021 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 absolute return (hedge strategies), private equity (venture capital and

leveraged buyouts), real estate, and natural resources (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:

	2022	2021
Endowment investments:		
Long-term investment pool	\$ 41,059,569	\$ 41,790,089
Other	62,704	122,493
Total net endowment investments	41,122,273	41,912,582
Non-endowment investments:		
Long-term investment pool	300,000	300,000
Fixed income	1,347,771	1,356,965
Derivatives	(75,334)	(628,384)
Other	1,477,453	1,322,722
Total non-endowment investments	3,049,890	2,351,303
Net investments, at fair value	\$ 44,172,163	\$ 44,263,885

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:

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

2021		Level 1	Level 2	Level 3	Total
Investments, at fair value:					
Cash and short-term investments	\$	1,519,592	\$ -	\$ -	\$ 1,519,592
Fixed income		4,305,650	-	65	4,305,715
Common stock:					
Domestic		943,860	13,513	3,972	961,345
Foreign		1,427,070	-	80,689	1,507,759
Total common stock		2,370,930	13,513	84,661	2,469,104
Other equity investments:					
Developed equities		-	-	1,388	1,388
Real assets		-	-	618,580	618,580
Venture capital		-	-	479,519	479,519
Total other equity investments		-	-	1,099,487	1,099,487
Other investments		160,314	325,074	303,582	788,970
Total leveled investments, at fair value	\$	8,356,486	\$ 338,587	\$ 1,487,795	\$ 10,182,868
Investments at net asset value					37,647,271
Total investments				\$	\$ 47,830,139
Liabilities associated with investments:					
Securities sold, not yet purchased	\$	787,354	\$ -	\$ -	\$ 787,354
Other liabilities		52,339	986,705	1,739,077	2,778,121
Total liabilities associated with investments	\$	839,693	\$ 986,705	\$ 1,739,077	\$ 3,565,475
Non-controlling interests					779
Net investments				\$	\$ 44,263,885

Included within cash and short-term investments are restricted short-term investment balances held as collateral in the amount of \$1,493.0 million and \$1,029.3 million as of June 30, 2022 and 2021, 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:

	2022	2021
Developed equities	\$ 4,455,361	\$ 5,240,678
Emerging equities	1,648,280	1,872,947
Leveraged buyouts	8,888,559	8,758,246
Marketable alternatives	5,303,852	5,210,590
Real assets	5,488,279	4,587,370
Venture capital	11,004,914	11,977,440
Total investments, at NAV	\$ 36,789,245	\$ 37,647,271

Assets and liabilities of investment companies that are controlled by the university are consolidated for reporting purposes. Certain investment companies are required to be consolidated for financial reporting purposes. 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:

	2022		2021	
Consolidated investment company assets	\$	125,108	\$	135,643
Consolidated investment company liabilities		4,692		4,479
	\$	120,416	\$	131,164

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	
	2022	2021			2022	2021	2022	2021
Emerging equities	\$	58,545	\$	84,661	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	\$	1,604,274	\$	1,388	Carried interest calculation	Fund high water mark	N/A	*
					Discount for illiquidity	Discount rate	*	55.0%
Fixed income	\$	1,185	\$	65	Indicative market quotations	Recent funding activity	N/A	N/A
Real assets	\$	439,971	\$	618,580	Discounted cash flow	Discount rate	8.0 - 12.0%	8.0 - 12.0%
Trusts	\$	208,054	\$	237,210	Net present value	Discount rate	3.7%	2.3%
Venture capital	\$	227,937	\$	479,519	Tax analysis	Likelihood of taxation	0.0%	0.0%
Other investments	\$	106,265	\$	66,372	Market comparables	Price per acre	\$8,834.00 - \$9,164.00	\$8,834.00 - \$9,164.00
Liabilities	\$	(1,664,611)	\$	(1,739,077)	Various methods	University pooled unit market value	\$4,885.00	\$5,041.79

* Valuation technique does not apply to year.

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 losses of \$114.1 million and unrealized gains of \$94.5 million that relate to investments held at June 30, 2022 and 2021, 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:

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 gain (loss), 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

2021	Developed equities	Real assets	Venture capital	Other	Liabilities	Total
Beginning balance	\$ 5,483	\$ 234,977	\$ 342,778	\$ 481,351	\$ (1,443,823)	\$ (379,234)
Realized and unrealized gain (loss), net	(2,112)	248,309	199,130	42,686	(395,115)	92,898
Purchases	-	13,243	420	20,992	(63,340)	(28,685)
Sales	(1,983)	(47,686)	(62,809)	(7,285)	163,201	43,438
Transfers in	-	169,737	-	-	-	169,737
Transfers out	-	-	-	(149,436)	-	(149,436)
Ending balance	\$ 1,388	\$ 618,580	\$ 479,519	\$ 388,308	\$ (1,739,077)	\$ (251,282)

Transfers into Level 3 consist primarily of investments reclassified from NAV to level 3 as the practical expedient is not used for certain limited partnership investments. Transfers out of Level 3 consist of investments reclassified from level 3 to NAV due to the use of the practical expedient and investments transferred out as a result of deconsolidation of investment entities.

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
	2022	2021		2022	2021		
Developed equities	\$ 6,059,635	\$ 5,242,066	No Limit	\$ 82,872	\$ 114,041	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	1,648,280	1,872,947	No Limit	126,000	110,700	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	8,888,559	8,758,246	1-25 years	4,523,006	4,438,331	Closed end funds not eligible for redemption.	Not redeemable.
Marketable alternatives	5,303,852	5,210,590	No Limit	115,719	268,586	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	5,928,250	5,205,950	1-25 years	2,456,597	3,015,820	Closed end funds not eligible for redemption.	Not redeemable.
Venture capital	11,232,851	12,456,959	1-25 years	2,095,548	1,524,279	Redemption terms range from 2 years with 3 years notice to closed end structures not available for redemption.	Not redeemable.
Total	<u>\$ 39,061,427</u>	<u>\$ 38,746,758</u>		<u>\$ 9,399,742</u>	<u>\$ 9,471,757</u>		

The fair value of fixed income securities of \$176.8 million and \$520.5 million was provided at June 30, 2022 and 2021, 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 university does not invest in derivatives for speculation. The fair value of derivative positions held at June 30 and related gain (loss) for the year, in thousands of dollars, were as follows:

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)	
Net collateral received/(posted)	-	(88,688)	
Total net exposure for derivatives	\$ 538	\$ 842	

2021

	Assets	Liabilities	(Loss) Gain
Endowment:			
Other	\$ -	\$ 45,255	\$ (206,440)
	-	45,255	(206,440)
Other:			
Interest rate swaps	27,058	672,100	423,253
	27,058	672,100	423,253
Gross value of derivatives	27,058	717,355	\$ 216,813
Other-counterparty netting	(27,058)	(27,058)	
Net collateral received/(posted)	-	(651,036)	
Total net exposure for derivatives	\$ -	\$ 39,261	

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 and \$2.4 billion at June 30, 2022 and 2021, respectively. The notional amount of contracts that pay based on variable rates and receive based on fixed rates were \$800.0 million and \$725.0 million at June 30, 2022 and 2021, 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 \$168.6 million and \$186.8 million at June 30, 2022 and 2021, respectively.

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

	2022	2021
Charitable gift annuities	\$ 289,105	\$ 293,211
Charitable remainder trusts	103,370	124,504
Pooled income funds	5,675	5,762
	<u>\$ 398,150</u>	<u>\$ 423,477</u>

Split-interest liabilities reported in the consolidated statement of financial position totaled \$130.8 million and \$149.1 million at June 30, 2022 and 2021, 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 \$1,370.6 million and \$1,464.4 million at June 30, 2022 and 2021, respectively. The largest balance recorded is for the Hospital, with \$1,037.0 million and \$1,121.4 million invested at June 30, 2022 and 2021, 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:

	2022	2021
Investment income	\$ 371,926	\$ 164,082
Realized and unrealized (loss) gain, net of investment management fees	(106,046)	11,888,742
Total endowment return	265,880	12,052,824
Other investment income	571,588	596,917
	<u>\$ 837,468</u>	<u>\$ 12,649,741</u>

Endowment investment returns totaling \$1,568.4 million and \$1,512.6 million were allocated to operating activities in 2022 and 2021, 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:

	2022	2021
Medical services	\$ 323,304	\$ 284,411
Grant and contracts	116,048	132,519
Affiliated organizations	119,644	100,965
Publications	7,267	6,294
Other	73,998	78,426
	<u>640,261</u>	<u>602,615</u>
Less: Allowance for doubtful accounts	(234,578)	(204,641)
	<u>\$ 405,683</u>	<u>\$ 397,974</u>

Medical services receivables are net of discounts and allowances of \$218.5 million and \$188.8 million at June 30, 2022 and 2021, respectively.

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

	2022	2021
Insurance companies	45%	47%
Payments due directly from patients	22%	23%
Medicare	17%	15%
Commercial insurance and others	11%	11%
Medicaid	5%	4%

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

The net receivable from the Hospital amounted to \$112.9 million and \$89.3 million at June 30, 2022 and 2021, respectively. Balances are settled in the ordinary course of business. The university recognized \$492.2 million and \$453.5 million in revenue and incurred \$135.5 million and \$122.3 million in expenses related to activities with the Hospital during the years ended June 30, 2022 and 2021, respectively.

4. Contributions Receivable

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

	2022	2021
Purpose:		
Operating programs	\$ 501,570	\$ 512,226
Endowment	636,325	797,637
Capital purposes	107,334	131,250
Gross unconditional promises to give	1,245,229	1,441,113
Less: Discount to present value	(111,307)	(114,403)
Allowance for uncollectible accounts	(113,429)	(129,293)
	\$ 1,020,493	\$ 1,197,417
Amounts due in:		
Less than one year	\$ 418,213	\$ 468,030
One to five years	531,880	661,891
More than five years	295,136	311,192
	\$ 1,245,229	\$ 1,441,113

Discount rates used to calculate the present value of contributions receivable ranged from .07% to 7.00% at June 30, 2022 and 2021.

The university had conditional pledges of approximately \$16.4 million and \$17.4 million at June 30, 2022 and June 30, 2021, respectively, which are subject to donor-imposed conditions.

5. Notes Receivable

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

	2022	2021
Institutional student loans	\$ 43,465	\$ 44,187
Federally-sponsored student loans	10,911	14,893
Notes receivable	48,312	49,535
	102,688	108,615
Less: Allowance for doubtful accounts	(12,776)	(12,106)
	\$ 89,912	\$ 96,509

Student Loans

Institutional student loans include 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	2022	2021
Right of use asset - Operating	Right of use assets	\$ 46,506	\$ 41,433
Right of use asset - Financing	Right of use assets	133,139	141,261
Right of use liabilities - Operating	Lease liabilities	47,304	41,959
Right of use liabilities - Financing	Lease liabilities	205,777	212,469

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	2022	2021
Financing lease cost			
Amortization of right of use assets	Depreciation, amortization and interest	\$ 10,279	\$ 9,404
Interest on lease liabilities	Depreciation, amortization and interest	7,719	7,675
Operating lease cost	Other operating expenses	10,114	10,815
Total lease cost		\$ 28,112	\$ 27,894

The following table summarizes maturities of lease liabilities as of June 30, 2022, in thousands of dollars:

	Financing	Operating	Total
2023	\$ 14,610	\$ 9,969	\$ 24,579
2024	14,813	9,542	24,355
2025	15,019	7,466	22,485
2026	15,228	5,799	21,027
2027	15,440	5,201	20,641
Thereafter	212,266	12,755	225,021
Undiscounted expected future cash flows	287,376	50,732	338,108
Discount	(81,599)	(3,428)	(85,027)
Discounted expected future cash flows	\$ 205,777	\$ 47,304	\$ 253,081

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

	2022		2021	
	Financing	Operating	Financing	Operating
Weighted-average remaining lease term (years)	19	9	19	9
Weighted-average discount rate	3.66%	1.76%	3.66%	2.16%
Total undiscounted lease liability	\$ 287,376	\$ 50,732	\$ 301,786	\$ 45,720

7. Other Assets

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

	2022	2021
Insurance receivables	\$ 140,923	\$ 135,086
Software costs, net of accumulated amortization	39,906	42,295
Deferred expenses	42,315	44,315
Inventories	17,670	16,392
	<u>\$ 240,814</u>	<u>\$ 238,088</u>

Amortization expense related to other assets included in operating expenses amounted to \$14.2 million and \$13.3 million in 2022 and 2021, 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:

	2022	2021
Land and real estate improvements	\$ 137,203	\$ 137,585
Buildings	8,380,253	8,163,195
Equipment	624,506	641,254
	<u>9,141,962</u>	<u>8,942,034</u>
Less: Accumulated depreciation and amortization	(3,961,507)	(3,706,913)
	<u>5,180,455</u>	<u>5,235,121</u>
Construction in progress	417,614	272,724
	<u>\$ 5,598,069</u>	<u>\$ 5,507,845</u>

Depreciation expense included in operating expenses amounted to \$306.7 million and \$301.2 million in 2022 and 2021, 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:

	2022	2021
Employee benefit obligations	\$ 993,684	\$ 1,503,483
Compensated absences	78,275	92,819
Financial aid grant obligations	49,674	65,321
Asset retirement obligations	38,229	39,422
Other	208,866	256,078
	<u>\$ 1,368,728</u>	<u>\$ 1,957,123</u>

Included in employee benefit obligations are defined benefit plan liabilities in excess of plan assets. These liabilities amounted to \$743.8 million at June 30, 2022 and \$1,247.0 million at June 30, 2021 (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, 2022	Calendar Year of Maturity	Outstanding Balance	
			2022	2021
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	0.09%	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	1.45%	2042	100,000	100,000
Series 2014A	1.10%	2048	250,000	250,000
Series 2015A	0.38%	2035	300,000	300,000
Series 2016A	1.79%	2042	399,320	399,320
Series 2017A	5.00%	2042	170,920	170,920
Series 2017B	2.44%	2029/2037	194,530	194,530
Series 2017C	5.00%	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	0.29%	2022	500,000	500,000
US Department of Energy	2.70%	2029	24,786	31,879
Principal amount			5,095,376	5,102,469
Less: Bond issue costs			(17,524)	(18,174)
Plus: Unamortized premiums and discounts, net			86,578	115,278
			\$ 5,164,430	\$ 5,199,573

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 \$14.6 million as of June 30, 2022.

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 \$23.3 million as of June 30, 2022.

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. On February 8, 2022, Series U was remarketed from a fixed rate of 2.00% to 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 Series X-2 bonds maturing in July 2037. On February 9, 2021, the bonds were remarketed from a fixed rate of 1.80% to a fixed interest rate of 0.25% through February 8, 2024.

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 has 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. The bonds bear a fixed interest rate of 1.10% through February 6, 2023.

Series 2015A bonds total \$300.0 million, maturing in July 2035. In July 2021, the bonds were remarketed from a fixed interest rate of 2.05% to a fixed interest rate of 0.38% through July 11, 2024.

Series 2016A bonds consist of 1) \$150.0 million Series 2016A-1 bonds bearing a fixed interest rate of 1.45% through June 30, 2022 and 2) \$249.3 million Series 2016A-2 bonds bearing a fixed interest rate of 2.00% through June 30, 2026. Both bond series mature in July 2042. On July 1, 2022, Series 2016A-1 was remarketed at a daily variable interest rate. Series 2016A-2 include a net premium of \$270 thousand as of June 30, 2022.

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 mature in July 2042 and bear a fixed interest rate of 5.00% through June 30, 2022. On July 1, 2022, both series were remarketed at a weekly variable interest rate.

Series 2017B bonds consist of 1) \$82.4 million Series 2017B-1 bonds maturing in July 2029 and 2) \$112.1 million Series 2017B-2 maturing in July 2037. In July 2020, Series 2017B-1 bonds (originally issued at a par value of \$112.1 million) were remarketed to a fixed interest rate of 5.00% through July 2029 and Series 2017B-2 bonds were remarketed to a term interest rate of 0.55% through July 2023. The Series 2017B-1 bonds include a net premium of \$23.1 million as of June 30, 2022.

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 were issued in December 2017 to refund Series 2010A-2 bonds and bear a fixed interest rate of 5.00% through January 2028. These bonds include a net premium of \$16.3 million as of June 30, 2022. Series 2017C-2 bonds were issued

in December 2017 and bear a fixed interest rate of 5.00% through January 2023. These bonds include a net premium of \$4.6 million as of June 30, 2022.

Series 2018A bonds were issued in July 2018 to refund Series 2010A-1 bonds and total \$67.6 million maturing in July 2025. The bonds bear a fixed interest rate of 5.00%. These bonds include a net premium of \$5.3 million as of June 30, 2022.

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 \$156 thousand as of June 30, 2022.

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 \$783 thousand as of June 30, 2022.

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:

2023	\$	504,835
2024		4,835
2025		504,835
2026		72,445
2027		4,835
Thereafter		4,003,591
Total	\$	5,095,376

Certain CHEFA Series are subject to tender by bondholders. To the extent all bonds subject to tender could not be remarketed, \$2.4 billion of bonds scheduled for maturity between 2029 and 2057 would be due when tendered.

Total interest expense incurred on indebtedness was \$71 million and \$78.5 million in 2022 and 2021, respectively. Interest capitalized to land, buildings and equipment totaled \$5.0 million and \$5.6 million in 2022 and 2021, respectively. Amortization expense related to bond issue costs included in operating expenses amounted to \$3.4 million and \$3.3 million in 2022 and 2021, 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 \$146.9 million and \$136.7 million in 2022 and 2021, respectively.

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 liabilities within the consolidated statements of financial position at June 30, in thousands of dollars:

	Pension		Postretirement	
	2022	2021	2022	2021
Change in benefit obligation:				
Benefit obligation, beginning of year	\$ 2,407,762	\$ 2,388,609	\$ 1,708,602	\$ 1,609,298
Service cost	101,014	103,235	66,548	70,732
Interest cost	58,060	52,013	38,456	36,007
Benefit payments	(51,846)	(44,391)	(32,101)	(26,668)
Assumption changes	(536,173)	(106,864)	(253,543)	(27,063)
Actuarial loss (gain)	4,260	15,160	(118,029)	46,296
Benefit obligation, end of year	\$ 1,983,077	\$ 2,407,762	\$ 1,409,933	\$ 1,708,602
Change in plan assets:				
Fair value, beginning of year	\$ 2,066,964	\$ 1,593,132	\$ 802,442	\$ 579,458
Actual return on plan assets	(166,373)	489,569	(96,185)	186,277
University contributions	49,945	31,318	80,623	64,715
Benefits paid	(51,846)	(44,391)	(32,101)	(26,668)
Expenses paid	(2,892)	(2,664)	(1,358)	(1,340)
Fair value, end of year	\$ 1,895,798	\$ 2,066,964	\$ 753,421	\$ 802,442
Funded Status	\$ (87,279)	\$ (340,798)	\$ (656,512)	\$ (906,160)

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 \$1,705.5 million and \$2,013.1 million at June 30, 2022 and June 30, 2021, respectively.

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

	2022	2021
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%
Weighted-average increase in future compensation levels	3.18%	3.13%
Projected health care cost trend rate (pre-65/post-65)	7.08%/12.73%	6.22% / 11.83%
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

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:

	2022		2021	
	Pension	Postretirement	Pension	Postretirement
Discount rate	\$ (525,707)	\$ (411,253)	\$ (120,535)	\$ (89,438)
Inflation	148	9,223	637	40,920
Turnover rates	-	-	17,661	12,709
Retirement rates	-	-	(4,627)	(6,137)
Salary Scale	(10,614)	726	-	-
Medical trend rates	-	147,761	-	14,883
	\$ (536,173)	\$ (253,543)	\$ (106,864)	\$ (27,063)

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	
	2022	2021	2022	2021
Service cost	\$ 101,014	\$ 103,235	\$ 66,548	\$ 70,732
Administrative expenses	2,753	2,803	1,400	1,400
Interest cost	58,060	52,013	38,456	36,007
Expected return on plan assets	(126,466)	(112,130)	(51,274)	(42,229)
Net amortization:				
Prior service cost	2,725	2,917	-	-
Net loss	29,855	53,381	7,432	20,832
Net periodic benefit cost	\$ 67,941	\$ 102,219	\$ 62,562	\$ 86,742

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 (decreases), 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:

	2022	2021
Weighted-average discount rate -		
all plans except unused sick pay plan	2.45%	2.20%
Weighted-average discount rate - unused sick pay plan	2.15%	1.90%
Expected long-term rate of return	7.25%	7.25%
Weighted-average compensation increase	3.13%	3.14%
Health care cost increase (pre-65/post-65)	6.22%/5.46%	6.44% / 9.58%
Ultimate trend rate (pre-65/post-65)	4.50%/4.50%	4.50% / 4.50%
Year ultimate trend rate is achieved	2030	2028
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	
	2022	2021	2022	2021
Unrecognized net actuarial loss	\$ (238,935)	\$ (469,283)	\$ (224,234)	\$ (124,875)
Amortization of unrecognized obligation	(32,580)	(56,297)	(7,432)	(20,832)
	\$ (271,515)	\$ (525,580)	\$ (231,666)	\$ (145,707)

During fiscal year 2022, the postretirement plans experienced a \$118.0 million liability gain largely attributable to claims experience. The pension plan experienced a liability 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 next page, and asset losses of \$147.5 million and \$292.8 million for the postretirement and pension plans, respectively.

During fiscal year 2021, the postretirement plans experienced a \$46.3 million liability loss largely attributable to an increase in prescription drug claims cost. The pension plan experienced a liability loss of \$15.2 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 gains of \$144.1 million and \$377.4 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	
	2022	2021	2022	2021
Unrecognized net actuarial loss	\$ 18,748	\$ 287,538	\$ 33,355	\$ 265,027
Unrecognized prior service cost	5,059	7,784	-	-
	\$ 23,807	\$ 295,322	\$ 33,355	\$ 265,027

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, 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 staff pension plan at June 30, 2021 in thousands of dollars:

2021	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	\$ 89,308	\$ -	\$ -	\$ 89,308
US government securities	169,332	-	-	169,332
Common stock:				
Domestic	28,482	-	-	28,482
Foreign	13,483	-	-	13,483
Total common stock	41,965	-	-	41,965
Other equity investments:				
Real assets	-	-	21,364	21,364
Total other equity investments	-	-	21,364	21,364
Other investments	663	-	-	663
Total leveled investments, at fair value	\$ 301,268	\$ -	\$ 21,364	322,632
Investments at net asset value				1,741,952
Total investments				2,064,584
Liabilities associated with investments	\$ 1,262	\$ 134	\$ -	1,396
Net investments				2,063,188
Benefit payable				3,776
Fair value, end of year				\$ 2,066,964

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 following table summarizes the fair values of investments by major type held by the retiree health plan at June 30, 2021 in thousands of dollars:

2021	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	\$ 35,927	\$ -	\$ -	\$ 35,927
US government securities	72,994	-	-	72,994
Common stock:				
Domestic	32,663	-	-	32,663
Foreign	13,806	-	-	13,806
Total common stock	46,469	-	-	46,469
Other investments	338	-	-	338
Total leveled investments, at fair value	\$ 155,728	\$ -	\$ -	155,728
Investments at net asset value				649,081
Total Investments				804,809
Liabilities associated with investments	\$ 596	\$ 83	\$ -	679
Net investments, at fair value				804,130
Receivable				1,688
Fair value, end of year				\$ 802,442

The table below represents the change in fair value measurements for Level 3 investments held by the staff pension plan and the retiree health plan for the plans' year ended June 30, in thousands of dollars:

	Pension		Postretirement	
	2022	2021	2022	2021
Beginning balance	\$ 21,364	\$ 15,124	\$ -	\$ 93
Unrealized gain/ (loss)	13,727	6,899	-	(48)
Purchases	1,512	1,037	-	-
Sales	(4,269)	(1,696)	-	(45)
Ending balance	\$ 32,334	\$ 21,364	\$ -	\$ -

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	
	2022	2021	2022	2021
Developed equities	28.3%	26.6%	33.8%	32.1%
Emerging equities	4.9%	8.7%	7.5%	10.8%
Marketable alternatives	16.1%	13.8%	16.3%	13.2%
Fixed income	7.0%	8.2%	8.6%	9.1%
Leveraged buyouts	14.2%	12.7%	8.9%	8.2%
Venture capital	17.5%	18.2%	14.0%	15.7%
Real assets	10.5%	7.6%	9.0%	6.7%
Cash	1.5%	4.2%	1.9%	4.2%

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 pension plan and retiree health plan in fiscal year 2023 are \$48.4 million and \$73.3 million, respectively.

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
2023	\$ 59,291	\$ 36,991	\$ 96,282
2024	64,772	40,914	105,686
2025	70,053	45,503	115,556
2026	75,637	49,857	125,494
2027	80,849	53,192	134,041
2028-2032	478,380	310,974	789,354
	<u>\$ 828,982</u>	<u>\$ 537,431</u>	<u>\$ 1,366,413</u>

13. Net Assets

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

	2022	2021
With Donor Restrictions:		
Donor-restricted endowments, perpetual in nature	\$ 5,530,421	\$ 5,229,165
Student loans, perpetual in nature	52,999	52,226
Donor-restricted endowments, subject to spending policy and appropriation	28,663,194	29,724,341
Board designated endowment, subject to spending policy and appropriation	298,908	281,249
Unexpended gift balances	1,554,287	1,351,455
Total net assets with donor restrictions	<u>\$ 36,099,809</u>	<u>\$ 36,638,436</u>
Without Donor Restrictions:		
Board designated endowment, subject to spending policy and appropriation	\$ 6,890,737	\$ 7,048,097
Funded status of defined benefit plans	(743,791)	(1,246,958)
Derivatives	(75,334)	(628,384)
Undesignated	2,520,983	2,480,014
Non-controlling interest	1,621	779
Total net assets without donor restrictions	<u>8,594,216</u>	<u>7,653,548</u>
Total net assets	<u>\$ 44,694,025</u>	<u>\$ 44,291,984</u>

Yale's endowment consists of approximately 8,000 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:

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

2021	Without Donor Restrictions	With Donor Restrictions	Total
Donor-restricted endowment	\$ -	\$ 34,953,506	\$ 34,953,506
Board-designated endowment	7,048,097	281,249	7,329,346
	\$ 7,048,097	\$ 35,234,755	\$ 42,282,852

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

	2022	2021
Undesignated	\$ 9,437,657	\$ 9,790,997
Teaching and research	10,105,276	10,312,979
Facilities and operations	7,463,516	7,647,723
Financial aid	7,369,578	7,446,749
Other specific purposes	7,007,233	7,084,404
	\$ 41,383,260	\$ 42,282,852

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

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

2021	Without Donor Restrictions	With Donor Restrictions	Total
Endowment net assets, beginning of year	\$ 5,146,647	\$ 26,055,039	\$ 31,201,686
Investment return:			
Investment income	27,612	136,470	164,082
Net appreciation	2,057,487	9,831,255	11,888,742
Total investment return	2,085,099	9,967,725	12,052,824
Contributions	1,079	635,040	636,119
Allocation of endowment spending	(274,465)	(1,238,136)	(1,512,601)
Other increases (decreases)	89,737	(184,913)	(95,176)
Endowment net assets, end of year	\$ 7,048,097	\$ 35,234,755	\$ 42,282,852

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 and non-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
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
Non-operating expenses		33,338		(6,420)		(3,888)	23,030
	\$	3,162,706	\$	1,076,003	\$	324,621	\$ 4,563,330

	Programmatic support		Patient care and other related services		Administration and other institutional support		Total
2021							
Salaries and wages	\$	1,241,664	\$	578,994	\$	150,485	\$ 1,971,143
Employee benefits		482,490		189,055		69,569	741,114
Depreciation, amortization and interest		367,915		14,375		25,383	407,673
Other operating expenditures		764,322		251,880		65,411	1,081,613
Total operating expenses		2,856,391		1,034,304		310,848	4,201,543
Non-operating expenses		63,031		4,714		5,689	73,434
	\$	2,919,422	\$	1,039,018	\$	316,537	\$ 4,274,977

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 \$540.2 million at June 30, 2022. 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, 2022, through October 21, 2022, 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, 2022

<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	W81XWH2010036	12.RD	\$ 95,207	\$ -
Department of Defense	W81XWH2010157	12.RD	116,556	-
Department of Defense	HDTRA120C0017	12.RD	148,159	-
Department of Defense	S-D00154-00003-YALE	12.RD	210,417	-
Department of Defense	HR00112190136	12.RD	254,681	167,842
Department of Defense	W81XWH1910649	12.RD	560,438	-
Department of Defense	N6600121C4018	12.RD	964,040	399,431
Department of Defense	W81XWH2010072	12.RD	1,659,351	-
			<u>4,008,849</u>	<u>567,273</u>
Basic and Applied Scientific Research	N00014-17-1-2568	12.300	4,747	-
Basic and Applied Scientific Research	N00014-18-1-2743	12.300	5,097	-
Basic and Applied Scientific Research	N00014-19-1-2132	12.300	30,253	-
Basic and Applied Scientific Research	N00014-22-1-2147	12.300	38,279	-
Basic and Applied Scientific Research	N00014-20-1-2640	12.300	94,086	-
Basic and Applied Scientific Research	N00014-20-1-2197	12.300	119,306	-
Basic and Applied Scientific Research	N00014-20-1-2134	12.300	165,015	-
Basic and Applied Scientific Research	N00014-21-1-2932	12.300	171,890	-
Basic and Applied Scientific Research	N00014-21-1-2131	12.300	179,715	-
Basic and Applied Scientific Research	N00014-21-1-2417	12.300	213,540	28,391
Basic and Applied Scientific Research	N00014-19-1-2406	12.300	234,223	-
Basic and Applied Scientific Research	N00014-19-1-2104	12.300	241,653	-
Basic and Applied Scientific Research	N00014-20-1-2126	12.300	246,200	-
Basic and Applied Scientific Research	N00014-20-1-2335	12.300	254,147	-
Basic and Applied Scientific Research	N00014-18-1-2353	12.300	263,143	-
Basic and Applied Scientific Research	N00014-18-1-2776	12.300	294,676	-
Basic and Applied Scientific Research	N00014-20-1-2628	12.300	301,658	-
Basic and Applied Scientific Research	N00173-21-G006	12.300	338,916	-
Basic and Applied Scientific Research	N00014-18-1-2409	12.300	347,041	126,716
			<u>3,543,585</u>	<u>155,107</u>
Military Medical Research and Development	W81XWH-14-1-0487	12.420	(12)	-
Military Medical Research and Development	W81XWH-18-1-0138	12.420	-	4,738
Military Medical Research and Development	PR180274/W81XWH1910044	12.420	10,873	-
Military Medical Research and Development	W81XWH2010360	12.420	16,519	-
Military Medical Research and Development	W81XWH-17-1-0662	12.420	18,105	-
Military Medical Research and Development	W81XWH-17-2-0035	12.420	20,473	-
Military Medical Research and Development	PR170078/W81XWH-18-1-0629	12.420	29,589	-
Military Medical Research and Development	W81XWH-17-1-0663	12.420	39,422	-
Military Medical Research and Development	W81XWH-17-1-0564	12.420	41,424	-
Military Medical Research and Development	W81XWH1910107	12.420	46,379	-
Military Medical Research and Development	W81XWH1910439	12.420	46,775	-
Military Medical Research and Development	W81XWH1810184	12.420	64,734	-
Military Medical Research and Development	W81XWH-21-1-0718/LR200001	12.420	71,863	-
Military Medical Research and Development	W81XWH1910264	12.420	73,487	-
Military Medical Research and Development	W81XWH1910618/NF180073	12.420	95,286	17,446
Military Medical Research and Development	W81XWH2010680	12.420	110,704	-
Military Medical Research and Development	W81XWH-19-1-0749	12.420	113,244	-
Military Medical Research and Development	W81XWH2010003	12.420	115,763	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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	W81XWH2110088	12.420	\$ 119,529	\$ -
Military Medical Research and Development	W81XWH2110083	12.420	129,041	-
Military Medical Research and Development	W81XWH2110956	12.420	159,301	-
Military Medical Research and Development	W81XWH-11-1-0099	12.420	160,172	-
Military Medical Research and Development	W81XWH2110488	12.420	175,547	-
Military Medical Research and Development	PR170078P1/W81XWH1810630	12.420	177,527	-
Military Medical Research and Development	W81XWH1810698/PR171449P1	12.420	186,683	-
Military Medical Research and Development	W81XWH2210005	12.420	194,491	-
Military Medical Research and Development	W81XWH2010673	12.420	200,860	18,426
Military Medical Research and Development	W81XWH-20-1-0454	12.420	204,528	-
Military Medical Research and Development	W81XWH2110479	12.420	213,360	-
Military Medical Research and Development	W81XWH2010718	12.420	223,161	-
Military Medical Research and Development	W81XWH2110514	12.420	263,296	-
Military Medical Research and Development	W81XWH2010120	12.420	291,419	-
Military Medical Research and Development	W81XWH1910055	12.420	292,987	-
Military Medical Research and Development	W81XWH2110547	12.420	314,437	121,099
Military Medical Research and Development	W81XWH1910557	12.420	332,298	-
Military Medical Research and Development	W81XWH2010297	12.420	333,950	-
Military Medical Research and Development	W81XWH2010580	12.420	355,489	-
Military Medical Research and Development	W81XWH-20-1-0763	12.420	421,674	-
Military Medical Research and Development	W81XWH2110411	12.420	438,633	-
Military Medical Research and Development	W81XWH2110717	12.420	718,699	-
Military Medical Research and Development	W81XWH1910377	12.420	744,630	-
COVID-19 Military Medical Research and Development	W81XWH2110019	12.420	869,705	-
Military Medical Research and Development	W81XWH2110739	12.420	2,144,231	-
			<u>10,580,276</u>	<u>161,709</u>
Basic Scientific Research	W911NF1820100	12.431	4,374	-
Basic Scientific Research	W911NF2210053	12.431	4,683	-
Basic Scientific Research	W911NF1920210	12.431	9,790	-
Basic Scientific Research	W911NF2110256	12.431	36,778	-
Basic Scientific Research	W911NF1810367	12.431	49,898	-
Basic Scientific Research	W911NF1920115	12.431	168,415	-
Basic Scientific Research	W911NF1810378	12.431	200,311	-
Basic Scientific Research	W911NF1910371	12.431	221,046	-
Basic Scientific Research	W911NF-18-1-0020	12.431	850,010	22,408
Basic Scientific Research	W911NF1810212	12.431	3,577,692	128,524
			<u>5,122,997</u>	<u>150,932</u>
Air Force Defense Research Sciences Program	FA9550-18-1-0165	12.800	10,898	-
Air Force Defense Research Sciences Program	FA9550-19-1-0141	12.800	14,049	-
Air Force Defense Research Sciences Program	FA9550-22-1-0209	12.800	38,065	-
Air Force Defense Research Sciences Program	FA9550-22-1-0097	12.800	53,014	-
Air Force Defense Research Sciences Program	FA9550-22-1-0041	12.800	74,371	-
Air Force Defense Research Sciences Program	FA9550-20-1-0037	12.800	113,417	-
Air Force Defense Research Sciences Program	FA9550-18-1-0134	12.800	129,240	-
Air Force Defense Research Sciences Program	FA9550-18-1-0213	12.800	192,236	-
Air Force Defense Research Sciences Program	FA9550-21-1-0173	12.800	202,457	-
Air Force Defense Research Sciences Program	FA9550-20-1-0129	12.800	277,605	-
Air Force Defense Research Sciences Program	FA9550-21-1-0152	12.800	312,508	-
			<u>1,417,860</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, 2022

<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>Direct: (Continued)</u>				
Research and Technology Development	HR0011-20-2-0051	12.910	\$ 296,218	\$ -
Research and Technology Development	FA8650-18-2-7850	12.910	723,856	512,409
Research and Technology Development	HR0011-20-2-0045	12.910	850,369	88,520
Research and Technology Development	HR00112120014	12.910	1,333,351	219,995
			<u>3,203,794</u>	<u>820,924</u>
	Subtotal - Department of Defense - Direct		<u>27,877,361</u>	<u>1,855,945</u>
 <u>Pass-through:</u>				
Icahn School of Medicine at Mount Sinai (ISMMS) - Department of Defense	0258-A061-4609	12.RD	24,905	-
Luna Labs USA, LLC - Department of Defense	7033-ARM-1T/YALE	12.RD	25,748	-
Sandia National Laboratories/DOE - Department of Defense	PO 2243046	12.RD	26,891	-
University of Washington, Seattle - Department of Defense	UWSC13521	12.RD	50,300	-
Brown University - Department of Defense	00001323	12.RD	92,112	-
University of California, Berkeley - Department of Defense	00010372	12.RD	104,012	-
Applied Research Associates, Inc. - Department of Defense	CON0004275704	12.RD	141,074	-
Columbia University - Department of Defense	3(GG008712)	12.RD	194,018	-
University of Colorado, Denver - Department of Defense	1560823	12.RD	195,949	-
GE Global Research - Department of Defense	401126008	12.RD	234,252	-
Nalas Engineering Services - Department of Defense	SERDP Project Number WP20-1010	12.RD	254,037	-
Pennsylvania State University - Department of Defense	S001881-AFOSR	12.RD	577,728	-
Sandia National Laboratories/DOE - Department of Defense	2199141	12.RD	712,779	-
			<u>2,633,805</u>	<u>-</u>
University of Illinois, Chicago - Basic and Applied Scientific Research	097239-17598	12.300	33,106	-
Temple University - Basic and Applied Scientific Research	264443-01-YU	12.300	39,668	-
University of Rochester - Basic and Applied Scientific Research	417314/URFAO:GR510771	12.300	57,624	-
Stevens Institute of Technology - Basic and Applied Scientific Research	2102753-02	12.300	58,768	-
New York University - Basic and Applied Scientific Research	F1168-01	12.300	96,951	-
University of California, San Diego - Basic and Applied Scientific Research	703872	12.300	98,278	-
University of California, Los Angeles (UCLA) - Basic and Applied Scientific Research	1015GTA246	12.300	137,821	-
Duke University - Basic and Applied Scientific Research	313-0982	12.300	158,016	-
Cornell University - Basic and Applied Scientific Research	87748-21011	12.300	219,014	-
Purdue University - Basic and Applied Scientific Research	13000966-030	12.300	305,773	-
			<u>1,205,019</u>	<u>-</u>
Icahn School of Medicine at Mount Sinai (ISMMS) - Military Medical Research and Development	0258-0761-4609	12.420	4,453	-
University of Alabama at Birmingham - Military Medical Research and Development	000523682-SC001-Klu	12.420	5,243	-
SPINOGENIX, INC. - Military Medical Research and Development	33492Spinogenix	12.420	10,879	-
University of Alabama at Birmingham - Military Medical Research and Development	000523682-SC001	12.420	18,749	-
Rutgers, the State University of New Jersey - Military Medical Research and Development	0420/PO #804112	12.420	23,836	-
Johns Hopkins University - Military Medical Research and Development	2005207506	12.420	59,313	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>				
Pass-through: (Continued)				
Research Institute at Nationwide Children's Hospital (The) - Military Medical Research and Development	710049-0921-00	12.420	\$ 83,254	\$ -
Philips Healthcare - Military Medical Research and Development	Prime Ref #W81XWH20C0142	12.420	141,198	-
Research Triangle Institute - Military Medical Research and Development	9-312-0216591-66319L	12.420	145,847	-
Oregon Health Sciences University - Military Medical Research and Development	1008339_YALE	12.420	152,557	-
Jackson (Henry M.) Foundation - Military Medical Research and Development	4551	12.420	173,226	-
			<u>818,555</u>	<u>-</u>
Regents of the University of Michigan - Basic Scientific Research	SUBK00013908	12.431	60,654	-
Pennsylvania State University - Basic Scientific Research	5640-YU-ARO-0146	12.431	117,925	-
Regents of the University of Michigan - Basic Scientific Research	SUBK00010308	12.431	123,330	-
University of Maryland - Basic Scientific Research	39406-Z8425101	12.431	221,901	-
University of Chicago - Basic Scientific Research	FP056991-01-PR	12.431	359,698	-
			<u>883,508</u>	<u>-</u>
IBM Corporation - Basic, Applied, and Advanced Research in Science and Engineering	PO 4700184288	12.630	175,942	-
			<u>175,942</u>	<u>-</u>
Jackson (Henry M.) Foundation - Uniformed Services University Medical Research Projects	5354	12.750	118,215	-
Jackson (Henry M.) Foundation - Uniformed Services University Medical Research Projects	5379/65821	12.750	306,466	-
			<u>424,681</u>	<u>-</u>
Purdue University - Air Force Defense Research Sciences Program	8000083725	12.800	4	-
Ludwig Maximilians Universitat Munchen - Air Force Defense Research Sciences Program	CAO FA9550-21-1-0039	12.800	62,096	-
Regents of the University of Michigan - Air Force Defense Research Sciences Program	SUBK00014745	12.800	96,184	-
Stanford University - Air Force Defense Research Sciences Program	62742085-204669	12.800	102,641	-
Johns Hopkins University - Air Force Defense Research Sciences Program	2005131401	12.800	135,941	-
University of Chicago - Air Force Defense Research Sciences Program	SUB000000155	12.800	144,974	-
University of Chicago - Air Force Defense Research Sciences Program	FA9550-21-1-0209	12.800	188,896	-
University of Colorado, Denver - Air Force Defense Research Sciences Program	1558047/FA9550-15-1-0015	12.800	215,131	-
Emory University - Air Force Defense Research Sciences Program	A234253	12.800	330,051	-
			<u>1,275,918</u>	<u>-</u>
California Institute of Technology (Caltech) - Research and Technology Development	S547062	12.910	128,482	-
			<u>128,482</u>	<u>-</u>
	Subtotal - Department of Defense - Pass Through		<u>7,545,910</u>	<u>-</u>
	Subtotal - Department of Defense		35,423,271	1,855,945
<u>Department of Agriculture</u>				
Direct:				
Department of Agriculture	17-CR-11242303-064	10.RD	1,586	-
Department of Agriculture	20-CS-11132540-050	10.RD	34,656	-
			<u>36,242</u>	<u>-</u>
COVID-19 Agricultural and Rural Economic Research, Cooperative Agreements and Collaborations	58-3000-0-0027	10.250	19,144	-
			<u>19,144</u>	<u>-</u>
Specialty Crop Research Initiative	2020-70029-33160	10.309	479,363	83,929
			<u>479,363</u>	<u>83,929</u>
Agriculture and Food Research Initiative (AFRI)	2021-67034-35165	10.310	39,215	-
Agriculture and Food Research Initiative (AFRI)	2020-67034-31894	10.310	62,831	-
			<u>102,046</u>	<u>-</u>
	Subtotal - Department of Agriculture - Direct		<u>636,795</u>	<u>83,929</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 Agriculture</u>				
Pass-through:				
Tufts--New England Medical Center - Agricultural Research_Basic and Applied Research	103093-00001:AG0014	10.001	\$ 75,222	\$ -
			75,222	-
University of Vermont - Sustainable Agriculture Research and Education	LNE21-423-35383	10.215	53,295	2,148
			53,295	2,148
University of Georgia - Agriculture and Food Research Initiative (AFRI)	SUB00002498	10.310	109,338	-
			109,338	-
Subtotal - Department of Agriculture - Pass Through			237,855	2,148
Subtotal - Department of Agriculture			874,650	86,077
<u>Department of Education</u>				
Direct:				
Social and Behavioral Context for Academic Learning	R305A210262	84.305A	451,459	-
			451,459	-
Subtotal - Department of Education - Direct			451,459	-
Subtotal - Department of Education			451,459	-
<u>Department of Commerce</u>				
Direct:				
Climate and Atmospheric Research	NA20OAR4310304	11.431	79,493	-
Climate and Atmospheric Research	NA20OAR4310377	11.431	114,291	-
			193,784	-
Subtotal - Department of Commerce - Direct			193,784	-
Pass-through:				
University of Connecticut - Sea Grant Support	KFS# 5657730 390744	11.417	23,195	-
			23,195	-
Subtotal - Department of Commerce - Pass Through			23,195	-
Subtotal - Department of Commerce			216,979	-
<u>Department of Energy</u>				
Direct:				
Department of Energy	7538128	81.RD	52,147	-
Department of Energy	7563601	81.RD	77,013	-
Department of Energy	PO# 2184982	81.RD	77,647	-
			206,807	-
Office of Science Financial Assistance Program	DE-SC0016179	81.049	(207)	-
Office of Science Financial Assistance Program	DE-SC0022535	81.049	4,539	-
Office of Science Financial Assistance Program	DE-SC0004889	81.049	4,963	-
Office of Science Financial Assistance Program	DE-FG02-01ER15183	81.049	6,186	-
Office of Science Financial Assistance Program	DE-SC0014476	81.049	20,668	-
Office of Science Financial Assistance Program	DE-SC0019061	81.049	26,091	-
Office of Science Financial Assistance Program	DE-SC0020438	81.049	43,523	-
Office of Science Financial Assistance Program	DE-FG02-08ER46482	81.049	63,383	-
Office of Science Financial Assistance Program	DE-SC0021298	81.049	111,818	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Energy				
Direct: (Continued)				
Office of Science Financial Assistance Program	DE-SC0019211	81.049	\$ 121,046	\$ -
Office of Science Financial Assistance Program	DE-SC0021965	81.049	123,323	-
Office of Science Financial Assistance Program	DE-SC0021012	81.049	133,866	-
Office of Science Financial Assistance Program	DE-SC0020162	81.049	140,680	-
Office of Science Financial Assistance Program	DE-FG02-98ER20311	81.049	169,812	-
Office of Science Financial Assistance Program	DE-SC0020315	81.049	184,061	-
Office of Science Financial Assistance Program	DE-SC0021953	81.049	202,146	-
Office of Science Financial Assistance Program	DE-FG02-05ER15646	81.049	280,135	-
Office of Science Financial Assistance Program	DE-SC0019521	81.049	369,386	-
Office of Science Financial Assistance Program	DE-FG02-07ER15909	81.049	393,554	-
Office of Science Financial Assistance Program	DE-SC0012654	81.049	756,716	-
Office of Science Financial Assistance Program	DE-SC0019406	81.049	865,083	124,748
Office of Science Financial Assistance Program	DE-SC0004168	81.049	879,918	-
Office of Science Financial Assistance Program	DE-SC0017660	81.049	2,081,964	-
			6,982,654	124,748
Renewable Energy Research and Development	DE-EE0009363	81.087	390,188	146,663
			390,188	146,663
Advanced Research Projects Agency - Energy	DE-AR0000871	81.135	650,846	354,278
			650,846	354,278
	Subtotal - Department of Energy - Direct		8,230,495	625,689
Department of Energy				
Pass-through:				
REMADE Institute/SMIA - Department of Energy	SA-19-18	81.RD	(2,496)	-
Lawrence Livermore National Laboratory - Department of Energy	B650854	81.RD	2,287	-
Oak Ridge Institute for Science and Education (ORISE) - Department of Energy	ORISE Fellowship	81.RD	7,947	-
Sonata Scientific - Department of Energy	68HERC21C0023 - Murray	81.RD	8,978	-
Michigan Technological University - Department of Energy	2010102DZ1	81.RD	14,938	-
InventWood LLC - Department of Energy	DE-AR0001485-3	81.RD	20,406	-
Brookhaven National Laboratory/DOE - Department of Energy	324037	81.RD	20,913	-
Lawrence Berkeley National Laboratory/LBNL/DOE - Department of Energy	7631842	81.RD	31,086	-
Lawrence Livermore National Laboratory - Department of Energy	B648887	81.RD	37,074	-
The Krell Institute - Department of Energy	Cushman	81.RD	38,000	-
Fermi National Accelerator Laboratory/DOE - Department of Energy	683405	81.RD	44,121	-
University of California, Berkeley - Department of Energy	7380202	81.RD	58,662	-
Brookhaven National Laboratory/DOE - Department of Energy	389926	81.RD	64,059	-
Lawrence Berkeley National Laboratory/LBNL/DOE - Department of Energy	7615037	81.RD	99,235	-
Northwestern University - Department of Energy	60057285 YALE	81.RD	101,632	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Energy				
Pass-through: (Continued)				
REMADE Institute/SMIA - Department of Energy	SA-20-10	81.RD	\$ 129,407	\$ -
Argonne National Laboratory - Department of Energy	1F-60429	81.RD	146,014	-
Colorado School of Mines - Department of Energy	401385-5801	81.RD	150,016	-
Pacific Northwest National Laboratory/DOE - Department of Energy	423572	81.RD	157,704	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	2021-0568	81.RD	194,145	-
National Renewable Energy Laboratory (NREL) - Department of Energy	SUB-2021-10390	81.RD	197,747	-
Reservoir Labs. Inc. - Department of Energy	TASSIULAS	81.RD	212,447	-
Lawrence Berkeley National Laboratory/(LBNL)/DOE - Department of Energy	7563699	81.RD	225,792	-
Pacific Northwest National Laboratory/DOE - Department of Energy	423571	81.RD	259,748	-
Fermi National Accelerator Laboratory/DOE - Department of Energy	653603	81.RD	263,225	-
Regents University of California, San Francisco - Department of Energy	7369232	81.RD	266,765	-
Sandia National Laboratories/DOE - Department of Energy	2227089	81.RD	370,022	-
Brookhaven National Laboratory/DOE - Department of Energy	324165	81.RD	618,225	-
University of North Carolina - Department of Energy	5118795	81.RD	1,383,695	-
Brookhaven National Laboratory/DOE - Department of Energy	390027	81.RD	4,817,177	-
			<u>9,938,971</u>	<u>-</u>
Research Foundation of CUNY - Office of Science Financial Assistance Program	CM00002281-00	81.049	536	-
PD3 Technologies, Inc. - Office of Science Financial Assistance Program	DE-SC0021858	81.049	5,611	-
University of South Carolina - Office of Science Financial Assistance Program	21-4461	81.049	7,000	-
InnoSense, LLC - Office of Science Financial Assistance Program	Dept of Energy - Mingjiang Zhong	81.049	10,880	-
Research Foundation of CUNY - Office of Science Financial Assistance Program	CM00002281-00	81.049	39,796	-
University of Missouri-Columbia - Office of Science Financial Assistance Program	C00069556-1	81.049	71,184	-
Cornell University - Office of Science Financial Assistance Program	85989-11162	81.049	105,577	-
Massachusetts Institute of Technology (MIT) - Office of Science Financial Assistance Program	S4685 - PO 238637	81.049	377,090	-
			<u>617,674</u>	<u>-</u>
North Carolina State University - Conservation Research and Development	2019-2554-01	81.086	8,380	-
			<u>8,380</u>	<u>-</u>
Northwestern University - Renewable Energy Research and Development	60057665 YALE	81.087	39,049	-
Colorado State University - Renewable Energy Research and Development	G-64001-02	81.087	49,634	-
North Carolina State University - Renewable Energy Research and Development	2019-0048-01	81.087	53,582	-
			<u>142,265</u>	<u>-</u>
New York State Energy Research and Development Authority (NYSERDA) - State Energy Program Special Projects	138676	81.119	9,001	-
			<u>9,001</u>	<u>-</u>
University of California, Santa Barbara - Advanced Research Projects Agency - Energy	KK1963	81.135	10,596	-
SuperCool Metals - Advanced Research Projects Agency - Energy	0719ARPA-E-YALE	81.135	119,711	-
			<u>130,307</u>	<u>-</u>
	Subtotal - Department of Energy - Pass Through		<u>10,846,598</u>	<u>-</u>
	Subtotal - Department of Energy		19,077,093	625,689
Department of Health & Human Services				
Direct:				
Department Of Health And Human Services	21-4353	93.RD	7,000	-
Department Of Health And Human Services	1R43EY032840-01	93.RD	14,195	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Department Of Health And Human Services	75D30120C09486	93.RD	\$ 23,120	\$ -
Department Of Health And Human Services	75N95020P00721/5821819/75N95020Q00334	93.RD	44,300	-
COVID-19 Department Of Health And Human Services	2U19AI089992-11	93.RD	56,077	-
COVID-19 Department Of Health And Human Services	75D30120C09810	93.RD	176,978	-
Department Of Health And Human Services	R21NS112121	93.RD	186,061	-
COVID-19 Department Of Health And Human Services	75A50120C000097-2	93.RD	280,642	-
Department Of Health And Human Services	1R01GM137117	93.RD	337,933	-
COVID-19 Department Of Health And Human Services	75D30121C10286	93.RD	458,765	-
COVID-19 Department Of Health And Human Services	75D30120C09570	93.RD	497,408	19,928
Department Of Health And Human Services	75N92019F00074	93.RD	502,161	288,954
Department Of Health And Human Services	75N92019D00036	93.RD	561,384	266,954
Department Of Health And Human Services	5R01CA226842-02	93.RD	682,266	232,688
COVID-19 Department Of Health And Human Services	75F40120C00174	93.RD	846,419	-
			<u>4,674,709</u>	<u>808,524</u>
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5P50DA036151-05	93.077	(23,051)	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA042528-03	93.077	192	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	1R01DA054993-01A1	93.077	9,095	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	1R01DA052566-01A1	93.077	27,640	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA046360-03	93.077	168,582	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5K01DA051882-02	93.077	177,676	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA049878-03	93.077	342,985	168,772
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5R01DA046334/3R01DA046334-S1	93.077	378,284	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	5U54DA036151-09/3U54DA036151-09S1,S2,S3	93.077	4,509,425	677,087
			<u>5,590,828</u>	<u>845,859</u>
Prevention of Disease, Disability, and Death by Infectious Diseases	6 U01CK000572	93.084	153,971	-
Prevention of Disease, Disability, and Death by Infectious Diseases	1U01CK000572-01	93.084	259,495	126,712
			<u>413,466</u>	<u>126,712</u>
Food and Drug Administration_Research	U01FD007000-01	93.103	90,074	76,842
Food and Drug Administration_Research	5U01FD005938	93.103	1,922,748	1,793,826
COVID-19 Food and Drug Administration_Research	5U01FD005938	93.103	64,399	-
Food and Drug Administration_Research	5U01FD005938	93.103	2,055,749	412,653
COVID-19 Food and Drug Administration_Research	5U01FD005938	93.103	97,127	-
			<u>4,230,097</u>	<u>2,283,321</u>
Environmental Health	DP1ES025459-05	93.113	-	(43,536)
Environmental Health	5R01ES005775-23	93.113	3,206	-
Environmental Health	1R03ES033381-01	93.113	21,920	-
Environmental Health	Jensen	93.113	24,193	-
Environmental Health	2R01ES005775-26	93.113	25,137	-
Environmental Health	F31ES030594-02	93.113	29,158	-
Environmental Health	F31ES031441-01A1	93.113	32,347	-
Environmental Health	1F31ES033114	93.113	33,645	-
Environmental Health	R00ES026729-03	93.113	86,411	-
Environmental Health	1R21ES031525	93.113	137,108	-
Environmental Health	1R01ES030562-01	93.113	487,358	118,385
Environmental Health	R01ES026246	93.113	611,512	435,941
			<u>1,491,995</u>	<u>510,790</u>
Oral Diseases and Disorders Research	1F31DE030332-01	93.121	26,609	-
			<u>26,609</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, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Emergency Medical Services for Children	19H34MC33245	93.127	\$ 285,442	\$ 92,230
			285,442	92,230
Centers for Research and Demonstration for Health Promotion and Disease Prevention	6 U48DP006380	93.135	66,204	66,205
COVID-19 Centers for Research and Demonstration for Health Promotion and Disease Prevention	6 U48DP006380	93.135	232,070	-
Centers for Research and Demonstration for Health Promotion and Disease Prevention	1 U48DP006380	93.135	793,675	428,381
COVID-19 Centers for Research and Demonstration for Health Promotion and Disease Prevention	1 U48DP006380	93.135	(10,863)	-
			1,081,086	494,586
NIEHS Superfund Hazardous Substances_Basic Research and Education	R01ES032712-01	93.143	181,892	108,868
			181,892	108,868
Human Genome Research	5R01HG008383-02	93.172	(17,040)	(17,040)
Human Genome Research	1R01HG008126-03	93.172	(11,218)	-
Human Genome Research	F30HG011193	93.172	29,410	-
Human Genome Research	1K99HG010909-01A1	93.172	47,352	-
Human Genome Research	5UM1HG006504-06	93.172	81,128	-
Human Genome Research	1U24HG012108-01	93.172	173,176	19,911
Human Genome Research	1R01HG009622-01A1	93.172	201,572	98,842
Human Genome Research	4R00HG010669-03	93.172	232,540	-
Human Genome Research	1R01HG010171-01A1	93.172	297,172	-
Human Genome Research	1R01HG011868-01	93.172	461,069	132,358
Human Genome Research	1R01HG010898-01A1	93.172	493,790	108,846
Human Genome Research	R01HG011245-01	93.172	511,873	-
Human Genome Research	1R01HG010749-01A1	93.172	636,728	101,008
			3,137,552	443,925
Research Related to Deafness and Communication Disorders	5R01DC009977-10	93.173	1,089	-
Research Related to Deafness and Communication Disorders	F31DC018469	93.173	11,932	-
Research Related to Deafness and Communication Disorders	R01DC016318	93.173	28,976	-
Research Related to Deafness and Communication Disorders	F31DC018708	93.173	33,693	-
Research Related to Deafness and Communication Disorders	1K01DC020145-01	93.173	36,280	-
Research Related to Deafness and Communication Disorders	R01DC013791	93.173	52,874	-
Research Related to Deafness and Communication Disorders	1F32DC019302-01A1	93.173	52,930	-
Research Related to Deafness and Communication Disorders	F32DC019521	93.173	65,248	-
Research Related to Deafness and Communication Disorders	1F32DC019250-01	93.173	66,415	-
Research Related to Deafness and Communication Disorders	1F32DC018445-01A1	93.173	72,598	-
Research Related to Deafness and Communication Disorders	1K99DC019397	93.173	110,415	-
Research Related to Deafness and Communication Disorders	1R21DC018098	93.173	131,579	51,741
Research Related to Deafness and Communication Disorders	2R01DC011697-19	93.173	144,945	-
Research Related to Deafness and Communication Disorders	2R01DC011697-16	93.173	206,665	-
Research Related to Deafness and Communication Disorders	1R01DC018570-01	93.173	297,974	-
Research Related to Deafness and Communication Disorders	1R01DC016851-01A1	93.173	322,619	-
Research Related to Deafness and Communication Disorders	2R01DC002174-33A1	93.173	353,533	-
Research Related to Deafness and Communication Disorders	1R01DC017989-01	93.173	358,814	52,543
Research Related to Deafness and Communication Disorders	2R01DC001919-29	93.173	404,206	-
Research Related to Deafness and Communication Disorders	2R01DC004729-22	93.173	410,009	-
Research Related to Deafness and Communication Disorders	5R01DC008130	93.173	437,660	-
Research Related to Deafness and Communication Disorders	1R01DC019057-01	93.173	519,632	-
Research Related to Deafness and Communication Disorders	5R01DC016318-02	93.173	577,901	-
			4,697,987	104,284
Immunization Research, Demonstration, Public Information and Education_Training and Clinical Skills Improvement Projects	1U01IP001110-01-00	93.185	520,504	67,784
			520,504	67,784
Research and Training in Complementary and Integrative Health	5UG3AT009767-02	93.213	(10,938)	-
Research and Training in Complementary and Integrative Health	5R01AT008448-05	93.213	-	8,924
Research and Training in Complementary and Integrative Health	4R33AT010619-02	93.213	19,068	-
Research and Training in Complementary and Integrative Health	1R21AT011575-01	93.213	72,249	-
Research and Training in Complementary and Integrative Health	5R21AT010763-02/3R21AT010763-01S1	93.213	117,544	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Research and Training in Complementary and Integrative Health	5R34AT009887	93.213	\$ 135,511	\$ -
Research and Training in Complementary and Integrative Health	5K23AT011342-03	93.213	152,434	-
Research and Training in Complementary and Integrative Health	5R34AT010365	93.213	231,562	-
Research and Training in Complementary and Integrative Health	1R61AT010619-01	93.213	348,392	-
Research and Training in Complementary and Integrative Health	R01AT011419	93.213	429,215	272,540
Research and Training in Complementary and Integrative Health	5R01AT010508-02	93.213	486,939	-
Research and Training in Complementary and Integrative Health	R01AT010014	93.213	663,455	-
Research and Training in Complementary and Integrative Health	5UH3AT009758-04	93.213	679,855	133,665
Research and Training in Complementary and Integrative Health	5UH3AT009767-06	93.213	855,221	718,336
Research and Training in Complementary and Integrative Health	5U24AT009769-05	93.213	1,258,813	107,779
			<u>5,439,320</u>	<u>1,241,244</u>
Research on Healthcare Costs, Quality and Outcomes	5K12HS023000-03	93.226	45	-
Research on Healthcare Costs, Quality and Outcomes	5K01HS023900-05	93.226	587	-
Research on Healthcare Costs, Quality and Outcomes	1K08HS026006-01A1	93.226	38,936	-
Research on Healthcare Costs, Quality and Outcomes	1R01HS027626-01A1	93.226	249,651	-
Research on Healthcare Costs, Quality and Outcomes	2T32HS017589	93.226	295,680	-
COVID-19 Research on Healthcare Costs, Quality and Outcomes	R01HS028340	93.226	416,971	-
Research on Healthcare Costs, Quality and Outcomes	2U18HS016978-12	93.226	1,073,974	707,209
			<u>2,075,844</u>	<u>707,209</u>
National Center on Sleep Disorders Research	1R03HL157009-01	93.233	36,218	-
National Center on Sleep Disorders Research	3U01HL150596-01S1	93.233	47,354	-
National Center on Sleep Disorders Research	1K23HL159259-01	93.233	116,490	-
National Center on Sleep Disorders Research	1R01HL126770-01A1	93.233	405,739	56,889
National Center on Sleep Disorders Research	U01HL150596	93.233	1,186,799	30,258
			<u>1,792,600</u>	<u>87,147</u>
Mental Health Research Grants	3R01MH077945-09S1	93.242	(31,187)	-
Mental Health Research Grants	5U01MH082022-10	93.242	(28,769)	-
Mental Health Research Grants	5T32MH014276-43	93.242	(12,439)	-
Mental Health Research Grants	5U01MH081902-08	93.242	(11,242)	(11,078)
Mental Health Research Grants	5R01MH108663-04	93.242	(3,178)	-
Mental Health Research Grants	5T32MH018268-34	93.242	(2,561)	-
Mental Health Research Grants	5R01MH112668-04	93.242	(2,169)	-
Mental Health Research Grants	5R01MH107513-04	93.242	(753)	-
Mental Health Research Grants	1R24MH114805	93.242	(361)	-
Mental Health Research Grants	5R01MH106635-02	93.242	(193)	(4,249)
Mental Health Research Grants	5R21MH110862-02	93.242	(171)	-
Mental Health Research Grants	5R21MH110850-02	93.242	(135)	-
Mental Health Research Grants	5R21MH112881-02	93.242	(135)	-
Mental Health Research Grants	5U01MH106876-03	93.242	-	2,027
Mental Health Research Grants	5R01MH109159-02	93.242	2	-
Mental Health Research Grants	5R01MH100914-04	93.242	45	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Mental Health Research Grants	R21MH118109	93.242	\$ 59	\$ -
Mental Health Research Grants	1R34MH117188-01	93.242	249	-
Mental Health Research Grants	5U01MH103365-03	93.242	3,537	-
Mental Health Research Grants	1R03MH128847-01A1	93.242	4,371	-
Mental Health Research Grants	5R21MH108940-02	93.242	6,315	-
Mental Health Research Grants	5U01MH081902-08	93.242	6,610	6,610
Mental Health Research Grants	5DP1MH110065-02	93.242	8,018	-
Mental Health Research Grants	1R21MH122202-01	93.242	10,082	-
Mental Health Research Grants	3U01MH081902-05S2	93.242	11,144	11,144
Mental Health Research Grants	1RF1MH117064-01	93.242	19,445	-
Mental Health Research Grants	F30MH129085	93.242	26,419	-
Mental Health Research Grants	F30MH123074	93.242	29,056	-
Mental Health Research Grants	5R01MH110750-03	93.242	30,105	-
Mental Health Research Grants	F30MH124271	93.242	31,344	-
Mental Health Research Grants	1R21MH116258-01A1	93.242	31,596	-
Mental Health Research Grants	1R21MH120801-01	93.242	31,638	-
Mental Health Research Grants	1K99MH126098-01A1	93.242	36,156	-
Mental Health Research Grants	K23MH115206	93.242	36,585	-
Mental Health Research Grants	5F32MH122058-02	93.242	37,664	-
Mental Health Research Grants	1F31MH127891	93.242	41,652	-
Mental Health Research Grants	1R03MH118609-01A1	93.242	52,841	-
Mental Health Research Grants	1R21MH120799-01	93.242	58,721	-
Mental Health Research Grants	1R21MH119803-01	93.242	61,410	-
Mental Health Research Grants	F32MH124319-01A1	93.242	63,750	-
Mental Health Research Grants	1F32MH123088-01A1	93.242	65,413	-
Mental Health Research Grants	1R01MH129301-01	93.242	66,508	-
Mental Health Research Grants	1R01MH111424	93.242	68,520	-
Mental Health Research Grants	5U01MH124639-03	93.242	81,603	-
Mental Health Research Grants	R21MH113955	93.242	82,005	-
Mental Health Research Grants	5R01MH108643-04	93.242	90,325	-
Mental Health Research Grants	1R01MH127147-01A1	93.242	91,350	-
Mental Health Research Grants	1R21MH119503-01A1	93.242	94,647	-
Mental Health Research Grants	1R21MH122887-01A1	93.242	102,565	-
Mental Health Research Grants	5R21MH119521-02	93.242	104,851	-
Mental Health Research Grants	5UG3MH111929-02/3UG3MH111929-02S1	93.242	110,703	7,379
Mental Health Research Grants	5R21MH120615-02/3R21MH120615-02S1	93.242	112,832	4,964
Mental Health Research Grants	1R21MH126072-01A1	93.242	112,928	-
Mental Health Research Grants	2R25MH077823-15	93.242	115,203	-
Mental Health Research Grants	1K23MH126366-01A1	93.242	121,513	-
Mental Health Research Grants	5R01MH112746-04	93.242	122,134	14,016
Mental Health Research Grants	5R01MH112189-05	93.242	125,248	-
Mental Health Research Grants	5R21MH115316	93.242	126,934	-
Mental Health Research Grants	1K01MH125142-01A1	93.242	127,795	-
Mental Health Research Grants	K01MH122316	93.242	135,560	-
Mental Health Research Grants	K23MH118999	93.242	138,059	-
Mental Health Research Grants	1R21MH122940	93.242	138,207	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Mental Health Research Grants	1R21MH119552-01A1	93.242	\$ 142,047	\$ -
Mental Health Research Grants	5R01MH108590-05	93.242	148,825	-
Mental Health Research Grants	5R21MH117438-02/3R21MH117438-02S1	93.242	153,652	-
Mental Health Research Grants	1R01MH111652-05	93.242	156,926	24,576
Mental Health Research Grants	2R01MH067528	93.242	157,480	-
Mental Health Research Grants	1R21MH125199-01A1	93.242	160,050	54,336
Mental Health Research Grants	5K08MH116119-04	93.242	163,397	-
Mental Health Research Grants	1RF1MH128614-01	93.242	164,343	125,411
Mental Health Research Grants	5R25MH071584-14/3R25MH071584-14S1	93.242	168,347	-
Mental Health Research Grants	R61MH115110	93.242	168,502	-
Mental Health Research Grants	7K01MH1111374	93.242	170,795	-
Mental Health Research Grants	K23MH121778-01	93.242	175,757	-
Mental Health Research Grants	5K23MH123760-03	93.242	175,978	-
Mental Health Research Grants	1R01MH113257-05	93.242	178,084	-
Mental Health Research Grants	1R01MH111629-05	93.242	181,206	-
Mental Health Research Grants	1R21MH125293-01A1	93.242	189,778	-
Mental Health Research Grants	5K24MH121571-03	93.242	193,285	-
Mental Health Research Grants	1R21MH124093	93.242	196,026	-
Mental Health Research Grants	1K23MH122777-01A1	93.242	201,377	-
Mental Health Research Grants	1R01MH124802-01	93.242	202,126	156,058
Mental Health Research Grants	R21MH121841-01	93.242	204,509	-
Mental Health Research Grants	4R00MH110570-04	93.242	215,431	-
Mental Health Research Grants	5K23MH115252-05	93.242	219,294	-
Mental Health Research Grants	R01MH115705	93.242	220,665	-
Mental Health Research Grants	1R21MH123870-01A1	93.242	224,876	-
Mental Health Research Grants	R01MH113257	93.242	238,955	-
Mental Health Research Grants	R25MH087217	93.242	250,657	68,220
Mental Health Research Grants	5K08MH122733-03	93.242	255,163	-
Mental Health Research Grants	1R61MH123028-01	93.242	265,899	-
Mental Health Research Grants	5K08MH117351-05	93.242	272,211	-
Mental Health Research Grants	RF1MH123245	93.242	274,048	-
Mental Health Research Grants	5T32MH014276	93.242	283,597	-
Mental Health Research Grants	RF1MH128876	93.242	289,838	-
Mental Health Research Grants	5R01MH112750-04	93.242	296,588	-
Mental Health Research Grants	5T32MH019961-24	93.242	306,848	-
Mental Health Research Grants	5R01MH109413-04	93.242	312,238	54,518
Mental Health Research Grants	2R01MH099045-06	93.242	319,893	-
Mental Health Research Grants	5R01MH093897	93.242	333,084	-
Mental Health Research Grants	1R01MH125737-01A1	93.242	334,557	80,386
Mental Health Research Grants	5R01MH109648-03	93.242	25,291	5,821
COVID-19 Mental Health Research Grants	5R01MH109648-03	93.242	321,308	-
Mental Health Research Grants	5R01MH114927-04	93.242	357,480	-
Mental Health Research Grants	1R01MH119164-01A1	93.242	404,863	78,385
Mental Health Research Grants	5R01MH113852-05	93.242	405,376	-
Mental Health Research Grants	5R01MH077681	93.242	415,333	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Mental Health Research Grants	R01MH116527	93.242	\$ 427,217	\$ 256,364
Mental Health Research Grants	5R01MH107570-03	93.242	429,744	-
Mental Health Research Grants	R01MH115939	93.242	443,849	-
Mental Health Research Grants	1R01MH121372-01	93.242	468,512	-
Mental Health Research Grants	R56MH116941	93.242	475,248	-
Mental Health Research Grants	T32MH018268-36	93.242	476,008	-
Mental Health Research Grants	R01MH125396	93.242	482,134	-
Mental Health Research Grants	1R01MH118453	93.242	486,036	-
Mental Health Research Grants	5R01MH125205/3R01MH125205	93.242	488,431	-
Mental Health Research Grants	1R56MH122449-01A1	93.242	504,293	46,294
Mental Health Research Grants	2T32MH020031	93.242	511,112	-
Mental Health Research Grants	1R01MH123155-01A1	93.242	536,282	358,787
Mental Health Research Grants	5R01MH119826-03	93.242	538,873	213,657
Mental Health Research Grants	5R01MH116002-04	93.242	556,753	-
Mental Health Research Grants	R01MH077939	93.242	583,669	-
Mental Health Research Grants	RF1MH123978-01	93.242	583,675	-
Mental Health Research Grants	R01MH118344-01A1	93.242	588,495	110,782
Mental Health Research Grants	5U19A1MH108206-04	93.242	612,154	612,154
Mental Health Research Grants	1R01MH124110	93.242	614,729	32,128
Mental Health Research Grants	5R01MH118332-02	93.242	631,144	65,557
Mental Health Research Grants	1R01MH125008-01	93.242	642,812	-
Mental Health Research Grants	U01MH122678	93.242	664,282	-
Mental Health Research Grants	R01MH125203-01	93.242	664,408	-
Mental Health Research Grants	1R01MH121991-01	93.242	672,129	-
Mental Health Research Grants	1R01MH120081-01	93.242	723,407	-
Mental Health Research Grants	5R01MH118728-02	93.242	744,736	5,710
Mental Health Research Grants	1R01MH119430-01	93.242	748,804	49,845
Mental Health Research Grants	1R01MH113557	93.242	750,777	-
Mental Health Research Grants	R01MH121095	93.242	757,275	-
Mental Health Research Grants	5R01MH110674-04	93.242	760,382	-
Mental Health Research Grants	1R01MH118554-01A1	93.242	762,735	-
Mental Health Research Grants	5R01MH116657-03	93.242	773,581	-
Mental Health Research Grants	1R01MH124892-01A1	93.242	776,034	-
Mental Health Research Grants	5R01MH120089/3R01MH120089	93.242	787,356	-
Mental Health Research Grants	1R01MH118245-02	93.242	791,529	646,698
Mental Health Research Grants	1R01MH120080-01	93.242	822,786	216,341
Mental Health Research Grants	5R01MH113230-03/3R01MH113230-03S1	93.242	831,708	-
Mental Health Research Grants	R01MH118215	93.242	839,385	-
Mental Health Research Grants	1U01MH124619-02	93.242	845,481	140,809
Mental Health Research Grants	5R01MH116038-03	93.242	850,223	-
Mental Health Research Grants	7U01MH107803-03	93.242	898,819	-
Mental Health Research Grants	7R01MH117289-02	93.242	929,923	45,235
Mental Health Research Grants	1R01MH121848-01A1	93.242	960,165	-
Mental Health Research Grants	U01MH116488	93.242	1,077,192	-
Mental Health Research Grants	4R33MH115113-03	93.242	1,243,901	-
Mental Health Research Grants	P30MH062294	93.242	2,039,611	47,373
Mental Health Research Grants	1U01MH124639-01	93.242	2,127,182	2,129,548
Mental Health Research Grants	1P50MH115716-02	93.242	2,460,695	-
Mental Health Research Grants	5U01MH121766-02/3U01MH121766-02S1	93.242	2,954,884	1,528,675
Mental Health Research Grants	UMH108206B	93.242	5,832,646	3,728,407
Mental Health Research Grants	5U01MH124639-02/3U01MH124639-02S1	93.242	6,720,341	5,050,914
			<u>66,269,954</u>	<u>15,963,802</u>

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	1U79SM080038	93.243	\$ 187,046	\$ 2,667
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	5H79TI080966-03	93.243	301,423	51,026
			488,469	53,693
Health Systems Strengthening and HIV/AIDS Prevention, Care and Treatment under the President's Emergency Plan for AIDS Relief	5T32EB019941	93.266	18,230	-
			18,230	-
Alcohol Research Programs	1R13AA027725-01	93.273	(2,607)	-
Alcohol Research Programs	4R01AA021984-04	93.273	(256)	-
Alcohol Research Programs	1R03AA028361-01A1	93.273	3,233	-
Alcohol Research Programs	4R01AA021818	93.273	3,388	-
Alcohol Research Programs	5R01AA022285-04	93.273	3,890	-
Alcohol Research Programs	1R01AA028859	93.273	5,165	-
Alcohol Research Programs	5P50AA012870-20	93.273	15,211	32,577
Alcohol Research Programs	1T35AA023760	93.273	30,651	-
Alcohol Research Programs	1F31AA028992-01	93.273	31,428	-
Alcohol Research Programs	5U01AA021724-04/5R01AA021724-05	93.273	41,308	-
Alcohol Research Programs	5R21AA024917-02	93.273	41,461	-
Alcohol Research Programs	5R01AA013892-15	93.273	45,274	-
Alcohol Research Programs	1K99AA029716-01	93.273	62,865	-
Alcohol Research Programs	5R34AA026021-03	93.273	68,041	-
Alcohol Research Programs	1K99AA029454-01	93.273	74,370	-
Alcohol Research Programs	1F32AA029627-01	93.273	85,626	-
Alcohol Research Programs	1R21AA028886-01A1	93.273	87,763	-
Alcohol Research Programs	5P50AA012870-22	93.273	100,375	-
Alcohol Research Programs	5U24AA022001-09	93.273	104,125	12,554
Alcohol Research Programs	5K23AA026890-04	93.273	111,237	-
Alcohol Research Programs	1K01AA024788	93.273	118,744	-
Alcohol Research Programs	1K01AA028258	93.273	127,233	-
Alcohol Research Programs	5K02AA027300-03	93.273	145,892	-
Alcohol Research Programs	1U01AA026962-01	93.273	147,066	-
Alcohol Research Programs	5U24AA020794-10	93.273	150,875	-
Alcohol Research Programs	5K23AA028515-02	93.273	159,799	-
Alcohol Research Programs	1R01AA028778-01	93.273	165,536	5,826
Alcohol Research Programs	5K01AA025670-05	93.273	166,232	-
Alcohol Research Programs	1R01AA029611-01	93.273	180,335	76,311
Alcohol Research Programs	1R01AA029820-01	93.273	185,852	-
Alcohol Research Programs	1R01AA029075-01A1	93.273	203,877	-
Alcohol Research Programs	5R01AA024122-03	93.273	216,195	25,000
Alcohol Research Programs	1P01AA029545-01	93.273	238,463	37,237
Alcohol Research Programs	5U01AA020795	93.273	245,691	10,508
Alcohol Research Programs	1R21AA029206	93.273	251,004	-
Alcohol Research Programs	5K01AA027832-03	93.273	251,608	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Alcohol Research Programs	T32AA028259	93.273	\$ 256,827	\$ -
Alcohol Research Programs	1R01AA025342-02	93.273	259,031	22,556
Alcohol Research Programs	R21AA028628	93.273	272,987	-
Alcohol Research Programs	1R01AA029137-01	93.273	318,491	-
Alcohol Research Programs	5R01AA025605-04	93.273	324,716	-
Alcohol Research Programs	1R01AG072893-01	93.273	336,941	-
Alcohol Research Programs	1R01AA028765-01A1	93.273	337,248	-
Alcohol Research Programs	R21AA028432	93.273	348,128	32,160
Alcohol Research Programs	1R01AA026364-01	93.273	350,017	144,630
Alcohol Research Programs	1R01AA027553-01	93.273	419,850	85,532
Alcohol Research Programs	5U01AA020790-10	93.273	433,855	237,062
Alcohol Research Programs	1R01AA026313-01A1	93.273	436,678	177,489
Alcohol Research Programs	5R01AA026514	93.273	563,248	-
Alcohol Research Programs	R24AA022057	93.273	690,890	-
Alcohol Research Programs	1R01AA029113-01	93.273	708,941	-
Alcohol Research Programs	R01AA025954	93.273	758,813	313,460
Alcohol Research Programs	5U01AA026224-04	93.273	758,885	241,040
Alcohol Research Programs	5R01AA026844-03/3R01AA026844-03S1	93.273	1,027,940	-
Alcohol Research Programs	2P50AA012870-21	93.273	1,543,156	89,271
Alcohol Research Programs	5U54AA027989/3U54AA027989	93.273	1,759,390	-
			<u>15,772,982</u>	<u>1,543,213</u>
Drug Abuse and Addiction Research Programs	5R21DA040914-02	93.279	(253)	-
Drug Abuse and Addiction Research Programs	5K08DA037525-04	93.279	(18)	-
Drug Abuse and Addiction Research Programs	5K25DA040032-05	93.279	699	-
Drug Abuse and Addiction Research Programs	5P50DA009241-25	93.279	742	-
Drug Abuse and Addiction Research Programs	5K01DA038207-04	93.279	3,130	3,206
Drug Abuse and Addiction Research Programs	1R21DA052620-01A1	93.279	3,620	-
Drug Abuse and Addiction Research Programs	F31DA054762	93.279	6,502	-
Drug Abuse and Addiction Research Programs	T32DA007238	93.279	7,158	-
Drug Abuse and Addiction Research Programs	DP2DA056169	93.279	8,964	-
Drug Abuse and Addiction Research Programs	5R01DA023248-10	93.279	11,008	-
Drug Abuse and Addiction Research Programs	2R01DA043443-06A1	93.279	11,748	-
Drug Abuse and Addiction Research Programs	R03DA047588	93.279	12,489	-
Drug Abuse and Addiction Research Programs	5R01DA042691-03	93.279	19,075	14,333
Drug Abuse and Addiction Research Programs	1R61DA053592-01A1	93.279	20,083	-
Drug Abuse and Addiction Research Programs	F31DA054861-01	93.279	25,235	-
Drug Abuse and Addiction Research Programs	1R21DA045189-01A1	93.279	26,696	-
Drug Abuse and Addiction Research Programs	5R21DA041539-02	93.279	28,723	26,660
COVID-19 Drug Abuse and Addiction Research Programs	1R01DA053301-01A1	93.279	31,250	-
Drug Abuse and Addiction Research Programs	5R01DA017294-13	93.279	35,070	-
Drug Abuse and Addiction Research Programs	5R01DA040471	93.279	35,771	25,142
Drug Abuse and Addiction Research Programs	5R21DA041580-02	93.279	39,963	-
Drug Abuse and Addiction Research Programs	5R21DA043831-02	93.279	41,618	-
Drug Abuse and Addiction Research Programs	5R01DA039136-03	93.279	51,349	-
Drug Abuse and Addiction Research Programs	1R61DA047037-01	93.279	52,658	-
Drug Abuse and Addiction Research Programs	5R01DA043690-03	93.279	53,299	-
Drug Abuse and Addiction Research Programs	1R01DA044981	93.279	71,662	-
Drug Abuse and Addiction Research Programs	R03DA052179	93.279	72,838	51,051
Drug Abuse and Addiction Research Programs	RDA052790A	93.279	76,298	11,143
Drug Abuse and Addiction Research Programs	R21DA045969-01	93.279	80,817	-
Drug Abuse and Addiction Research Programs	UG1DA050072	93.279	81,179	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Drug Abuse and Addiction Research Programs	5R21DA046030-02	93.279	\$ 83,677	\$ -
Drug Abuse and Addiction Research Programs	1R21DA047902-01A1	93.279	85,720	40,882
Drug Abuse and Addiction Research Programs	5R01DA043443	93.279	88,612	-
Drug Abuse and Addiction Research Programs	1R21DA047621	93.279	96,516	-
Drug Abuse and Addiction Research Programs	1R21DA054491-01	93.279	98,492	-
Drug Abuse and Addiction Research Programs	K02DA032322	93.279	105,007	-
Drug Abuse and Addiction Research Programs	5K08DA051667-03	93.279	107,886	-
Drug Abuse and Addiction Research Programs	P30DA018343	93.279	109,699	78,810
Drug Abuse and Addiction Research Programs	5R01DA041067-04	93.279	118,545	-
Drug Abuse and Addiction Research Programs	5P30DA018343-18	93.279	121,413	-
Drug Abuse and Addiction Research Programs	1R01DA054703-01	93.279	131,191	-
Drug Abuse and Addiction Research Programs	5R21DA045743-02	93.279	133,654	-
Drug Abuse and Addiction Research Programs	5R21DA043055-02	93.279	148,268	-
Drug Abuse and Addiction Research Programs	5K23DA052682	93.279	160,671	-
Drug Abuse and Addiction Research Programs	1K23DA045957	93.279	161,967	-
Drug Abuse and Addiction Research Programs	5K01DA042937-02	93.279	163,684	-
Drug Abuse and Addiction Research Programs	1R21DA049583-01	93.279	167,796	-
Drug Abuse and Addiction Research Programs	1K01DA045738	93.279	171,359	-
Drug Abuse and Addiction Research Programs	5R25DA043870	93.279	178,672	-
Drug Abuse and Addiction Research Programs	2UG1DA015831-19/3UD1DA015831-19S1&S2&S3&S4	93.279	186,213	189,534
COVID-19 Drug Abuse and Addiction Research Programs	2UG1DA015831-19/3UD1DA015831-19S1&S2&S3&S4	93.279	(6,421)	-
Drug Abuse and Addiction Research Programs	1K01DA047194-01	93.279	182,168	51,816
Drug Abuse and Addiction Research Programs	5R21DA044749-02/3R21DA044749-02S1	93.279	187,860	-
Drug Abuse and Addiction Research Programs	5R01DA041480-02	93.279	188,043	8,537
Drug Abuse and Addiction Research Programs	5K01DA042998	93.279	199,579	-
Drug Abuse and Addiction Research Programs	2T32DA007238-32	93.279	200,756	-
Drug Abuse and Addiction Research Programs	4R33DA041661-03	93.279	201,601	-
Drug Abuse and Addiction Research Programs	5K01DA046561-04	93.279	215,151	-
Drug Abuse and Addiction Research Programs	7R01DA018928-17	93.279	233,069	-
Drug Abuse and Addiction Research Programs	1R01DA054314-01	93.279	251,461	-
Drug Abuse and Addiction Research Programs	5R21DA050160-02/3R21DA050160-02S1&S2	93.279	259,901	-
Drug Abuse and Addiction Research Programs	5R01DA029910-010	93.279	300,403	202,196
Drug Abuse and Addiction Research Programs	5R01DA038832-03	93.279	326,680	-
Drug Abuse and Addiction Research Programs	1R01DA047986-01A1	93.279	341,304	-
Drug Abuse and Addiction Research Programs	T32DA022975	93.279	345,272	-
Drug Abuse and Addiction Research Programs	1R01DA047789	93.279	347,020	175,348
Drug Abuse and Addiction Research Programs	1R01DA047063	93.279	357,890	125,058
Drug Abuse and Addiction Research Programs	2T32DA019426-17	93.279	366,191	-
Drug Abuse and Addiction Research Programs	4R33DA047527-03	93.279	377,639	100,627
Drug Abuse and Addiction Research Programs	1R01DA052454-01A1	93.279	382,915	-
Drug Abuse and Addiction Research Programs	5R01DA038709-02	93.279	389,821	-
Drug Abuse and Addiction Research Programs	5R37DA014241	93.279	397,726	-
Drug Abuse and Addiction Research Programs	5U01DA051639-03	93.279	398,806	2,264

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Drug Abuse and Addiction Research Programs	5R01DA037974-05	93.279	\$ 416,939	\$ 66,353
Drug Abuse and Addiction Research Programs	1R01DA052846-01	93.279	419,439	60,097
Drug Abuse and Addiction Research Programs	1R01DA052385-01A1	93.279	429,403	-
Drug Abuse and Addiction Research Programs	1R01DA050454-01A1	93.279	434,136	28,927
Drug Abuse and Addiction Research Programs	1R01DA051906-01	93.279	437,387	-
Drug Abuse and Addiction Research Programs	UG3DA050251	93.279	463,359	34,499
Drug Abuse and Addiction Research Programs	2R01DA033679	93.279	481,550	271,659
Drug Abuse and Addiction Research Programs	R01DA060636	93.279	493,473	25,602
Drug Abuse and Addiction Research Programs	5R01DA041271	93.279	494,527	205,616
Drug Abuse and Addiction Research Programs	5U01DA051977	93.279	500,062	317,975
Drug Abuse and Addiction Research Programs	5R01DA040698-03	93.279	510,280	-
Drug Abuse and Addiction Research Programs	1R01DA042911	93.279	531,777	-
Drug Abuse and Addiction Research Programs	5K12DA000167-30	93.279	539,853	50,485
Drug Abuse and Addiction Research Programs	4R33DA047037-04	93.279	576,187	-
Drug Abuse and Addiction Research Programs	2K12DA033312	93.279	579,531	-
Drug Abuse and Addiction Research Programs	1UG3DA050322-01	93.279	588,781	-
Drug Abuse and Addiction Research Programs	1R01DA043125	93.279	601,205	301,872
Drug Abuse and Addiction Research Programs	UG1DA015831	93.279	603,579	34,632
Drug Abuse and Addiction Research Programs	R01DA046160	93.279	684,113	-
Drug Abuse and Addiction Research Programs	5R01DA047820-03	93.279	698,939	142,747
Drug Abuse and Addiction Research Programs	1DP2DA049282-01	93.279	711,108	-
Drug Abuse and Addiction Research Programs	5R37DA023999-12	93.279	733,039	-
Drug Abuse and Addiction Research Programs	5R01DA047094-03	93.279	744,395	389,632
Drug Abuse and Addiction Research Programs	1R01DA051871	93.279	800,816	294,419
Drug Abuse and Addiction Research Programs	4UH3DA050251-03	93.279	844,087	84,395
Drug Abuse and Addiction Research Programs	1RM1DA055310	93.279	860,330	194,917
Drug Abuse and Addiction Research Programs	5R01DA043337	93.279	903,804	203,179
Drug Abuse and Addiction Research Programs	R01DA045465	93.279	932,782	104,991
Drug Abuse and Addiction Research Programs	UG1DA050072	93.279	1,290,915	1,133,708
Drug Abuse and Addiction Research Programs	U01DA041174	93.279	1,400,959	-
Drug Abuse and Addiction Research Programs	4UH3DA047003	93.279	1,417,985	411,937
Drug Abuse and Addiction Research Programs	5P30DA018343	93.279	1,444,226	26,524
Drug Abuse and Addiction Research Programs	1U01DA053628-01	93.279	1,667,482	76,015
Drug Abuse and Addiction Research Programs	1UM1DA051410-01	93.279	1,813,680	48,948
Drug Abuse and Addiction Research Programs	1U01DA053039-01	93.279	1,933,217	999,871
Drug Abuse and Addiction Research Programs	5U01DA045372-03	93.279	2,251,248	1,289,358
Drug Abuse and Addiction Research Programs	UG1DA015831	93.279	10,926,109	9,275,811
COVID-19 Drug Abuse and Addiction Research Programs	UG1DA015831	93.279	8,785	-
			<u>51,142,737</u>	<u>17,180,776</u>
Discovery and Applied Research for Technological Innovations to Improve Human Health	R03EB027209	93.286	13,022	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	5R01EB022589	93.286	21,798	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB032658	93.286	27,661	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R03EB027864	93.286	27,770	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB023414	93.286	50,533	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB027872	93.286	59,133	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R03EB031123	93.286	73,054	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB023366-01A1	93.286	111,361	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R21EB029607-01A1	93.286	183,300	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB022030	93.286	\$ 196,601	\$ -
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB026759	93.286	217,433	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R21EB028954	93.286	263,528	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R01EB031821	93.286	325,763	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R01EB014861	93.286	331,185	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	R01EB025468	93.286	577,343	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	1R01EB025840-01A1	93.286	754,291	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	U01EB029811	93.286	1,931,395	1,601,875
			<u>5,165,171</u>	<u>1,601,875</u>
Minority Health and Health Disparities Research	1R01NS127879-01	93.307	1,282	-
Minority Health and Health Disparities Research	1R01MD016386-01	93.307	84,440	18,656
Minority Health and Health Disparities Research	1R01MD016922-01	93.307	125,129	42,680
Minority Health and Health Disparities Research	5K01MD016166-02	93.307	136,556	-
Minority Health and Health Disparities Research	R21MD013481	93.307	139,432	-
Minority Health and Health Disparities Research	1R21MD012697-01A1	93.307	171,268	76,896
Minority Health and Health Disparities Research	R01MD015974	93.307	320,016	36,082
Minority Health and Health Disparities Research	R01MD014853	93.307	528,047	283,744
Minority Health and Health Disparities Research	U54MD010711	93.307	550,892	199,742
Minority Health and Health Disparities Research	1R01MD012769-01A1	93.307	682,541	357,984
			<u>2,739,603</u>	<u>1,015,784</u>
Trans-NIH Research Support	R03TR004173	93.310	3,568	-
Trans-NIH Research Support	1DPGM123507-01	93.310	23,979	-
COVID-19 Trans-NIH Research Support	3UG1DA050072	93.310	48,359	-
Trans-NIH Research Support	1R03OD032623	93.310	51,603	-
Trans-NIH Research Support	1DP5OD023088	93.310	52,461	-
Trans-NIH Research Support	1R03TR003402	93.310	65,668	-
Trans-NIH Research Support	1DP2AI138259	93.310	82,989	-
Trans-NIH Research Support	1DP2GM146253-01	93.310	115,278	-
Trans-NIH Research Support	R03OD030609-01	93.310	137,959	-
Trans-NIH Research Support	U54AG076043	93.310	325,633	-
Trans-NIH Research Support	UG3NS115597	93.310	430,982	2,591
Trans-NIH Research Support	7DP5OD029636	93.310	432,091	-
Trans-NIH Research Support	1U01OD033241-01/3U01OD033241-01S1	93.310	448,283	37,486
Trans-NIH Research Support	1UG3CA257393	93.310	535,532	-
Trans-NIH Research Support	1UG3HL147352	93.310	573,730	-
Trans-NIH Research Support	1DP2CA248136-01	93.310	647,675	-
Trans-NIH Research Support	DP2CA238295	93.310	668,604	-
Trans-NIH Research Support	DP2GM132930	93.310	730,810	-
Trans-NIH Research Support	1U01CA260701	93.310	802,453	-
Trans-NIH Research Support	5DP1DA050986-04	93.310	1,172,645	-
COVID-19 Trans-NIH Research Support	3U54MD010711-05S1	93.310	1,928,935	822,304
COVID-19 Trans-NIH Research Support	3UG1DA050072-02S3	93.310	2,633,878	2,114,548
			<u>11,913,115</u>	<u>2,976,929</u>
Dietary Supplement Research Program	F30HD106694	93.321	27,702	-
			<u>27,702</u>	<u>-</u>
National Center for Advancing Translational Sciences	5TL1TR001864	93.350	(9,093)	-
National Center for Advancing Translational Sciences	5UL1TR001863	93.350	(8,179)	-
National Center for Advancing Translational Sciences	5UL1TR001863	93.350	91	-
National Center for Advancing Translational Sciences	5KL2TR001862	93.350	6,866	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
National Center for Advancing Translational Sciences	TL1TR001864	93.350	\$ 55,148	\$ -
National Center for Advancing Translational Sciences	KL2TR001862	93.350	94,437	-
National Center for Advancing Translational Sciences	7R21TR002639	93.350	212,925	60,563
National Center for Advancing Translational Sciences	2UL1TR001863	93.350	784,083	-
National Center for Advancing Translational Sciences	TL1TR001864	93.350	870,541	-
National Center for Advancing Translational Sciences	KL2TR001862	93.350	1,087,462	-
National Center for Advancing Translational Sciences	1U01TR002763-02	93.350	1,443,520	693,998
National Center for Advancing Translational Sciences	2UL1TR001863	93.350	9,909,998	-
			<u>14,447,799</u>	<u>754,561</u>
Research Infrastructure Programs	2R24OD016474-05	93.351	284,066	146,537
Research Infrastructure Programs	S10OD028738-01A1	93.351	589,686	-
Research Infrastructure Programs	1S10OD026810	93.351	1,760,000	-
			<u>2,633,752</u>	<u>146,537</u>
21st Century Cures Act - Beau Biden Cancer Moonshot	U01CA246665	93.353	10,090	9,996
21st Century Cures Act - Beau Biden Cancer Moonshot	U2CCA252979-01A1	93.353	629,095	303,373
21st Century Cures Act - Beau Biden Cancer Moonshot	U01CA233096	93.353	838,851	-
			<u>1,478,036</u>	<u>313,369</u>
Nursing Research	1R01NR016007-03	93.361	5,728	17,859
Nursing Research	1K99NR018876-01	93.361	25,179	-
Nursing Research	1F31NR018996-01A1	93.361	29,190	-
Nursing Research	1F31NR019934-01	93.361	48,022	-
Nursing Research	5R01NR016191-05/3R01NR016191-05S1	93.361	121,656	-
Nursing Research	1R34NR019283-01A1	93.361	237,734	-
Nursing Research	1R01NR018335-01	93.361	678,729	52,193
Nursing Research	R01NR019009	93.361	982,956	722,972
			<u>2,129,194</u>	<u>793,024</u>
Cancer Cause and Prevention Research	5P01CA016038-42	93.393	(2,302)	-
Cancer Cause and Prevention Research	5R01CA206465-03 REV	93.393	-	6,284
Cancer Cause and Prevention Research	2003067934	93.393	307	-
Cancer Cause and Prevention Research	1F99CA245819	93.393	4,136	-
Cancer Cause and Prevention Research	1R01CA270788-01	93.393	10,196	-
Cancer Cause and Prevention Research	1R03CA219603-01A1	93.393	15,243	5,716
Cancer Cause and Prevention Research	R01CA201873	93.393	21,232	11,950
Cancer Cause and Prevention Research	F99CA253767	93.393	28,130	-
Cancer Cause and Prevention Research	R21CA240166	93.393	35,963	-
Cancer Cause and Prevention Research	1R03CA245991-01	93.393	42,774	-
Cancer Cause and Prevention Research	R03CA252808	93.393	45,835	-
Cancer Cause and Prevention Research	1R21CA238100	93.393	76,327	-
Cancer Cause and Prevention Research	K00CA245722	93.393	83,671	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Direct: (Continued)</u>				
Cancer Cause and Prevention Research	R03CA252689	93.393	\$ 84,173	\$ -
Cancer Cause and Prevention Research	1R01CA266604-01	93.393	98,733	-
Cancer Cause and Prevention Research	1R03CA241699-01	93.393	109,780	-
Cancer Cause and Prevention Research	R21CA238066	93.393	118,428	-
Cancer Cause and Prevention Research	1R21CA252916-01A1	93.393	118,733	-
Cancer Cause and Prevention Research	5R01CA102703-12	93.393	144,501	-
Cancer Cause and Prevention Research	R35CA197628	93.393	152,263	-
Cancer Cause and Prevention Research	K07CA230234	93.393	154,534	-
Cancer Cause and Prevention Research	R01CA258269	93.393	227,253	-
Cancer Cause and Prevention Research	2R01CA204120	93.393	242,039	-
Cancer Cause and Prevention Research	1R01CA238570	93.393	312,623	-
Cancer Cause and Prevention Research	1R01CA215453	93.393	319,023	14,377
Cancer Cause and Prevention Research	R37CA230580-03	93.393	346,938	-
Cancer Cause and Prevention Research	1R01CA215990	93.393	356,340	-
Cancer Cause and Prevention Research	1R01CA218141	93.393	388,604	-
Cancer Cause and Prevention Research	MUSCHEN	93.393	415,824	-
Cancer Cause and Prevention Research	1R01CA222518	93.393	494,716	-
Cancer Cause and Prevention Research	1R01CA244660-01	93.393	522,323	303,449
Cancer Cause and Prevention Research	R01CA24391	93.393	591,526	335,393
Cancer Cause and Prevention Research	5R01CA214703-03 Revised	93.393	593,392	-
Cancer Cause and Prevention Research	1R01CA206483	93.393	609,929	284,891
Cancer Cause and Prevention Research	MUSCHEN	93.393	691,738	-
Cancer Cause and Prevention Research	1R01CA245313-01	93.393	769,037	-
Cancer Cause and Prevention Research	R01CA224140	93.393	789,197	104,105
			<u>9,013,159</u>	<u>1,066,165</u>
Cancer Detection and Diagnosis Research	5R01CA197486	93.394	34,861	-
Cancer Detection and Diagnosis Research	1U01CA271278	93.394	57,462	-
Cancer Detection and Diagnosis Research	1R21CA256380-01A1	93.394	70,026	-
Cancer Detection and Diagnosis Research	1R01CA206180	93.394	103,422	43,520
Cancer Detection and Diagnosis Research	1R01CA219647-01	93.394	154,584	-
Cancer Detection and Diagnosis Research	R03CA249569	93.394	189,720	-
Cancer Detection and Diagnosis Research	R21CA252587	93.394	215,713	-
Cancer Detection and Diagnosis Research	R01CA264851	93.394	273,772	-
Cancer Detection and Diagnosis Research	R37CA245154	93.394	282,756	-
Cancer Detection and Diagnosis Research	R01CA255226	93.394	346,744	-
Cancer Detection and Diagnosis Research	U01CA233364	93.394	435,481	213,432
Cancer Detection and Diagnosis Research	1R33CA246711-01	93.394	559,520	-
COVID-19 Cancer Detection and Diagnosis Research	U01CA260507	93.394	1,003,936	-
			<u>3,727,997</u>	<u>256,952</u>
Cancer Treatment Research	5UM1CA186689-03	93.395	(112,001)	-
Cancer Treatment Research	1R50CA211252-03	93.395	20,998	-
Cancer Treatment Research	1R01CA266757	93.395	26,587	-
Cancer Treatment Research	7R01CA237652-03	93.395	67,838	-
Cancer Treatment Research	5R01CA188359-06	93.395	114,864	-
Cancer Treatment Research	1R21CA263437-01	93.395	168,476	-
Cancer Treatment Research	R01CA218501	93.395	201,543	-
Cancer Treatment Research	R21CA240660	93.395	239,169	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Cancer Treatment Research	1R01CA216846	93.395	\$ 278,307	\$ -
Cancer Treatment Research	R01CA256530-01A1	93.395	312,042	90,316
Cancer Treatment Research	1R01CA224023-01	93.395	319,816	-
Cancer Treatment Research	1R01CA207753	93.395	498,994	-
Cancer Treatment Research	1R01CA215553-01A1	93.395	523,153	256,969
Cancer Treatment Research	1UG1CA233337	93.395	771,034	-
Cancer Treatment Research	1R35CA197574	93.395	951,778	-
Cancer Treatment Research	5R35CA197589-04	93.395	1,032,166	-
Cancer Treatment Research	2UM1CA186689	93.395	1,686,739	851,000
Cancer Treatment Research	P50CA121974	93.395	2,371,585	26,371
			<u>9,473,088</u>	<u>1,224,656</u>
Cancer Biology Research	5R01CA191489-03	93.396	(7,655)	-
Cancer Biology Research	4R00CA215315-04	93.396	15,473	-
Cancer Biology Research	1R03CA259881-01	93.396	82,233	-
Cancer Biology Research	7R01CA203011	93.396	123,209	-
Cancer Biology Research	R33CA225863	93.396	131,434	-
Cancer Biology Research	R01CA259386	93.396	132,595	-
Cancer Biology Research	1R01CA262377-01	93.396	181,113	-
Cancer Biology Research	1R37CA258261-01A1	93.396	190,049	-
Cancer Biology Research	R21CA246118	93.396	222,032	-
Cancer Biology Research	1R01CA214704-02	93.396	226,869	-
Cancer Biology Research	1R01CA204002-01A1	93.396	242,168	-
Cancer Biology Research	R01CA237586	93.396	303,472	-
Cancer Biology Research	1R33CA225498-01A1	93.396	314,627	-
Cancer Biology Research	R01CA166376	93.396	374,444	-
Cancer Biology Research	R33CA251037-01	93.396	380,184	-
Cancer Biology Research	R00CA226342	93.396	388,296	42,366
Cancer Biology Research	2R01CA198164-06	93.396	399,929	-
Cancer Biology Research	1R01CA230444-01	93.396	445,990	128,086
Cancer Biology Research	1R01CA227473	93.396	460,785	-
Cancer Biology Research	1R01CA248532-01A1	93.396	475,563	-
Cancer Biology Research	1R01CA263715-01	93.396	486,982	251,482
Cancer Biology Research	1R01CA248166-01	93.396	537,143	197,328
Cancer Biology Research	1U01CA238728	93.396	605,113	118,643
Cancer Biology Research	1R01CA212376	93.396	650,551	-
Cancer Biology Research	1R01CA230275-01A1	93.396	655,061	347,032
Cancer Biology Research	1R01CA237037	93.396	655,284	-
Cancer Biology Research	1U01CA235747	93.396	679,635	-
Cancer Biology Research	R01CA240602	93.396	777,154	79,194
Cancer Biology Research	2R35CA197628-07	93.396	885,176	-
Cancer Biology Research	R01CA231112	93.396	1,010,902	-
Cancer Biology Research	R35CA242462	93.396	1,077,783	-
			<u>13,103,594</u>	<u>1,164,131</u>
Cancer Centers Support Grants	5P50CA196530-02	93.397	(3,867)	-
Cancer Centers Support Grants	1P50DE030707	93.397	261,163	269,773

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Cancer Centers Support Grants	1U54CA209992-01	93.397	\$ 520,720	\$ 24,253
Cancer Centers Support Grants	2P30CA016359-39	93.397	575,538	-
COVID-19 Cancer Centers Support Grants	2P30CA016359-39	93.397	2,931	-
Cancer Centers Support Grants	2P50CA196530-06	93.397	2,121,292	-
Cancer Centers Support Grants	1P50DE030707	93.397	2,750,959	359,855
Cancer Centers Support Grants	5P30CA016359	93.397	4,690,521	53,931
			<u>10,919,257</u>	<u>707,812</u>
Cancer Research Manpower	5T32CA193200-03	93.398	(2,544)	-
Cancer Research Manpower	1K01CA204431-02	93.398	3,809	-
Cancer Research Manpower	1F31CA232477-01	93.398	4,987	-
Cancer Research Manpower	F32CA224946	93.398	6,469	-
Cancer Research Manpower	1F31CA261129-01	93.398	16,556	-
Cancer Research Manpower	1F99CA264425	93.398	21,639	-
Cancer Research Manpower	F31CA257288	93.398	25,407	-
Cancer Research Manpower	1F31CA254426	93.398	26,435	-
Cancer Research Manpower	F30CA239444	93.398	26,441	-
Cancer Research Manpower	F31CA247018	93.398	28,907	-
Cancer Research Manpower	F30CA254123	93.398	29,875	-
Cancer Research Manpower	1F31CA254339-01	93.398	30,241	-
Cancer Research Manpower	F30CA254158	93.398	30,879	-
Cancer Research Manpower	F30CA250249	93.398	31,891	-
Cancer Research Manpower	F30CA254246	93.398	32,342	-
Cancer Research Manpower	1F31CA243295-01	93.398	33,056	-
Cancer Research Manpower	F31CA265173-01	93.398	36,609	-
Cancer Research Manpower	1F30CA236466	93.398	36,617	-
Cancer Research Manpower	1 F31 CA261126-01	93.398	38,359	-
Cancer Research Manpower	1R25CA203650	93.398	39,701	31,636
Cancer Research Manpower	F31CA260794	93.398	41,504	-
Cancer Research Manpower	F31CA265150	93.398	41,577	-
Cancer Research Manpower	5K08CA208016	93.398	47,872	-
Cancer Research Manpower	5K99CA256350-02	93.398	100,626	-
Cancer Research Manpower	K08CA258796	93.398	132,404	-
Cancer Research Manpower	K08CA245211	93.398	139,597	-
Cancer Research Manpower	K08CA259222	93.398	147,661	-
Cancer Research Manpower	1K08CA204732	93.398	148,355	-
Cancer Research Manpower	KABECHE	93.398	168,881	-
Cancer Research Manpower	2R25CA203650	93.398	180,270	79,099
Cancer Research Manpower	1K08CA255465-01A1	93.398	231,111	-
Cancer Research Manpower	1K08CA237872	93.398	260,643	-
Cancer Research Manpower	T32CA250803	93.398	275,812	-
Cancer Research Manpower	1K08CA248725-01A1	93.398	284,199	-
Cancer Research Manpower	K08CA245112	93.398	288,044	-
Cancer Research Manpower	T32CA233414	93.398	350,346	-
Cancer Research Manpower	T32CA193200	93.398	393,384	-
Cancer Research Manpower	K12CA215110	93.398	817,652	-
			<u>4,547,614</u>	<u>110,735</u>
ACL National Institute on Disability, Independent Living, and Rehabilitation Research	90AREM0002	93.433	23,426	-
ACL National Institute on Disability, Independent Living, and Rehabilitation Research	90AREM0002-03-00	93.433	133,799	-
			<u>157,225</u>	<u>-</u>
Closing the Gap Between Standards Development and Implementation	1R21EB026630	93.826	38,500	-
			<u>38,500</u>	<u>-</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Cardiovascular Diseases Research	5R01HL125587-03	93.837	\$ (17,910)	\$ -
Cardiovascular Diseases Research	5T32HL098069-09 REV	93.837	(6,913)	-
Cardiovascular Diseases Research	5T32HL007950-18	93.837	(2,886)	-
Cardiovascular Diseases Research	2R01HL115247-07	93.837	(970)	-
Cardiovascular Diseases Research	5R01HL135012-04	93.837	(70)	-
Cardiovascular Diseases Research	2R01HL085416-13	93.837	1,333	-
Cardiovascular Diseases Research	F30HL143878	93.837	2,741	-
Cardiovascular Diseases Research	F31HL140823	93.837	4,470	-
Cardiovascular Diseases Research	F31HL143924	93.837	5,590	-
Cardiovascular Diseases Research	F31HL143928	93.837	6,109	-
Cardiovascular Diseases Research	1F31HL162505	93.837	8,919	-
Cardiovascular Diseases Research	F31HL140791	93.837	9,788	-
Cardiovascular Diseases Research	1F31HL149246-01	93.837	27,172	-
Cardiovascular Diseases Research	1R01HL160822	93.837	28,728	-
Cardiovascular Diseases Research	F30HL156469	93.837	29,468	-
Cardiovascular Diseases Research	1R01HL162792	93.837	30,628	-
Cardiovascular Diseases Research	F30HL158154	93.837	33,549	-
Cardiovascular Diseases Research	1F31HL149289-01	93.837	35,925	-
Cardiovascular Diseases Research	F30HL149180	93.837	39,963	-
Cardiovascular Diseases Research	F31HL158091-01	93.837	43,027	-
Cardiovascular Diseases Research	5R01HL123949	93.837	47,430	-
Cardiovascular Diseases Research	5K01HL125514-04	93.837	53,066	-
Cardiovascular Diseases Research	5R01HL130246-02	93.837	53,463	-
Cardiovascular Diseases Research	1K08HL157727-01A1	93.837	57,963	-
Cardiovascular Diseases Research	K08HL155888-01A1	93.837	67,191	-
Cardiovascular Diseases Research	5K99HL150234-02	93.837	75,773	-
Cardiovascular Diseases Research	1R21HL161556-01	93.837	81,588	46,819
Cardiovascular Diseases Research	1R01HL163984-01	93.837	94,803	-
Cardiovascular Diseases Research	1R01HL155105	93.837	95,028	-
Cardiovascular Diseases Research	1K99HL157552	93.837	100,391	-
Cardiovascular Diseases Research	K01HL145347	93.837	126,613	-
Cardiovascular Diseases Research	5R01HL128973-04	93.837	146,885	-
Cardiovascular Diseases Research	1K08HL136898	93.837	155,569	-
Cardiovascular Diseases Research	1K08HL143133	93.837	162,336	-
Cardiovascular Diseases Research	2R01HL109420	93.837	171,910	-
Cardiovascular Diseases Research	2R01HL131952-06A1	93.837	175,849	-
Cardiovascular Diseases Research	2T35HL007649	93.837	211,549	-
Cardiovascular Diseases Research	2R01HL062289-19A1	93.837	212,744	-
Cardiovascular Diseases Research	K23HL153775-01A1	93.837	223,310	-
Cardiovascular Diseases Research	2R01HL125811-05A1	93.837	234,114	-
Cardiovascular Diseases Research	1R01HL157019-01	93.837	272,955	-
Cardiovascular Diseases Research	1R01HL158876-01A1	93.837	281,791	-
Cardiovascular Diseases Research	R01HL155411-01A1	93.837	296,751	-
Cardiovascular Diseases Research	1R01HL142090-01	93.837	302,849	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Cardiovascular Diseases Research	5R01HL134166-02	93.837	\$ 304,367	\$ -
Cardiovascular Diseases Research	1R01HL142818-01	93.837	339,612	-
Cardiovascular Diseases Research	2U01HL098162	93.837	349,405	-
Cardiovascular Diseases Research	R01HL150449	93.837	356,582	-
Cardiovascular Diseases Research	T32HL007950-21	93.837	364,815	-
Cardiovascular Diseases Research	1R01HL138567-01	93.837	386,323	-
Cardiovascular Diseases Research	R01HL149344-01A1	93.837	392,807	-
Cardiovascular Diseases Research	DP2HL151354-01	93.837	399,973	-
Cardiovascular Diseases Research	T32HL098069-11A1	93.837	409,694	-
Cardiovascular Diseases Research	R01HL138357	93.837	434,193	4,016
Cardiovascular Diseases Research	1R01HL139629-01	93.837	458,681	-
Cardiovascular Diseases Research	1R01HL136590	93.837	481,075	101,528
Cardiovascular Diseases Research	R01HL148008-01A1	93.837	483,053	-
Cardiovascular Diseases Research	R01HL115148	93.837	493,078	-
Cardiovascular Diseases Research	1R01HL141852-01A1	93.837	498,114	71,516
Cardiovascular Diseases Research	1R01HL146101-01	93.837	503,891	-
Cardiovascular Diseases Research	R01HL144706	93.837	511,160	-
Cardiovascular Diseases Research	R01HL151222-01A1	93.837	525,501	-
Cardiovascular Diseases Research	1R01HL144644	93.837	531,797	-
Cardiovascular Diseases Research	1R01HL141137-01	93.837	537,155	-
Cardiovascular Diseases Research	1R01HL137365-01A1	93.837	559,670	167,573
Cardiovascular Diseases Research	R01HL150352-01A1	93.837	575,225	-
Cardiovascular Diseases Research	1U01HL142518	93.837	576,667	272,854
Cardiovascular Diseases Research	1R01HL149343-01	93.837	633,236	-
Cardiovascular Diseases Research	R01HL148819	93.837	635,095	106,834
Cardiovascular Diseases Research	R01HL144476	93.837	637,916	-
Cardiovascular Diseases Research	1R01HL149746-01A1	93.837	671,687	-
Cardiovascular Diseases Research	R01HL155543-01	93.837	679,318	-
Cardiovascular Diseases Research	R01HL142765-01A1	93.837	698,159	131,982
Cardiovascular Diseases Research	5R35HL139945-04	93.837	702,167	-
Cardiovascular Diseases Research	2R01HL124402	93.837	710,735	-
Cardiovascular Diseases Research	R01HL152548-01	93.837	712,918	-
Cardiovascular Diseases Research	1R35HL145249-02	93.837	731,808	-
Cardiovascular Diseases Research	R01HL152197-01A1	93.837	733,238	-
Cardiovascular Diseases Research	1R01HL137696	93.837	740,407	56,823
Cardiovascular Diseases Research	R01HL121226	93.837	820,360	124,475
Cardiovascular Diseases Research	5R35HL155988-02	93.837	825,887	-
Cardiovascular Diseases Research	2R01HL135582-05	93.837	872,107	-
Cardiovascular Diseases Research	1R01HL146723-03	93.837	872,917	-
Cardiovascular Diseases Research	R35HL135820	93.837	914,535	-
Cardiovascular Diseases Research	1R01HL148354-01	93.837	917,047	110,674
Cardiovascular Diseases Research	R01HL154345	93.837	936,252	-
Cardiovascular Diseases Research	1R35HL135767	93.837	1,031,887	-
Cardiovascular Diseases Research	5U01HL125511-04	93.837	1,094,137	880,410
Cardiovascular Diseases Research	2P01HL107205-06A1	93.837	1,472,796	-
			<u>32,498,029</u>	<u>2,075,504</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Direct: (Continued)</u>				
Lung Diseases Research	4UH3HL123886-05	93.838	\$ (56,053)	\$ -
Lung Diseases Research	5T32HL007778-22	93.838	12	-
Lung Diseases Research	1F32HL154641-01	93.838	909	-
Lung Diseases Research	1R01HL138540-02	93.838	5,510	-
Lung Diseases Research	F30HL162459	93.838	9,689	-
Lung Diseases Research	1F31HL158119-01A1	93.838	21,486	-
Lung Diseases Research	F30HL143880	93.838	23,616	-
Lung Diseases Research	2T35HL007649	93.838	30,566	-
Lung Diseases Research	F30HL149151	93.838	32,090	-
Lung Diseases Research	1R03HL154275-01	93.838	43,327	-
Lung Diseases Research	F30HL143906	93.838	50,843	-
Lung Diseases Research	1K08HL135402-01	93.838	71,628	-
Lung Diseases Research	1K99HL151806-01A1	93.838	79,003	-
Lung Diseases Research	1R03HL154276	93.838	115,503	-
Lung Diseases Research	1K23HL138229-01A1	93.838	145,142	-
Lung Diseases Research	1K08HL151970-01	93.838	206,669	-
Lung Diseases Research	R01HL159459-01	93.838	384,379	40,420
Lung Diseases Research	1R01HL157776-01A1	93.838	402,263	-
Lung Diseases Research	1R01HL152677-01	93.838	470,716	-
Lung Diseases Research	U01HL145567	93.838	504,950	165,313
Lung Diseases Research	R01HL145152	93.838	517,623	-
Lung Diseases Research	1R01HL145660	93.838	564,393	208,174
Lung Diseases Research	1R01HL155948-01	93.838	673,006	-
Lung Diseases Research	2T32HL007778-26	93.838	685,764	-
Lung Diseases Research	1R01HL153604-01	93.838	762,260	4,409
Lung Diseases Research	R33HL138650	93.838	790,700	106,298
Lung Diseases Research	R35HL135805	93.838	851,030	-
Lung Diseases Research	R35HL150766-01	93.838	1,026,193	-
			<u>8,413,217</u>	<u>524,614</u>
Blood Diseases and Resources Research	1F32HL142144	93.839	3	-
Blood Diseases and Resources Research	F30HL149185	93.839	5,670	-
Blood Diseases and Resources Research	2T32HL007974-21	93.839	46,224	-
Blood Diseases and Resources Research	K01HL145580	93.839	50,511	-
Blood Diseases and Resources Research	1R21A1164106-01	93.839	208,305	-
Blood Diseases and Resources Research	1R01HL133406	93.839	221,080	-
Blood Diseases and Resources Research	1R21HL150642-01A1	93.839	240,101	-
Blood Diseases and Resources Research	2T32HL007974-17	93.839	307,643	-
Blood Diseases and Resources Research	1R01HL132951	93.839	385,102	-
Blood Diseases and Resources Research	R01HL122815-05A1	93.839	561,756	-
Blood Diseases and Resources Research	1R01HL139756-02	93.839	625,863	-
Blood Diseases and Resources Research	1R01HL150515-01	93.839	705,718	-
			<u>3,357,976</u>	<u>-</u>
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	F31HL156805-01	93.840	27,701	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	R21HL150459	93.840	106,233	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	T32HL155000	93.840	139,443	-
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	1R01HL143785-01	93.840	381,690	188,919
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	5R01HL151603-02	93.840	771,123	235,284
Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	1K12HL138037	93.840	773,983	16,398
			<u>2,200,173</u>	<u>440,601</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Arthritis, Musculoskeletal and Skin Diseases Research	2K24AR060231-06	93.846	\$ 181	\$ -
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR069876-01A1	93.846	1,837	-
Arthritis, Musculoskeletal and Skin Diseases Research	R21AR074571	93.846	8,653	-
Arthritis, Musculoskeletal and Skin Diseases Research	5T32AR007016-43	93.846	8,769	-
Arthritis, Musculoskeletal and Skin Diseases Research	1F32AR079892-01A1	93.846	16,922	-
Arthritis, Musculoskeletal and Skin Diseases Research	1F31AR073094	93.846	22,012	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR080416	93.846	25,368	-
Arthritis, Musculoskeletal and Skin Diseases Research	1F31AR079928	93.846	29,230	-
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR080152	93.846	41,971	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R03AR076484-01	93.846	54,359	-
Arthritis, Musculoskeletal and Skin Diseases Research	5T32AR007107-46	93.846	60,569	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR080104-01	93.846	111,842	-
Arthritis, Musculoskeletal and Skin Diseases Research	K08AR073933	93.846	145,759	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR070851	93.846	151,375	-
Arthritis, Musculoskeletal and Skin Diseases Research	1K08AR077689-01A1	93.846	151,502	-
Arthritis, Musculoskeletal and Skin Diseases Research	R21AR079591-01	93.846	157,278	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR068994	93.846	173,205	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR078334-01	93.846	215,243	-
Arthritis, Musculoskeletal and Skin Diseases Research	7R01AR068353	93.846	240,025	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR073607	93.846	243,215	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R21AR078538-01	93.846	250,008	-
Arthritis, Musculoskeletal and Skin Diseases Research	2T32AR007107-47	93.846	259,919	-
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR074545-02	93.846	277,651	-
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR067755-02	93.846	278,306	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR070811-05	93.846	314,755	-
Arthritis, Musculoskeletal and Skin Diseases Research	2T32AR007016-47	93.846	372,408	-
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR079428	93.846	408,975	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR076420-01A1	93.846	414,884	-
Arthritis, Musculoskeletal and Skin Diseases Research	2R01AR068392	93.846	425,772	-
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR062111	93.846	430,713	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR079232	93.846	470,856	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR076938-03	93.846	474,583	136,511
Arthritis, Musculoskeletal and Skin Diseases Research	R01AR071491	93.846	519,788	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR075412	93.846	524,152	25,725
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR078715-01A1	93.846	535,652	40,481
Arthritis, Musculoskeletal and Skin Diseases Research	2R01AR063663-06A1	93.846	545,239	-
Arthritis, Musculoskeletal and Skin Diseases Research	R37AR040072	93.846	577,602	-
Arthritis, Musculoskeletal and Skin Diseases Research	5R01AR072668-02	93.846	658,243	-
Arthritis, Musculoskeletal and Skin Diseases Research	1R01AR073270-01	93.846	659,112	401,558
			<u>10,257,933</u>	<u>604,275</u>
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK103176-03	93.847	(50,392)	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK083294-10	93.847	(14,350)	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK090489-07	93.847	(1,513)	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5U01DK106908-02	93.847	(698)	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	4R01DK020495-40	93.847	(216)	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK101984-05	93.847	\$ (67)	\$ -
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK110181-03	93.847	2	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	4U01DK082185-09	93.847	1,414	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F30DK131846	93.847	2,153	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK130318	93.847	2,751	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK129616	93.847	14,656	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R03DK121048-01	93.847	17,099	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK132645	93.847	23,236	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F31DK130556-01A1	93.847	24,648	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F31DK129022-01A1	93.847	26,597	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1DP3DK112227-01	93.847	42,292	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK129466	93.847	45,298	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1F31DK126362-01A1	93.847	46,634	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R21DK130299-01	93.847	67,180	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K01DK120798	93.847	70,920	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R25DK121566-01	93.847	72,045	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	7K08DK124686	93.847	72,391	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R56DK077065	93.847	73,332	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK130362-01	93.847	91,350	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK093771-06	93.847	92,798	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK111038-03	93.847	94,121	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5K23DK117065-03	93.847	111,083	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R56DK129344	93.847	114,770	52,255
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK129836-01	93.847	116,069	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5K08DK110536-03	93.847	118,930	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK125718-01A1	93.847	120,327	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK109434	93.847	122,354	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	K01DK118005	93.847	147,782	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK115894-01A1	93.847	148,574	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK116774-04	93.847	149,010	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R03DK124743	93.847	152,146	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5K01DK120783-04	93.847	160,674	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K23DK127154-01A1	93.847	161,737	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	K23DK128560	93.847	168,201	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5K08DK113109-04	93.847	169,201	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	K01DK124441	93.847	172,519	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK124788-01A1	93.847	172,749	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK114031-01	93.847	173,310	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK128277	93.847	176,461	41,239
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK117597-01	93.847	179,068	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5K08DK119642-03	93.847	179,819	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5K23DK115893	93.847	191,875	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2K12DK094714-08	93.847	204,048	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R21DK128662	93.847	205,532	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK104046-05	93.847	213,721	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Diabetes, Digestive, and Kidney Diseases Extramural Research	1K08DK128585	93.847	\$ 215,754	\$ -
Diabetes, Digestive, and Kidney Diseases Extramural Research	2T32DK007017-42	93.847	230,317	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R21DK128680-01	93.847	243,801	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R56DK121511	93.847	245,681	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK113135	93.847	260,326	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1DP3DK113511-01	93.847	270,447	264,780
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK128087-01	93.847	277,220	59,123
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK121326	93.847	278,615	23,106
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK111038	93.847	281,043	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK089098-06	93.847	289,661	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK115969	93.847	292,258	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	T35DK104689	93.847	296,650	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2T32DK007356	93.847	314,265	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	PO 0000139692	93.847	315,247	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK124321-01	93.847	325,406	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5T32DK007058-47	93.847	333,943	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK119386-01	93.847	336,629	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2U01 DK106908-06	93.847	341,006	57,761
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK121551-01A1	93.847	344,302	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5T32DK007276-44	93.847	349,159	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK129523-01	93.847	349,729	79,070
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK111539	93.847	352,140	42,173
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK114504	93.847	352,935	47,448
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK113191-01A1	93.847	359,515	9,461
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK120373-01A1	93.847	363,511	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK027044	93.847	363,834	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK077065-12	93.847	382,060	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK057846	93.847	384,271	78,195
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK083294-11	93.847	391,942	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK124420-02	93.847	392,553	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK093629	93.847	406,626	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK129552	93.847	409,337	24,619
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK125650-01A1	93.847	413,743	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK117650	93.847	415,034	10,437
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK112797	93.847	424,165	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK099097-06A1	93.847	424,649	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK115933	93.847	426,322	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK101528	93.847	458,470	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5P01DK057751	93.847	459,826	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK112771	93.847	460,366	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK119968-03	93.847	467,702	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK124500	93.847	470,639	115,641
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126815-01	93.847	480,123	44,458
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK120911-03/3R01DK120911-03S1	93.847	482,773	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Diabetes, Digestive, and Kidney Diseases Extramural Research	7R01DK122164-03	93.847	\$ 483,779	\$ -
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK114041-01A1	93.847	499,339	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK096096-06A1	93.847	501,151	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK101984-07	93.847	502,105	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK049587-17	93.847	513,894	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK033793-34A1	93.847	523,912	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK124272-03	93.847	524,302	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK120891-01A1	93.847	532,612	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK123227-02	93.847	538,039	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK114169/3R01DK114169 S1	93.847	540,509	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126809-01A1	93.847	544,525	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK127637-01A1	93.847	565,521	207,960
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK114793-01A1	93.847	572,875	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK125492-02	93.847	575,656	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	U01DK123817	93.847	580,740	232,835
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK072614-30	93.847	593,134	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126637-01	93.847	610,693	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK121948-01	93.847	629,207	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK114075-01A1	93.847	636,287	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126295-01A1	93.847	637,524	23,825
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK113984	93.847	662,457	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1R01DK126447-02	93.847	736,164	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5R01DK117651-04	93.847	745,649	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1DP2DK125119	93.847	748,499	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	2R01DK099039-06	93.847	755,040	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	1U01DK123799-01	93.847	825,174	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK020495-42	93.847	942,386	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	U54DK106857	93.847	958,815	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK118728-01A1	93.847	1,000,187	565,096
Diabetes, Digestive, and Kidney Diseases Extramural Research	2P30DK034989	93.847	1,037,125	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	5P30DK079310-14	93.847	1,260,223	201,789
Diabetes, Digestive, and Kidney Diseases Extramural Research	5RC2DK120534-02	93.847	1,590,523	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	P30DK045735	93.847	1,701,997	-
			<u>44,447,679</u>	<u>2,181,271</u>
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS087568	93.853	(798)	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS117609-01	93.853	(19)	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS091300	93.853	11	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5T32NS041228	93.853	612	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1K23NS101099-01A1	93.853	655	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS127495-01	93.853	2,196	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F32NS108448	93.853	6,191	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS120528-01	93.853	8,302	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS122412	93.853	15,703	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS108053	93.853	18,615	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS127879-01	93.853	\$ 23,962	\$ -
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS115315	93.853	25,487	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R37NS100901-03	93.853	26,249	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS113511	93.853	28,228	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS115519	93.853	29,392	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F31NS118810-01	93.853	29,951	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	F31NS122417	93.853	30,989	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	F99NS125835	93.853	36,397	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5F32NS110111-02	93.853	40,129	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS095993-01A1	93.853	44,540	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS110407-01A1	93.853	48,627	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS085136	93.853	53,896	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS035193	93.853	58,304	4,568
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS126277	93.853	60,605	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS060803	93.853	63,475	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R03NS112859	93.853	68,828	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1F32NS117780-02	93.853	70,871	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	UG3NS123307	93.853	72,581	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS109874-01A1	93.853	73,061	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS035193-23A1	93.853	74,429	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS066974-05	93.853	79,701	10,395
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS100106	93.853	83,216	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K00MH122372	93.853	86,393	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS095930-02	93.853	88,506	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1K23NS121634-01A1	93.853	89,734	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS096088-01A1	93.853	92,985	5,204
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS097928-03	93.853	94,634	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS097728-01	93.853	99,835	99,250
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS105924	93.853	108,481	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS097547-06	93.853	114,392	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS095817	93.853	129,854	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS109641-01	93.853	132,425	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R00NS114166-03	93.853	146,029	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS120116-01A1	93.853	157,975	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R37NS045876-18	93.853	161,962	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	7R21NS109637	93.853	165,666	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5K23NS107624-02	93.853	166,744	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	T32NS105583	93.853	169,944	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS116484	93.853	170,219	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS121026-01A1	93.853	172,386	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2T32NS007224-36	93.853	176,107	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS099478	93.853	177,388	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS118056	93.853	182,896	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS094253-02	93.853	183,122	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS097547-03	93.853	183,929	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R25NS079193-06	93.853	188,269	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS109734-01A1	93.853	\$ 188,350	\$ -
Extramural Research Programs in the Neurosciences and Neurological Disorders	K23NS112596	93.853	190,821	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5K23NS110980-02	93.853	194,199	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS118764	93.853	202,434	35,796
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS119992-01	93.853	205,641	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS116584-01	93.853	217,176	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS122907-01	93.853	219,529	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS066974-10	93.853	219,843	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS036251-21	93.853	248,042	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R21NS108060	93.853	249,148	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS102277	93.853	270,139	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	UG3NS112826-02	93.853	277,920	163,108
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS121773	93.853	278,918	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS118616-01A1	93.853	283,603	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	U24NS107215	93.853	301,311	91,627
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R21NS123469-01	93.853	302,570	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS102239-01A1	93.853	311,597	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS113236	93.853	320,169	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	U24NS107136	93.853	324,661	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS107328	93.853	330,403	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS101104-05/3R01NS101104-04S1	93.853	334,529	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS102267-01	93.853	339,952	252,618
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS011613	93.853	360,052	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS123405-01	93.853	367,803	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS104917	93.853	369,702	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	4R37NS100901-05	93.853	383,433	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS122388-01	93.853	390,923	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS109062	93.853	392,393	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS091070	93.853	395,574	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS105640	93.853	398,195	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS110824	93.853	399,222	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS111242-02	93.853	401,607	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS111961	93.853	405,293	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS109160-01A1	93.853	418,705	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS112223	93.853	423,517	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS076558-10	93.853	426,959	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS112907	93.853	450,546	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	T32NS041228	93.853	473,498	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS114400-02	93.853	479,853	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS117904-01	93.853	501,215	299,698
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS111980	93.853	510,926	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS094219-06	93.853	521,720	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS118884-01A1	93.853	533,967	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Extramural Research Programs in the Neurosciences and Neurological Disorders	5R01NS028695-29	93.853	\$ 540,387	\$ -
Extramural Research Programs in the Neurosciences and Neurological Disorders	1RF1NS110354	93.853	544,474	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS086932	93.853	556,745	200,851
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS118886-01A1	93.853	562,108	114,998
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS112706-01	93.853	574,632	260,846
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS111935	93.853	612,197	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS106104-04	93.853	619,469	448,723
Extramural Research Programs in the Neurosciences and Neurological Disorders	2R01NS021501-33A1	93.853	640,680	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	R01NS110721	93.853	654,210	47,331
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS115544-02	93.853	668,408	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS113445	93.853	711,167	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS118463-01	93.853	819,052	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R01NS100547	93.853	876,459	248,514
Extramural Research Programs in the Neurosciences and Neurological Disorders	1R35NS097283-06	93.853	937,640	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	UH3NS112826-03	93.853	1,045,217	169,186
Extramural Research Programs in the Neurosciences and Neurological Disorders	DP1NS111778	93.853	1,153,193	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS106513-02	93.853	1,077,296	928,069
COVID-19 Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS106513-02	93.853	163,227	-
			<u>32,186,880</u>	<u>3,380,782</u>
Allergy and Infectious Diseases Research	2U19AI089992-06A1	93.855	(37,449)	(7,588)
Allergy and Infectious Diseases Research	2T32AI007517	93.855	(9,011)	-
Allergy and Infectious Diseases Research	1R21AI146648	93.855	(470)	-
Allergy and Infectious Diseases Research	5R01AI16313-03	93.855	(253)	-
Allergy and Infectious Diseases Research	5R01AI089824-07	93.855	(120)	-
Allergy and Infectious Diseases Research	7R01AI087946-10	93.855	14	-
Allergy and Infectious Diseases Research	2R01AI127642	93.855	76	-
Allergy and Infectious Diseases Research	1R21AI135477-01A1	93.855	182	-
Allergy and Infectious Diseases Research	R21AI171333	93.855	451	-
Allergy and Infectious Diseases Research	5R01AI048120-13	93.855	693	-
Allergy and Infectious Diseases Research	R21AI142243	93.855	1,354	-
Allergy and Infectious Diseases Research	1R21AI167773-01A1	93.855	2,247	-
Allergy and Infectious Diseases Research	5R01AI104739-04	93.855	3,139	-
COVID-19 Allergy and Infectious Diseases Research	1R01AI161399-01A1	93.855	6,464	-
Allergy and Infectious Diseases Research	1R21AI142463-01	93.855	9,239	-
Allergy and Infectious Diseases Research	2004801605	93.855	10,830	-
Allergy and Infectious Diseases Research	5R01AI112438-04	93.855	13,398	2,690
Allergy and Infectious Diseases Research	F30AI157227	93.855	14,671	-
Allergy and Infectious Diseases Research	1R21AI135799-01	93.855	14,875	-
Allergy and Infectious Diseases Research	1R21AI163674	93.855	21,452	-
Allergy and Infectious Diseases Research	1R21AI142198	93.855	25,838	5,541
Allergy and Infectious Diseases Research	1F31AI161971	93.855	26,560	-
Allergy and Infectious Diseases Research	F30AI157270	93.855	26,903	-
Allergy and Infectious Diseases Research	1F31AI157221-02	93.855	28,202	-
Allergy and Infectious Diseases Research	F30AI157301	93.855	29,056	-
Allergy and Infectious Diseases Research	5F31AI150168-02	93.855	29,296	-
Allergy and Infectious Diseases Research	F30AI145102	93.855	31,191	-
Allergy and Infectious Diseases Research	1R01AI123208-03	93.855	33,832	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Allergy and Infectious Diseases Research	1R01AI137060-01A1	93.855	\$ 40,141	\$ -
Allergy and Infectious Diseases Research	5R01AI114780-02	93.855	43,184	-
Allergy and Infectious Diseases Research	5K08AI128745-05	93.855	44,064	-
Allergy and Infectious Diseases Research	1F32AI143141-01	93.855	44,202	-
Allergy and Infectious Diseases Research	1R21AI161838-01A1	93.855	46,226	-
Allergy and Infectious Diseases Research	F30AI138473	93.855	51,473	-
Allergy and Infectious Diseases Research	R21AI163663-01	93.855	63,811	-
Allergy and Infectious Diseases Research	7K08AI128043	93.855	71,021	-
Allergy and Infectious Diseases Research	1R21AI153644-01A1	93.855	82,370	-
Allergy and Infectious Diseases Research	1R01AI131518-02	93.855	82,741	-
Allergy and Infectious Diseases Research	R01AI162826	93.855	83,289	-
COVID-19 Allergy and Infectious Diseases Research	3R01AI157488	93.855	83,987	-
Allergy and Infectious Diseases Research	1R01AI164692	93.855	88,031	-
Allergy and Infectious Diseases Research	2R01AI049561	93.855	93,695	-
Allergy and Infectious Diseases Research	U19AI089992	93.855	97,976	-
COVID-19 Allergy and Infectious Diseases Research	1R03AI159275	93.855	101,005	-
Allergy and Infectious Diseases Research	RAI169531A	93.855	103,783	-
Allergy and Infectious Diseases Research	1R21AI144315	93.855	104,360	-
Allergy and Infectious Diseases Research	1R21AI166387	93.855	113,615	-
Allergy and Infectious Diseases Research	3R21AI144315-01A1S1	93.855	117,030	-
Allergy and Infectious Diseases Research	5R01AI122797-03	93.855	121,308	67,661
Allergy and Infectious Diseases Research	1R21AI164590-01	93.855	123,127	-
Allergy and Infectious Diseases Research	1R21AI149731-01	93.855	125,232	-
Allergy and Infectious Diseases Research	1R21AI157890	93.855	126,389	20,703
Allergy and Infectious Diseases Research	5R01AI118855-03	93.855	127,466	-
Allergy and Infectious Diseases Research	R01AI151176-03	93.855	132,838	104,755
Allergy and Infectious Diseases Research	1R01AI126033	93.855	136,330	-
Allergy and Infectious Diseases Research	1R01AI22220-01A1	93.855	139,441	-
Allergy and Infectious Diseases Research	1R01AI127429-01	93.855	142,505	-
Allergy and Infectious Diseases Research	R01AI158805-01A1	93.855	145,970	23,960
Allergy and Infectious Diseases Research	T32AI007210	93.855	149,621	-
COVID-19 Allergy and Infectious Diseases Research	1R01AI123321-01A1	93.855	151,252	(22,383)
Allergy and Infectious Diseases Research	1K08AI163493-01	93.855	156,616	-
Allergy and Infectious Diseases Research	1R01AI171980-01A1	93.855	160,103	17,190
Allergy and Infectious Diseases Research	R21AI144345	93.855	162,411	-
Allergy and Infectious Diseases Research	R21AI163969	93.855	165,525	32,403
Allergy and Infectious Diseases Research	1R21AI157857-01A1	93.855	178,799	94,727
Allergy and Infectious Diseases Research	5T32AI055403	93.855	178,970	-
Allergy and Infectious Diseases Research	K08AI159229	93.855	179,996	-
Allergy and Infectious Diseases Research	1R21AI152927	93.855	180,094	22,458
Allergy and Infectious Diseases Research	1R21AI142708-01A1	93.855	183,998	-
COVID-19 Allergy and Infectious Diseases Research	K23AI159518	93.855	186,041	-
COVID-19 Allergy and Infectious Diseases Research	1R21AI158179-01	93.855	193,157	-
Allergy and Infectious Diseases Research	1R21AI154187	93.855	193,628	-
Allergy and Infectious Diseases Research	R21AI159201	93.855	194,363	-
Allergy and Infectious Diseases Research	4R33AI122384-03	93.855	195,464	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Allergy and Infectious Diseases Research	R01AI114780-06A1	93.855	\$ 209,182	\$ -
COVID-19 Allergy and Infectious Diseases Research	3P01AI039671-22S1	93.855	209,619	-
Allergy and Infectious Diseases Research	5T32AI007640-19	93.855	214,542	-
Allergy and Infectious Diseases Research	5U19AI089681-11	93.855	218,657	218,964
Allergy and Infectious Diseases Research	1R56AI152206-01	93.855	221,058	-
Allergy and Infectious Diseases Research	1R21AI149628-01	93.855	222,401	-
Allergy and Infectious Diseases Research	1R56AI145326-01A1	93.855	235,616	-
Allergy and Infectious Diseases Research	1R21AI159580	93.855	245,118	-
Allergy and Infectious Diseases Research	R21AI156208	93.855	247,116	-
Allergy and Infectious Diseases Research	1R01AI155562-01A1	93.855	250,256	52,342
Allergy and Infectious Diseases Research	R01AI136942	93.855	254,241	98,525
Allergy and Infectious Diseases Research	R01AI110452	93.855	256,092	-
Allergy and Infectious Diseases Research	1R21AI156595-01	93.855	257,205	40,791
COVID-19 Allergy and Infectious Diseases Research	R01AI112970-06	93.855	264,106	55,422
Allergy and Infectious Diseases Research	1R01AI157488	93.855	280,420	-
Allergy and Infectious Diseases Research	1R01AI120369-03	93.855	283,912	-
Allergy and Infectious Diseases Research	1R01AI123204	93.855	284,593	-
Allergy and Infectious Diseases Research	5R01AI132452	93.855	291,900	-
Allergy and Infectious Diseases Research	4R37AI041699-22	93.855	295,961	-
Allergy and Infectious Diseases Research	5R01AI121183-02	93.855	308,912	-
Allergy and Infectious Diseases Research	1R01AI127865-01A1	93.855	316,515	-
Allergy and Infectious Diseases Research	1R01AI165480-01	93.855	317,857	-
Allergy and Infectious Diseases Research	1R56AI155497	93.855	319,906	-
Allergy and Infectious Diseases Research	1R01AI131613	93.855	320,348	3,817
Allergy and Infectious Diseases Research	1T32AI155387	93.855	320,803	-
Allergy and Infectious Diseases Research	2R01AI044616-20	93.855	326,423	-
Allergy and Infectious Diseases Research	2R01AI087946-12	93.855	345,131	43,105
Allergy and Infectious Diseases Research	1R01AI12505-05	93.855	345,647	304,226
Allergy and Infectious Diseases Research	R01AI153351	93.855	345,891	108,267
Allergy and Infectious Diseases Research	5R01AI068041-15	93.855	346,517	-
Allergy and Infectious Diseases Research	U01AI145965	93.855	348,340	140,195
Allergy and Infectious Diseases Research	2T32AI007517-21A1	93.855	360,957	-
Allergy and Infectious Diseases Research	1R01AI144152-01	93.855	382,717	-
Allergy and Infectious Diseases Research	1R01AI127642-01A1	93.855	396,514	-
Allergy and Infectious Diseases Research	1R01AI138141	93.855	403,011	24,269
Allergy and Infectious Diseases Research	5R01AI154844-02	93.855	407,201	-
Allergy and Infectious Diseases Research	1R01AI150913	93.855	412,897	-
Allergy and Infectious Diseases Research	2R01AI108834-08	93.855	417,350	-
Allergy and Infectious Diseases Research	5R01AI104739-07	93.855	418,302	31,217
Allergy and Infectious Diseases Research	1R01AI162260-01A1	93.855	421,208	-
Allergy and Infectious Diseases Research	1R01AI162820	93.855	435,240	-
Allergy and Infectious Diseases Research	R01AI137093	93.855	435,950	-
Allergy and Infectious Diseases Research	1R01AI142624	93.855	437,057	-
Allergy and Infectious Diseases Research	2R01AI116313	93.855	445,015	-
Allergy and Infectious Diseases Research	1R01AI153100-01A1	93.855	446,900	82,918

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Allergy and Infectious Diseases Research	2R01AI032524-26	93.855	\$ 447,818	\$ -
Allergy and Infectious Diseases Research	1U01AI132895	93.855	448,766	-
Allergy and Infectious Diseases Research	1R01AI146584-01	93.855	449,494	252,872
Allergy and Infectious Diseases Research	5R01AI130068-03	93.855	468,736	-
Allergy and Infectious Diseases Research	1R01AI152220-01	93.855	477,279	-
Allergy and Infectious Diseases Research	2T32AI007019	93.855	479,533	-
Allergy and Infectious Diseases Research	5R01AI121207-04	93.855	497,323	99,680
Allergy and Infectious Diseases Research	R01AI141009	93.855	507,005	199,739
Allergy and Infectious Diseases Research	1R01AI137079-01A1	93.855	519,084	-
Allergy and Infectious Diseases Research	2R01AI110325-	93.855	522,393	62,191
Allergy and Infectious Diseases Research	2R56AI120558-05A1	93.855	536,269	-
Allergy and Infectious Diseases Research	1R01AI152443-01A1	93.855	539,146	10,058
Allergy and Infectious Diseases Research	1R01AI148255-01A1	93.855	540,278	-
Allergy and Infectious Diseases Research	2R01AI114618-06	93.855	547,394	-
Allergy and Infectious Diseases Research	1R01AI152421-01A1	93.855	549,963	-
Allergy and Infectious Diseases Research	2R01AI113040	93.855	562,060	-
Allergy and Infectious Diseases Research	1R01AI158615-01	93.855	571,691	164,127
Allergy and Infectious Diseases Research	R01AI147854-01A1	93.855	585,020	448,492
Allergy and Infectious Diseases Research	1R01AI145164-01	93.855	586,735	-
Allergy and Infectious Diseases Research	9R01AI155072-28	93.855	599,019	-
Allergy and Infectious Diseases Research	R01AI153422	93.855	619,851	22,996
COVID-19 Allergy and Infectious Diseases Research	1R01AI163395-01	93.855	648,098	21,413
Allergy and Infectious Diseases Research	1R01AI139525-01A1	93.855	652,813	26,768
Allergy and Infectious Diseases Research	2R01AI055472	93.855	677,660	-
Allergy and Infectious Diseases Research	3R01AI151176	93.855	681,679	482,311
Allergy and Infectious Diseases Research	1R01AI162645-01	93.855	700,077	-
Allergy and Infectious Diseases Research	1R01AI150334-01	93.855	703,064	-
Allergy and Infectious Diseases Research	4R37AI030492-32	93.855	714,098	-
Allergy and Infectious Diseases Research	2R01AI104824-06A1	93.855	755,265	423,089
Allergy and Infectious Diseases Research	5R01AI132409-03	93.855	759,044	190,560
Allergy and Infectious Diseases Research	1R01AI150560	93.855	808,164	189,526
Allergy and Infectious Diseases Research	R01AI148467	93.855	884,874	-
Allergy and Infectious Diseases Research	5U19AI089681	93.855	1,054,804	891,542
Allergy and Infectious Diseases Research	1R01AI136794	93.855	1,192,403	429,010
Allergy and Infectious Diseases Research	U19AI089992	93.855	1,003,000	139,829
COVID-19 Allergy and Infectious Diseases Research	U19AI089992	93.855	191,861	-
Allergy and Infectious Diseases Research	2P01AI039671-20A1	93.855	2,200,304	1,421,968
COVID-19 Allergy and Infectious Diseases Research	U19AI089992	93.855	2,297,446	-
			<u>47,473,423</u>	<u>7,042,346</u>
Biomedical Research and Research Training	1F32GM131583	93.859	(26)	-
Biomedical Research and Research Training	1R01GM118486	93.859	-	15,579
Biomedical Research and Research Training	5R01GM112778-03	93.859	123	-
Biomedical Research and Research Training	2R01GM098931	93.859	429	-
Biomedical Research and Research Training	5R37GM056207-24	93.859	948	-
Biomedical Research and Research Training	1F31GM143917	93.859	3,712	-
Biomedical Research and Research Training	1F32GM145087-01	93.859	5,422	-
Biomedical Research and Research Training	1F32GM145094-01	93.859	5,505	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Biomedical Research and Research Training	1F32GM137568-01	93.859	\$ 14,480	\$ -
Biomedical Research and Research Training	1R01GM126211-01	93.859	14,579	-
Biomedical Research and Research Training	1F31GM145178-01	93.859	21,004	-
Biomedical Research and Research Training	F32GM145116	93.859	28,501	-
Biomedical Research and Research Training	1R01GM129155	93.859	32,866	-
Biomedical Research and Research Training	1F32GM142247	93.859	33,090	-
Biomedical Research and Research Training	5F32GM131460-02	93.859	35,510	-
Biomedical Research and Research Training	2R01GM123011	93.859	35,848	-
Biomedical Research and Research Training	1K99GM135537-01A1	93.859	35,952	-
Biomedical Research and Research Training	1K99GM144683-01	93.859	38,096	-
Biomedical Research and Research Training	F32GM136029-01	93.859	39,816	-
Biomedical Research and Research Training	1F31GM142294-01	93.859	41,627	-
Biomedical Research and Research Training	1F32GM139389	93.859	48,342	-
Biomedical Research and Research Training	R25GM140278-01	93.859	55,231	-
Biomedical Research and Research Training	1F32GM142204	93.859	59,112	-
Biomedical Research and Research Training	1F32GM140723-01A1	93.859	60,180	-
Biomedical Research and Research Training	1F32GM139266-01	93.859	65,159	-
Biomedical Research and Research Training	1F32GM136179-01A1	93.859	66,030	-
Biomedical Research and Research Training	1F32GM139285-01	93.859	66,428	-
Biomedical Research and Research Training	1K99GM140174-01A1	93.859	66,789	-
Biomedical Research and Research Training	1F32GM137502-01	93.859	67,577	-
Biomedical Research and Research Training	F32GM133176-01A1	93.859	68,562	-
Biomedical Research and Research Training	1K99GM141320	93.859	77,252	-
Biomedical Research and Research Training	1R21GM132661	93.859	89,107	-
Biomedical Research and Research Training	2R35GM122473	93.859	91,293	-
Biomedical Research and Research Training	1K99GM135533-01A1	93.859	95,038	-
Biomedical Research and Research Training	1R01GM146463	93.859	99,565	-
Biomedical Research and Research Training	1R01GM118528-01A1	93.859	103,588	-
Biomedical Research and Research Training	1R01GM125955	93.859	104,446	-
Biomedical Research and Research Training	1R01GM125951-04	93.859	106,116	-
Biomedical Research and Research Training	R01GM131642	93.859	106,738	-
Biomedical Research and Research Training	2R01GM050422-22	93.859	124,628	-
Biomedical Research and Research Training	1R21GM141669-01	93.859	131,362	-
Biomedical Research and Research Training	5R01GM047214-26	93.859	135,756	-
Biomedical Research and Research Training	R35GM143072-01	93.859	147,794	-
Biomedical Research and Research Training	R35GM122485	93.859	157,047	-
Biomedical Research and Research Training	5R01GM126835-02	93.859	167,659	-
Biomedical Research and Research Training	1R35GM144096	93.859	177,291	-
Biomedical Research and Research Training	5T32GM100884-09	93.859	178,809	-
Biomedical Research and Research Training	5R01GM131319	93.859	179,663	6,162
Biomedical Research and Research Training	2R01GM043301-26A1	93.859	181,854	-
Biomedical Research and Research Training	1R01GM120162-03	93.859	197,291	-
Biomedical Research and Research Training	5R01GM129149	93.859	208,872	-
Biomedical Research and Research Training	2R01GM101316-05	93.859	221,025	-
Biomedical Research and Research Training	4R00GM124296-03	93.859	238,995	-
Biomedical Research and Research Training	2R01GM106121	93.859	246,679	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Biomedical Research and Research Training	1R01GM129308	93.859	\$ 260,399	\$ -
Biomedical Research and Research Training	1R01GM141192-01	93.859	267,684	-
Biomedical Research and Research Training	T32GM086287	93.859	268,462	-
Biomedical Research and Research Training	2R01GM105672	93.859	270,672	-
Biomedical Research and Research Training	1R01GM132114-01	93.859	273,090	-
Biomedical Research and Research Training	R01GM095766-05A1	93.859	275,964	-
Biomedical Research and Research Training	1R35GM144105-01	93.859	277,612	-
Biomedical Research and Research Training	1R01GM129081-01A1	93.859	281,863	10,314
Biomedical Research and Research Training	1R01GM118614	93.859	282,570	-
Biomedical Research and Research Training	1R01GM141313	93.859	289,479	-
Biomedical Research and Research Training	1R01GM125769-01	93.859	290,322	-
Biomedical Research and Research Training	1R35GM142687-01	93.859	294,212	-
Biomedical Research and Research Training	R01GM123798	93.859	303,766	-
Biomedical Research and Research Training	2R01GM110243-06A1	93.859	309,171	73,554
Biomedical Research and Research Training	2R01GM065313	93.859	309,891	-
Biomedical Research and Research Training	4R00GM126145-03	93.859	311,330	-
Biomedical Research and Research Training	1R01GM140735-01	93.859	316,334	-
Biomedical Research and Research Training	2R01GM106189-06	93.859	316,900	90,663
Biomedical Research and Research Training	5R01GM122984-02	93.859	322,007	-
Biomedical Research and Research Training	1R01GM127876-01	93.859	326,490	-
Biomedical Research and Research Training	1R01GM135331-01A1	93.859	328,057	-
Biomedical Research and Research Training	2R01GM117386-06	93.859	336,193	-
Biomedical Research and Research Training	2R01GM026132	93.859	337,454	-
Biomedical Research and Research Training	1R01GM135290-01	93.859	342,453	-
Biomedical Research and Research Training	1R01GM138722-01	93.859	344,150	-
Biomedical Research and Research Training	2R01GM115636-06A1	93.859	348,171	-
Biomedical Research and Research Training	1R01GM137411	93.859	355,199	11,323
Biomedical Research and Research Training	1R01GM136815-01A1	93.859	357,051	234,670
Biomedical Research and Research Training	2R01GM105718	93.859	360,721	-
Biomedical Research and Research Training	2R01GM110530-06	93.859	363,093	-
Biomedical Research and Research Training	2R01GM032136	93.859	376,639	-
Biomedical Research and Research Training	5T32GM007324-44	93.859	377,524	-
Biomedical Research and Research Training	5R01GM134005-02	93.859	388,164	126,334
Biomedical Research and Research Training	1R35GM141961-01	93.859	392,458	-
Biomedical Research and Research Training	R01GM137068	93.859	394,023	-
Biomedical Research and Research Training	DGM137414A	93.859	395,548	-
Biomedical Research and Research Training	R35GM138341	93.859	399,858	-
Biomedical Research and Research Training	1R01GM131004-01	93.859	402,794	-
Biomedical Research and Research Training	2R01GM112766-05	93.859	407,674	-
Biomedical Research and Research Training	1R35GM138299-01	93.859	413,182	-
Biomedical Research and Research Training	R35GM133467	93.859	416,956	-
Biomedical Research and Research Training	1R35GM128661-01	93.859	422,647	-
Biomedical Research and Research Training	2R25GM114000-06	93.859	424,643	171,134
Biomedical Research and Research Training	R01GM132358	93.859	426,033	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Biomedical Research and Research Training	1R01GM138533-01	93.859	\$ 427,323	\$ -
Biomedical Research and Research Training	2R01GM117230-06A1	93.859	427,795	-
Biomedical Research and Research Training	1R35GM139449-01	93.859	431,775	-
Biomedical Research and Research Training	2R01GM112781-05A1	93.859	439,734	-
Biomedical Research and Research Training	R01GM130847-01A1	93.859	447,611	189,476
Biomedical Research and Research Training	1R01GM134083-01	93.859	447,980	-
Biomedical Research and Research Training	1R35GM133573-01	93.859	455,202	-
Biomedical Research and Research Training	1R35GM131776-01	93.859	457,356	-
Biomedical Research and Research Training	1R01GM136969	93.859	459,664	-
Biomedical Research and Research Training	R35GM142959	93.859	461,018	-
Biomedical Research and Research Training	1R35GM142875-01	93.859	463,280	-
Biomedical Research and Research Training	2T32GM067543-16	93.859	470,489	-
Biomedical Research and Research Training	1R35GM142825-01	93.859	472,633	-
Biomedical Research and Research Training	2T32GM008283	93.859	474,345	-
Biomedical Research and Research Training	1R35GM128670	93.859	480,995	-
Biomedical Research and Research Training	R35GM137956-02	93.859	491,260	-
Biomedical Research and Research Training	R35GM136346-01	93.859	495,407	-
Biomedical Research and Research Training	2R37GM061221	93.859	502,435	-
Biomedical Research and Research Training	5R35GM138185-02	93.859	511,291	-
Biomedical Research and Research Training	5R01GM134148-03	93.859	528,747	-
Biomedical Research and Research Training	R01GM138856	93.859	539,597	270,631
Biomedical Research and Research Training	R01CA240418	93.859	540,249	-
Biomedical Research and Research Training	1R01GM137031-01	93.859	553,459	-
Biomedical Research and Research Training	2R01GM100930-09	93.859	554,303	-
Biomedical Research and Research Training	1R01GM139337-01	93.859	555,073	-
Biomedical Research and Research Training	1R35GM131913	93.859	556,725	-
Biomedical Research and Research Training	1R01GM140481-01	93.859	559,177	-
Biomedical Research and Research Training	1R01GM127870-01	93.859	586,199	-
Biomedical Research and Research Training	1R35GM122473-02	93.859	608,249	-
Biomedical Research and Research Training	1R35GM128619	93.859	610,085	-
Biomedical Research and Research Training	1R01GM138411-01	93.859	613,846	-
Biomedical Research and Research Training	1R35GM122560	93.859	614,770	-
Biomedical Research and Research Training	2T32GM007499-41	93.859	624,661	-
Biomedical Research and Research Training	1R35GM131714-01	93.859	637,722	-
Biomedical Research and Research Training	2R01GM073857	93.859	638,036	335,545
Biomedical Research and Research Training	1R35GM137952-01	93.859	638,736	-
Biomedical Research and Research Training	1R35GM131715	93.859	704,580	-
Biomedical Research and Research Training	1R35GM122485-01	93.859	752,136	-
Biomedical Research and Research Training	R35GM136656	93.859	765,260	-
Biomedical Research and Research Training	1R35GM131687	93.859	781,712	-
Biomedical Research and Research Training	2R35GM118159-06	93.859	813,292	-
Biomedical Research and Research Training	1R35GM1122580	93.859	853,983	-
Biomedical Research and Research Training	1R35GM136325-01	93.859	893,682	-
Biomedical Research and Research Training	1R35GM132092-01	93.859	938,740	-
Biomedical Research and Research Training	1RM1GM141649	93.859	1,721,644	-
Biomedical Research and Research Training	T32GM136651	93.859	2,318,392	-
			<u>48,858,311</u>	<u>1,535,385</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Child Health and Human Development Extramural Research	5U10HD055925-10REV	93.865	\$ (36,795)	\$ 28,597
Child Health and Human Development Extramural Research	1R21HD089131-01A1	93.865	(562)	-
Child Health and Human Development Extramural Research	1F31HD097958-01	93.865	291	-
Child Health and Human Development Extramural Research	1F31HD109060	93.865	2,153	-
Child Health and Human Development Extramural Research	R21HD098031	93.865	4,578	-
Child Health and Human Development Extramural Research	1F32HD106666	93.865	13,605	-
Child Health and Human Development Extramural Research	F31HD104415-01A1	93.865	23,711	-
Child Health and Human Development Extramural Research	F30HD106692	93.865	30,431	-
Child Health and Human Development Extramural Research	F30HD105440	93.865	33,246	-
Child Health and Human Development Extramural Research	1F32HD095567-01	93.865	43,425	-
Child Health and Human Development Extramural Research	F31HD104443-01	93.865	44,640	-
Child Health and Human Development Extramural Research	7R03HD094985-02	93.865	55,791	-
Child Health and Human Development Extramural Research	1DP2HD091799-01	93.865	62,434	-
Child Health and Human Development Extramural Research	R03HD100883-01A1	93.865	117,583	-
Child Health and Human Development Extramural Research	5K99HD101653-02	93.865	117,673	-
Child Health and Human Development Extramural Research	1R21HD102174	93.865	120,020	-
Child Health and Human Development Extramural Research	1R01HD083881-04	93.865	150,732	(402)
Child Health and Human Development Extramural Research	1R01HD097368	93.865	179,153	-
Child Health and Human Development Extramural Research	1R21HD100751-02	93.865	186,572	-
Child Health and Human Development Extramural Research	2R01HD053112	93.865	190,547	-
Child Health and Human Development Extramural Research	R21HD099318-02	93.865	227,070	-
Child Health and Human Development Extramural Research	1R21HD102565	93.865	232,987	42,738
Child Health and Human Development Extramural Research	1R01HD106359-01	93.865	234,856	68,853
Child Health and Human Development Extramural Research	1DP2HD108774-01	93.865	255,908	-
Child Health and Human Development Extramural Research	1R01HD103692-01	93.865	277,212	-
Child Health and Human Development Extramural Research	1R01HD106326-01	93.865	327,442	5,603
Child Health and Human Development Extramural Research	2K12HD047018	93.865	333,790	-
Child Health and Human Development Extramural Research	T32HD007149-41A1	93.865	341,623	-
Child Health and Human Development Extramural Research	R01HD092361	93.865	346,979	-
Child Health and Human Development Extramural Research	5R01HD100563-02/3R01HD100563-02S1	93.865	360,994	68,817
Child Health and Human Development Extramural Research	4R37HD042012	93.865	371,189	-
Child Health and Human Development Extramural Research	7R01HD088626	93.865	403,388	246,833
Child Health and Human Development Extramural Research	R01HD096745	93.865	419,191	-
Child Health and Human Development Extramural Research	R01HD098128-01A1	93.865	439,048	-
Child Health and Human Development Extramural Research	1R01HD100468-01A1	93.865	443,067	131,135
Child Health and Human Development Extramural Research	1R01HD097808	93.865	443,702	-
Child Health and Human Development Extramural Research	5R01HD101475-02/3R01HD101475-02S1	93.865	455,402	20,213
Child Health and Human Development Extramural Research	1R01HD100369-01	93.865	460,208	64,672
Child Health and Human Development Extramural Research	R01HD103512	93.865	478,654	228,312
Child Health and Human Development Extramural Research	R01HD100336	93.865	529,856	-
Child Health and Human Development Extramural Research	R01HD093608	93.865	557,773	-
Child Health and Human Development Extramural Research	2R01HD076248-06A1	93.865	585,677	-
Child Health and Human Development Extramural Research	R01HD102537-01	93.865	586,115	105,531
Child Health and Human Development Extramural Research	1R01HD105267-01	93.865	645,504	-
Child Health and Human Development Extramural Research	R01HD102030-10	93.865	672,852	-
Child Health and Human Development Extramural Research	1R01HD100035-01A1	93.865	701,330	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
Child Health and Human Development Extramural Research	5R01HD102186-03	93.865	\$ 775,817	\$ -
Child Health and Human Development Extramural Research	R01HD028016	93.865	795,725	45,753
Child Health and Human Development Extramural Research	1R01HD092185	93.865	797,241	230,698
			<u>14,839,828</u>	<u>1,287,353</u>
Aging Research	4R00AG052604-02	93.866	(54,845)	-
Aging Research	5T32AG019134-18	93.866	(3,569)	-
Aging Research	1R21AG054213-01	93.866	(216)	-
Aging Research	5P50AG047270-02	93.866	(83)	-
Aging Research	1P30AG066508-01	93.866	(73)	-
Aging Research	R03AG064255	93.866	2,066	-
Aging Research	1R21AG055861-01A1	93.866	3,538	-
Aging Research	2R01AG017560-21	93.RD	4,881	-
Aging Research	1F31AG074627	93.866	6,459	-
Aging Research	1R21AG062202	93.866	7,952	-
Aging Research	2T35AG049685	93.866	16,358	-
Aging Research	5T35AG049685	93.866	20,732	-
Aging Research	5R21AG061427-02	93.866	21,985	21,993
Aging Research	1F31AG066483-01A1	93.866	22,526	-
Aging Research	F30AG074629	93.866	25,035	-
Aging Research	1F31AG062099	93.866	26,408	-
Aging Research	R13AG069385-01	93.866	28,368	-
Aging Research	R21AG076239	93.866	30,175	-
Aging Research	F31AG067720-01	93.866	31,484	-
Aging Research	1F31AG069490-01A1	93.866	40,136	-
Aging Research	R03AG073988	93.866	41,129	-
Aging Research	1R01AG071528	93.866	45,816	-
Aging Research	F30AG066371	93.866	49,332	-
Aging Research	K01AG054734	93.866	50,179	-
Aging Research	RF1AG072484	93.866	52,916	-
Aging Research	R01AG076154-01	93.866	61,432	-
Aging Research	1R21AG067024-01	93.866	66,869	-
Aging Research	1R21AG073897-01	93.866	66,983	-
Aging Research	F32AG060717	93.866	68,646	-
Aging Research	R03AG073991	93.866	72,611	-
Aging Research	1R21AG075778-01	93.866	78,434	-
Aging Research	1R01AG074657-01	93.866	86,344	-
Aging Research	5K01AG062752	93.866	105,991	-
Aging Research	5R25ES029052-04	93.866	108,543	-
Aging Research	1K01AG053408-01A1	93.866	111,648	-
Aging Research	R03AG074067-01	93.866	139,954	-
Aging Research	1R21AG074238-01	93.866	145,454	45,621
Aging Research	K76AG074905	93.866	158,503	-
Aging Research	2U01AG032284	93.866	180,695	-
Aging Research	1R21AG072961-01	93.866	184,973	69,180
Aging Research	5K24AG042489-08	93.866	191,690	-
Aging Research	1R01AG052986-01A1	93.866	193,750	219,441

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Aging Research	1K76AG059987-01	93.866	\$ 194,639	\$ -
Aging Research	5R01AG048918	93.866	208,091	-
Aging Research	7RF1AG053991-02	93.866	208,298	181,861
Aging Research	1K23A057794	93.866	212,663	-
Aging Research	1R21AG067335-01	93.866	215,228	-
Aging Research	1RF1AG074341-01	93.866	222,535	-
Aging Research	1K76AG064548	93.866	228,673	-
Aging Research	R01AG068285	93.866	231,421	-
Aging Research	1K76AG057023	93.866	237,412	-
Aging Research	R01AG058773	93.866	244,720	-
Aging Research	1R21AG067347-01A1	93.866	247,050	74,000
Aging Research	K23AG059919	93.866	254,421	-
Aging Research	5R01AG056728-03	93.866	258,010	-
Aging Research	1R01AG062668-01A1	93.866	260,568	-
Aging Research	1R01AG073177-01	93.866	263,697	-
Aging Research	2R56AG053495-06	93.866	281,243	-
Aging Research	R01AG034924-11	93.866	324,070	-
Aging Research	RF1AG068191-01A1	93.866	337,888	149,009
Aging Research	1RF1AG058257-01	93.866	363,332	-
Aging Research	R01AG066165	93.866	367,660	-
Aging Research	R01AG066447-01	93.866	372,444	-
Aging Research	T32AG019134	93.866	386,188	-
Aging Research	2R01AG017560	93.866	394,480	-
Aging Research	R01AG074609-01	93.866	402,939	-
Aging Research	P30AG066508	93.866	414,235	-
Aging Research	R01AG065474	93.866	424,522	-
Aging Research	1R01AG060084-01	93.866	468,519	35,256
Aging Research	5P01AG051459-05	93.866	475,298	72,610
Aging Research	R01AG067533	93.866	487,804	44,314
Aging Research	1R01AG052560-01A1	93.866	497,641	-
Aging Research	1R01AG062210-01	93.866	499,450	-
Aging Research	1R01AG057912	93.866	506,397	15,406
Aging Research	5R01AG068863-02	93.866	507,743	-
Aging Research	1R01AG052005-05	93.866	520,200	-
Aging Research	R01AG056628	93.866	565,895	43,926
Aging Research	R01AG065917-01A1	93.866	604,603	138,426
Aging Research	RF1AG070926	93.866	627,856	-
Aging Research	5R01AG061190-04	93.866	640,370	-
Aging Research	R01AG059607	93.866	660,639	187,063
Aging Research	R01AG065403	93.866	678,226	343,531
Aging Research	1 R01AG055362	93.866	684,864	-
Aging Research	R01AG069921	93.866	689,836	-
Aging Research	R56AG074015	93.866	759,202	-
Aging Research	1R01AG067329-02	93.866	826,956	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Direct: (Continued)				
Aging Research	R33AG058926	93.866	\$ 1,068,654	\$ 489,203
Aging Research	1R01AG058565-03	93.866	1,081,062	139,758
Aging Research	R61AG069822	93.866	1,161,837	623,622
Aging Research	5DP1AG066590	93.866	1,420,228	20,076
Aging Research	2P30AG021342-16	93.866	1,505,090	-
Aging Research	U01AG058608	93.866	1,548,893	-
Aging Research	5R01AG062276-03	93.866	1,713,623	-
Aging Research	1P30AG066508-02	93.866	2,670,453	-
			<u>32,918,975</u>	<u>2,914,296</u>
Vision Research	1K99EY029375-01	93.867	1,775	-
Vision Research	F31EY032793	93.867	13,656	-
Vision Research	R25EY029125	93.867	22,594	-
Vision Research	F30EY032338	93.867	25,407	-
Vision Research	1R21EY031512-01A1	93.867	43,386	-
Vision Research	R21EY029820	93.867	62,363	-
Vision Research	F32EY031133-01	93.867	67,862	-
Vision Research	F32EY032389	93.867	71,338	-
Vision Research	1K99EY030550-01	93.867	72,881	-
Vision Research	1K99EY030549-01	93.867	74,217	-
Vision Research	1K99EY031743-01	93.867	84,773	-
Vision Research	2R01EY017963-08	93.867	113,929	-
Vision Research	2T32EY022312-08	93.867	161,080	-
Vision Research	4R00EY025026-03	93.867	188,547	-
Vision Research	1R01EY032555-01A1	93.867	227,148	-
Vision Research	1P30EY026878-01	93.867	248,242	-
Vision Research	K23EY030530	93.867	274,229	-
Vision Research	2R01EY015788-14A1	93.867	274,766	-
Vision Research	1R01EY030854-01A1	93.867	330,657	-
Vision Research	R01EY031751	93.867	337,775	46,763
Vision Research	2R01EY022951-07	93.867	352,842	-
Vision Research	R01EY014454	93.867	398,744	51,279
Vision Research	5R01EY032396-02	93.867	435,837	125,035
Vision Research	2R01EY026555	93.867	445,544	-
Vision Research	1R01EY029323-01	93.867	461,137	127,643
Vision Research	2R01EY026065-04	93.867	570,571	-
Vision Research	1DP1EY033975-01	93.867	1,141,699	-
			<u>6,502,999</u>	<u>350,720</u>
Medical Library Assistance	1G08LM013801-01	93.879	54,806	-
Medical Library Assistance	1R01LM013477-01	93.879	462,467	97,412
Medical Library Assistance	2T15LM007056-32	93.879	511,949	-
			<u>1,029,222</u>	<u>97,412</u>
Special Projects of National Significance	U90HA31462	93.928	373,005	29,950
Special Projects of National Significance	U90HA393410101	93.928	751,475	206,969
			<u>1,124,480</u>	<u>236,919</u>
COVID-19 PPHF Geriatric Education Centers	T1MHP39071	93.969	6,652	-
			<u>6,652</u>	<u>-</u>
International Research and Research Training	5D43TW006589-14	93.989	(1,049)	-
International Research and Research Training	R01TW011480-01	93.989	13,300	-
International Research and Research Training	2D43TW010540	93.989	18,498	-
International Research and Research Training	5K01TW009995	93.989	20,529	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
Direct: (Continued)				
International Research and Research Training	1D43TW012202	93.989	\$ 50,949	\$ 15,019
International Research and Research Training	R21TW010998	93.989	55,554	33,717
International Research and Research Training	R21TW011270-01	93.989	60,741	-
International Research and Research Training	001-2020	93.989	65,352	-
International Research and Research Training	K01TW010496	93.989	67,980	-
International Research and Research Training	7D43TW007120	93.989	123,003	89,094
International Research and Research Training	1K01TW011194	93.989	151,261	-
International Research and Research Training	R21TW011762	93.989	193,251	61,734
International Research and Research Training	1R21TW011663-01	93.989	206,901	42,574
International Research and Research Training	2R25TW007700-07	93.989	211,087	54,967
International Research and Research Training	D43TW011526	93.989	232,473	141,427
International Research and Research Training	2D43TW009607	93.989	250,833	190,385
International Research and Research Training	1D43TW011324-02	93.989	367,857	134,499
			<u>2,088,520</u>	<u>763,416</u>
Subtotal - Department of Health & Human Services - Direct			<u>549,051,406</u>	<u>78,231,391</u>
Pass-through:				
Dartmouth College - Department Of Health And Human Services	R1469	93.RD	(21,458)	-
COVID-19 Rush University Medical Center - Department Of Health And Human Services	20042803-Sub01	93.RD	(14,281)	-
Connecticut Dept. of Mental Health and Addiction Services - Department Of Health And Human Services	20MHA6066	93.RD	(11,847)	-
Task Force for Global Health, Inc. - Department Of Health And Human Services	PI-CD33-CODI- Sharifi	93.RD	(9,811)	-
Leidos Biomedical Research, Inc. (formerly SAIC-Frederick) - Department Of Health And Human Services	15X147	93.RD	(1,449)	-
University of Toledo - Department Of Health And Human Services	F-2022-38	93.RD	513	-
Duke University - Department Of Health And Human Services	206993	93.RD	1,055	-
Oregon Health Sciences University - Department Of Health And Human Services	1004086-001 YALE	93.RD	1,471	-
Brigham and Women's Hospital - Department Of Health And Human Services	120077	93.RD	2,000	-
Medical College of Wisconsin - Department Of Health And Human Services	Damsky/Nelson	93.RD	2,175	-
University of Pittsburgh - Department Of Health And Human Services	CNVA00056666 (413614-26)	93.RD	2,529	-
Task Force for Global Health, Inc. - Department Of Health And Human Services	PI-CD33-CODI- Sharifi	93.RD	3,659	-
Intelligent Automation - Department Of Health And Human Services	Subcontract #2380-1/HHSN271201800018C	93.RD	3,749	-
Emory University - Department Of Health And Human Services	1RF1AG073428	93.RD	4,398	-
Research Institute at Nationwide Children's Hospital (The) - Department Of Health And Human Services	700215-0322-00	93.RD	4,664	-
Children's Hospital Corporation, (formerly CHB) - Department Of Health And Human Services	GENFD0001939647	93.RD	9,677	-
Oregon Health Sciences University - Department Of Health And Human Services	1004086-001 YALE	93.RD	11,889	-
University of Tennessee Health Science Center - Department Of Health And Human Services	20-4003-YALE	93.RD	14,061	-
COVID-19 Children's Hospital Boston - Department Of Health And Human Services	GENFD0001834672	93.RD	17,048	-
University of Connecticut Health Center - Department Of Health And Human Services	UCHC6-133599647	93.RD	19,778	-
HealthPartners Institute For Education & Research - Department Of Health And Human Services	X1717200-Yale	93.RD	19,890	-
Children's Hospital of Philadelphia (The) - Department Of Health And Human Services	PROTOCOL ACCL1633	93.RD	21,066	-
Brigham and Women's Hospital - Department Of Health And Human Services	124510-Peduzzi	93.RD	22,790	-
University of Connecticut - Department Of Health And Human Services	7R21TW011665-02	93.RD	26,025	-
Duke University - Department Of Health And Human Services	R33HL138650	93.RD	27,420	-
COVID-19 Stanford University - Department Of Health And Human Services	62877982-250198	93.RD	28,574	-
COVID-19 HealthPartners Institute For Education & Research - Department Of Health And Human Services	X2024100 - Yale	93.RD	31,832	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Department Of Health And Human Services	0258-A428-4609	93.RD	39,717	-
Fudan University Shanghai Medical College - Department Of Health And Human Services	Aksoy	93.RD	39,821	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Pass-through: (Continued)</u>				
Massachusetts General Hospital - Department Of Health And Human Services	237496	93.RD	\$ 41,550	\$ -
Emory University - Department Of Health And Human Services	A305103	93.RD	56,049	-
Pennsylvania State University - Department Of Health And Human Services	S001387-DHHS	93.RD	65,942	-
Johns Hopkins University - Department Of Health And Human Services	2005112352	93.RD	68,726	-
The University of Sciences, Techniques and Technologies of Bamako (USTTB) - Department Of Health And Human Services	R01NS118522-01A	93.RD	75,313	-
Flambeau Diagnostics, LLC. - Department Of Health And Human Services	Wyllie - SOW Amendment	93.RD	80,429	-
Harvard University - Department Of Health And Human Services	136051-5117182	93.RD	81,409	-
COVID-19 HealthPartners Institute For Education & Research - Department Of Health And Human Services	X2024200 - Yale	93.RD	83,040	-
Westat - Department Of Health And Human Services	6579-S50-06/HHSN2752018000011	93.RD	112,673	-
University of Missouri-Columbia - Department Of Health And Human Services	PAR-18-646	93.RD	119,314	-
COVID-19 Rush University Medical Center - Department Of Health And Human Services	20042803-Sub01	93.RD	144,373	-
Dartmouth College - Department Of Health And Human Services	R1399	93.RD	149,731	-
Salk Institute for Biological Studies - Department Of Health And Human Services	R01 CA216101	93.RD	151,108	-
University of California, Los Angeles (UCLA) - Department Of Health And Human Services	2000 G YD004	93.RD	154,191	-
Tempus Labs - Department Of Health And Human Services	20-003105	93.RD	163,129	-
COVID-19 City of New Haven - Department Of Health And Human Services	A21-2370	93.RD	168,407	-
Washington University in St. Louis - Department Of Health And Human Services	WU-21-0449	93.RD	175,566	-
Tempus Labs - Department Of Health And Human Services	20201021	93.RD	211,912	-
Eigen - Department Of Health And Human Services	R42CA224888	93.RD	279,863	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Department Of Health And Human Services	0258-A443-4609	93.RD	360,671	-
University of Virginia - Department Of Health And Human Services	GB10691 PO#2133380	93.RD	413,620	-
Leidos Biomedical Research, Inc. (formerly SAIC-Frederick) - Department Of Health And Human Services	14X080 task order Q4	93.RD	464,503	-
COVID-19 Rush University Medical Center - Department Of Health And Human Services	20042803-Sub01	93.RD	470,112	-
University of Washington, Seattle - Department Of Health And Human Services	UWSC10520	93.RD	488,649	-
			<u>4,877,235</u>	<u>-</u>
University of Michigan - Family Smoking Prevention and Tobacco Control Act Regulatory Research	SUBK00014315	93.077	13,232	-
Duke University - Family Smoking Prevention and Tobacco Control Act Regulatory Research	A033887	93.077	52,633	-
Regents of the University of Michigan - Family Smoking Prevention and Tobacco Control Act Regulatory Research	SUBK00007978	93.077	250,355	-
			<u>316,220</u>	<u>-</u>
Children's Hospital Corporation, (formerly CHB) - Blood Disorder Program: Prevention, Surveillance, and Research	GENFD0001937096	93.080	13,262	-
Children's Hospital Corporation, (formerly CHB) - Blood Disorder Program: Prevention, Surveillance, and Research	GENFD0002095154	93.080	13,728	-
			<u>26,990</u>	<u>-</u>
Icahn School of Medicine at Mount Sinai (ISMMS) - Maternal and Child Health Federal Consolidated Programs	0253-7151-4609	93.110	1,453	-
Children's Hospital Los Angeles - Maternal and Child Health Federal Consolidated Programs	CHAT-1901 Prozora	93.110	2,849	-
			<u>4,302</u>	<u>-</u>
Duke University - Environmental Health	A03-2603	93.113	11,341	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Environmental Health	0255-G101-4609	93.113	15,010	-
Boston University - Environmental Health	4500003892	93.113	17,174	-
Emory University - Environmental Health	A014068	93.113	31,734	-
University of California, Berkeley - Environmental Health	00010812	93.113	47,231	-
University of Arizona - Environmental Health	579610	93.113	67,912	-
			<u>190,402</u>	<u>-</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
University of Washington, Seattle - Oral Diseases and Disorders Research	UWSC13466	93.121	\$ 47,344	\$ -
University of North Carolina - Oral Diseases and Disorders Research	5113679	93.121	92,034	-
			139,378	-
University of California, Davis - Emergency Medical Services for Children	A20-1236-S002	93.127	2,040	-
University of Texas at Austin - Emergency Medical Services for Children	UTA20-000621	93.127	365,290	119,019
			367,330	119,019
Connecticut Dept. of Public Health (DPH) - Injury Prevention and Control Research and State and Community Based Programs	2016-0168	93.136	2,699	-
			2,699	-
Harvard School of Public Health - NIEHS Superfund Hazardous Substances_Basic Research and Education	113146-5111923	93.143	10,563	-
Harvard School of Public Health - NIEHS Superfund Hazardous Substances_Basic Research and Education	113146-5111852	93.143	108,166	-
			118,729	-
University of Massachusetts - HIV-Related Training and Technical Assistance	OSP29994-08	93.145	(3,320)	-
University of Massachusetts, Worcester - HIV-Related Training and Technical Assistance	OSP29994-03	93.145	18,594	-
University of Massachusetts, Worcester - HIV-Related Training and Technical Assistance	OSP29994-08	93.145	392,196	-
			407,470	-
European Bioinformatics Institute - EMBL-EBI - Human Genome Research	YALE-4559-02	93.172	16,480	-
University of California, Santa Cruz - Human Genome Research	A20-0450-5007	93.172	29,617	-
Broad Institute, Inc - Human Genome Research	5136184-5500001506	93.172	41,525	-
Jackson Laboratory - Human Genome Research	210314-0521-11	93.172	57,448	-
Jackson Laboratory - Human Genome Research	210314-0430-02	93.172	100,503	-
Northeastern University - Human Genome Research	500694-78050	93.172	101,508	-
Broad Institute, Inc - Human Genome Research	5001087-5500001644	93.172	107,819	-
Stanford University - Human Genome Research	U24HG012012/622690935-208880	93.172	114,110	-
Washington University in St. Louis - Human Genome Research	WU-21-191	93.172	157,871	-
Washington University in St. Louis - Human Genome Research	WU-21-174	93.172	223,618	-
University of Massachusetts - Human Genome Research	OSP2017187	93.172	310,896	-
			1,261,395	-
New York University - Research Related to Deafness and Communication Disorders	F1141-01	93.173	20,795	-
John B. Pierce Laboratory Inc. (The) - Research Related to Deafness and Communication Disorders	293-A	93.173	52,921	-
Columbia University - Research Related to Deafness and Communication Disorders	2(GG015069-01)	93.173	87,042	-
			160,758	-
University of Texas at Austin - Immunization Research, Demonstration, Public Information and Education_Training and Clinical Skills Improvement Projects	UTA20-000942/UT AUS-SUB000000110AM1	93.185	84,528	-
University of Texas at Austin - Immunization Research, Demonstration, Public Information and Education_Training and Clinical Skills Improvement Projects	UTA20-000942 PARENT	93.185	101,152	-
			185,680	-
New York University - Research and Training in Complementary and Integrative Health	17-A0-00-008501/Project 114813	93.213	6,284	-
New York University - Research and Training in Complementary and Integrative Health	17-A0-00-008501/Project 114813	93.213	15,474	-
Northern California Institute for Research & Education - Research and Training in Complementary and Integrative Health	SEAL2242-01	93.213	91,193	-
Palmer College Foundation - Research and Training in Complementary and Integrative Health	12274	93.213	529,829	-
			642,780	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Pass-through: (Continued)</u>				
Regents of the University of Minnesota - Research on Healthcare Costs, Quality and Outcomes	P006920957	93.226	\$ 700	\$ -
Johns Hopkins University - Research on Healthcare Costs, Quality and Outcomes	2004987469	93.226	1,539	-
Johns Hopkins University - Research on Healthcare Costs, Quality and Outcomes	2004987469	93.226	13,576	-
New York University School of Medicine - Research on Healthcare Costs, Quality and Outcomes	19-A0-00-003674	93.226	83,609	-
			<u>99,424</u>	<u>-</u>
Ohio State University - National Center on Sleep Disorders Research	60078518	93.233	2,000	-
			<u>2,000</u>	<u>-</u>
COVID-19 Stanford University - State Rural Hospital Flexibility Program	62579595-197900	93.241	105,157	-
			<u>105,157</u>	<u>-</u>
Washington University in St. Louis - Mental Health Research Grants	WU-21-183-MOD-2	93.242	(2,723)	-
Palo Alto Veterans Institute for Research (PAVIR) - Mental Health Research Grants	WIS0001-03	93.242	710	-
State University of New York at Buffalo (SUNY) - Mental Health Research Grants	1087883-75114	93.242	3,519	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-E532-4609	93.242	3,898	-
University of California, Los Angeles (UCLA) - Mental Health Research Grants	1350 G TC885	93.242	4,512	-
George Washington University - Mental Health Research Grants	21-M80	93.242	4,768	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-E531-4609	93.242	4,785	-
Columbia University - Mental Health Research Grants	SCHEINOST	93.242	6,116	-
Johns Hopkins University - Mental Health Research Grants	2004870606	93.242	7,463	-
Rutgers (the State University of New Jersey) - Mental Health Research Grants	2012	93.242	7,713	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-F662-4609	93.242	14,043	-
Duke University - Mental Health Research Grants	AO33907	93.242	15,788	-
University of California, San Diego - Mental Health Research Grants	KR 704696	93.242	18,475	-
Saint Louis University - Mental Health Research Grants	1R01MH125820-01A1	93.242	19,140	-
Florida International University - Mental Health Research Grants	000335	93.242	21,109	-
University of Maryland - Mental Health Research Grants	97339-Z0315202	93.242	23,902	-
University of Vermont - Mental Health Research Grants	34337SUB00000223	93.242	24,194	-
Boston University - Mental Health Research Grants	4500003636	93.242	33,580	-
Hartford Hospital - Mental Health Research Grants	126370-Y1	93.242	33,772	-
Research Foundation of State University of New York (SUNY) - Mental Health Research Grants	100-1160744-87896	93.242	35,005	-
Research Foundation for Mental Hygiene - Mental Health Research Grants	140830	93.242	36,224	-
Oregon Health Sciences University - Mental Health Research Grants	1016696_YALE	93.242	36,269	-
University of Massachusetts - Mental Health Research Grants	OSP2018096-S1	93.242	38,930	-
Princeton University - Mental Health Research Grants	SUB0000204	93.242	40,539	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-C272-4609	93.242	42,495	-
University of Pennsylvania - Mental Health Research Grants	583978	93.242	42,921	-
Georgia State University Research Foundation - Mental Health Research Grants	SP00015049-02	93.242	52,702	-
Rutgers (the State University of New Jersey) - Mental Health Research Grants	0459	93.242	54,757	-
Hartford Hospital - Mental Health Research Grants	126379-Y	93.242	59,087	-
Johns Hopkins University - Mental Health Research Grants	2005239823	93.242	65,205	-
Center for Social Innovation - Mental Health Research Grants	1R44MH115546-01/Phase II-Year 3	93.242	65,231	-
University of Pennsylvania - Mental Health Research Grants	583167	93.242	68,362	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-F381-4609	93.242	74,534	-
Hartford Hospital - Mental Health Research Grants	126360-Y1	93.242	98,716	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-1111-4609	93.242	106,052	-
Cornell University - Mental Health Research Grants	212194	93.242	113,899	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Pass-through: (Continued)</u>				
Regents University of California, San Francisco - Mental Health Research Grants	10936sc	93.242	\$ 119,968	\$ -
Columbia University - Mental Health Research Grants	2(GG014816-01)	93.242	129,124	-
Rutgers (the State University of New Jersey) - Mental Health Research Grants	0821	93.242	129,235	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-3711-4609	93.242	134,402	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-8053-4609	93.242	136,788	-
Vanderbilt University Medical Center - Mental Health Research Grants	VUMC66205	93.242	140,457	-
Feinstein Institute for Medical Research (The) - Mental Health Research Grants	AWD00001140-YU	93.242	143,398	-
NEW YORK GENOME CENTER, INC. - Mental Health Research Grants	2021-0050-Yale-01	93.242	152,110	-
American University - Mental Health Research Grants	31464-01	93.242	161,590	-
Research Foundation of State University of New York (SUNY) - Mental Health Research Grants	100-1087883-91809	93.242	161,756	-
University of California, Los Angeles (UCLA) - Mental Health Research Grants	2000 G WF250	93.242	176,830	-
Duke University - Mental Health Research Grants	A034583	93.242	202,243	-
Research Foundation of State University of New York (SUNY) - Mental Health Research Grants	76296	93.242	241,542	-
University of Massachusetts - Mental Health Research Grants	OSP2018096	93.242	260,356	-
University of Maryland - Mental Health Research Grants	1802424/3307/4007	93.242	260,548	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Mental Health Research Grants	0255-C271-4609	93.242	329,462	-
Indiana University - Mental Health Research Grants	8818-YU	93.242	330,899	-
Florida International University - Mental Health Research Grants	800010268-01	93.242	654,044	-
			<u>5,140,444</u>	<u>-</u>
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	EP-001	93.243	26,057	-
			<u>26,057</u>	<u>-</u>
Icahn School of Medicine at Mount Sinai (ISMMS) - Occupational Safety and Health Program	0254-5943-4609	93.262	1,310	-
Stanford University - Occupational Safety and Health Program	61405843-48844	93.262	16,421	-
			<u>17,731</u>	<u>-</u>
Lumme, Inc. - Alcohol Research Programs	SBIR - McKee	93.273	(135)	-
New York University School of Medicine - Alcohol Research Programs	16-A0-00-006073-01	93.273	1,297	-
Boston University - Alcohol Research Programs	4500002414	93.273	1,856	-
Vanderbilt University Medical Center - Alcohol Research Programs	VUMC95888	93.273	7,094	-
Syracuse University - Alcohol Research Programs	30505-05408-S01	93.273	20,906	-
University of Louisville Research Fdn, Inc - Alcohol Research Programs	ULRF_21-0656-01	93.273	21,612	-
New York University School of Medicine - Alcohol Research Programs	19-A1-00-1001516/112563	93.273	34,987	-
New York University School of Medicine - Alcohol Research Programs	19-A0-00-1002752	93.273	43,923	-
Mayo Clinic of Rochester - Alcohol Research Programs	YAL-243530-03	93.273	175,078	-
New York University - Alcohol Research Programs	22-A0-00-1007862/Project #260926	93.273	365,269	-
			<u>671,887</u>	<u>-</u>
University of Connecticut Health Center - Drug Abuse and Addiction Research Programs	R21DA051934	93.279	(16,053)	-
Regents University of California, San Francisco - Drug Abuse and Addiction Research Programs	11386sc	93.279	(25)	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	580041	93.279	(11)	-
McLean Hospital - Drug Abuse and Addiction Research Programs	UG1DA015831/401108	93.279	101	-
Indiana University - Drug Abuse and Addiction Research Programs	9246_YALE	93.279	1,975	-
Center for Social Innovation - Drug Abuse and Addiction Research Programs	NIDA-OASIS	93.279	6,992	-
RTI International - Drug Abuse and Addiction Research Programs	1-312-0217653-66170L	93.279	10,348	-
University of California, Los Angeles (UCLA) - Drug Abuse and Addiction Research Programs	1935 G VA649	93.279	10,586	-
Regents University of California, San Francisco - Drug Abuse and Addiction Research Programs	11821sc	93.279	10,635	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Drug Abuse and Addiction Research Programs	0255-F873-4609	93.279	11,095	-
University of Iowa - Drug Abuse and Addiction Research Programs	11277400 - 1001621834	93.279	12,038	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
Icahn School of Medicine at Mount Sinai (ISMMS) - Drug Abuse and Addiction Research Programs	0255-B948-4609	93.279	\$ 14,603	\$ -
George Mason University - Drug Abuse and Addiction Research Programs	E2052463	93.279	14,609	-
Regents University of California, San Francisco - Drug Abuse and Addiction Research Programs	11822sc	93.279	19,255	-
Howard University - Drug Abuse and Addiction Research Programs	GRT000080-10002886	93.279	26,775	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Drug Abuse and Addiction Research Programs	0255-C601-4609	93.279	27,224	-
RTI International - Drug Abuse and Addiction Research Programs	1-312-0217761-66296L	93.279	27,277	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Drug Abuse and Addiction Research Programs	0255-B947-4609	93.279	27,338	-
National Institute on Drug Abuse (NIDA)/NIH/DHHS - Drug Abuse and Addiction Research Programs	169866	93.279	56,301	-
New York University School of Medicine - Drug Abuse and Addiction Research Programs	17-A1-00006921	93.279	59,782	-
Hennepin Healthcare Research Institute - Drug Abuse and Addiction Research Programs	15390-02	93.279	61,361	-
Ukrainian Institute on Public Health Policy - Drug Abuse and Addiction Research Programs	U01DA045384-Y4	93.279	62,656	-
University of Massachusetts - Drug Abuse and Addiction Research Programs	S5111000040533	93.279	65,582	-
Boston Medical Center - Drug Abuse and Addiction Research Programs	BMC #6738	93.279	65,976	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	582578	93.279	115,646	-
Stanford University - Drug Abuse and Addiction Research Programs	62097889-26345	93.279	118,739	-
University of Connecticut - Drug Abuse and Addiction Research Programs	420109/KFS #5663920	93.279	120,282	-
University of Connecticut - Drug Abuse and Addiction Research Programs	146488263	93.279	157,836	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	582578	93.279	161,754	-
Hennepin Healthcare Research Institute - Drug Abuse and Addiction Research Programs	15312.2	93.279	173,246	-
Research Triangle Institute - Drug Abuse and Addiction Research Programs	1-312-0216573-65364L	93.279	185,526	-
University of Pennsylvania - Drug Abuse and Addiction Research Programs	582578	93.279	194,741	-
Dartmouth College - Drug Abuse and Addiction Research Programs	R1469	93.279	212,937	-
University of California, Los Angeles (UCLA) - Drug Abuse and Addiction Research Programs	1445 G XB107	93.279	433,395	-
New York University School of Medicine - Drug Abuse and Addiction Research Programs	18-A0-Q01001703/111675	93.279	726,284	-
			<u>3,176,806</u>	<u>-</u>
COVID-19 Connecticut Dept. of Public Health (DPH) - Centers for Disease Control and Prevention_Investigations and Technical Assistance	2017-0026	93.283	(23,408)	-
COVID-19 Connecticut Dept. of Public Health (DPH) - Centers for Disease Control and Prevention_Investigations and Technical Assistance	2017-0026	93.283	292	-
COVID-19 Connecticut Dept. of Public Health (DPH) - Centers for Disease Control and Prevention_Investigations and Technical Assistance	2017-0026	93.283	1,711	-
COVID-19 Connecticut Dept. of Public Health (DPH) - Centers for Disease Control and Prevention_Investigations and Technical Assistance	2017-0026	93.283	1,953,260	-
COVID-19 Connecticut Dept. of Public Health (DPH) - Centers for Disease Control and Prevention_Investigations and Technical Assistance	2017-0026-6	93.283	2,097,060	-
			<u>4,028,915</u>	<u>-</u>
Oakland University - Discovery and Applied Research for Technological Innovations to Improve Human Health	33101	93.286	5,745	-
University of California, San Diego - Discovery and Applied Research for Technological Innovations to Improve Human Health	704653	93.286	12,865	-
Board of Trustees of Leland Stanford Junior University - Discovery and Applied Research for Technological Innovations to Improve Human Health	62244871-159445	93.286	25,803	-
Texas A&M Engineering Experiment Station - Discovery and Applied Research for Technological Innovations to Improve Human Health	M1900476	93.286	70,231	-
University of Minnesota - Discovery and Applied Research for Technological Innovations to Improve Human Health	N006264805	93.286	213,306	-
			<u>327,950</u>	<u>-</u>
Meharry Medical College - Minority Health and Health Disparities Research	170406MFL060	93.307	26,535	-
- Minority Health and Health Disparities Research	RCC-001 YALE	93.307	42,997	-
North Carolina State University - Minority Health and Health Disparities Research	2017-1593-06	93.307	113,178	-
			<u>182,710</u>	<u>-</u>
University of Massachusetts - Trans-NIH Research Support	OSP20265-00	93.310	6,569	-
Carnegie Mellon University - Trans-NIH Research Support	1090667-441654	93.310	7,472	-
University of North Carolina - Trans-NIH Research Support	5120924	93.310	12,032	-
Medical College of Wisconsin - Trans-NIH Research Support	5U24HG010423-02- Glazer	93.310	20,549	-
University of North Carolina - Trans-NIH Research Support	5118548	93.310	21,385	-
Medical College of Wisconsin - Trans-NIH Research Support	5U24HG010423-02- Glazer 2	93.310	30,833	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
COVID-19 Rutgers (the State University of New Jersey) - Trans-NIH Research Support	1818	93.310	\$ 73,680	\$ -
Baylor College of Medicine - Trans-NIH Research Support	70000001053	93.310	86,394	-
University of North Carolina - Trans-NIH Research Support	5124052/5118241/5120021	93.310	93,717	-
University of North Carolina - Trans-NIH Research Support	5121993	93.310	128,701	-
Baylor College of Medicine - Trans-NIH Research Support	7000001324	93.310	157,924	-
			<u>639,256</u>	<u>-</u>
Duke University - National Center for Advancing Translational Sciences	A031871 (SPS-248405)	93.350	2,390	-
Tufts--New England Medical Center - National Center for Advancing Translational Sciences	NH9053	93.350	9,431	-
Mayo Clinic of Rochester - National Center for Advancing Translational Sciences	YAL-254500-01/PO #67305906	93.350	75,877	-
Mayo Clinic of Rochester - National Center for Advancing Translational Sciences	YAL-254500-03/PO #68227172	93.350	101,104	-
New York University School of Medicine - National Center for Advancing Translational Sciences	Clinical Study Protocol s20-00541; 20-A0-S1-004185,	93.350	268,453	-
National Jewish Health - National Center for Advancing Translational Sciences	20115904	93.350	348,191	-
			<u>805,446</u>	<u>-</u>
COVID-19 University of Massachusetts, Worcester - Research Infrastructure Programs	SUB00000073	93.351	58,115	-
			<u>58,115</u>	<u>-</u>
Duke University - 21st Century Cures Act - Beau Biden Cancer Moonshot	A034458	93.353	17,178	-
H. Lee Moffitt Cancer Center & Research Institute, Inc. - 21st Century Cures Act - Beau Biden Cancer Moonshot	10-19767-03-02-G1	93.353	93,372	-
			<u>110,550</u>	<u>-</u>
University of Colorado, Denver - Nursing Research	FY22.105.008	93.361	53,459	-
COVID-19 New York University - Nursing Research	F1970-01	93.361	131,931	-
			<u>185,390</u>	<u>-</u>
New York University - Cancer Cause and Prevention Research	21-A1-00-1004038	93.393	6,323	-
University of New Mexico - Cancer Cause and Prevention Research	3RCQ4	93.393	9,685	-
Case Western Reserve University - Cancer Cause and Prevention Research	RES512891	93.393	13,582	-
University of Massachusetts, Worcester - Cancer Cause and Prevention Research	OSP32495-01	93.393	18,827	-
University of Michigan - Cancer Cause and Prevention Research	3003750930	93.393	32,959	-
Emory University - Cancer Cause and Prevention Research	A316240	93.393	36,634	-
Johns Hopkins University - Cancer Cause and Prevention Research	2004811763	93.393	42,530	-
Washington University in St. Louis - Cancer Cause and Prevention Research	WU-22-0282	93.393	130,752	-
Medical University of South Carolina - Cancer Cause and Prevention Research	A21-0022-S001	93.393	171,765	-
University of Michigan - Cancer Cause and Prevention Research	SUBK00012361	93.393	271,114	-
			<u>734,171</u>	<u>-</u>
University of California, San Francisco - Cancer Detection and Diagnosis Research	10730SC	93.394	1,418	-
University of California, San Francisco - Cancer Detection and Diagnosis Research	10730SC	93.394	7,230	-
University of California, San Francisco - Cancer Detection and Diagnosis Research	10731sc	93.394	8,660	-
Washington University in St. Louis - Cancer Detection and Diagnosis Research	WU-22-0181	93.394	9,169	-
Johns Hopkins University - Cancer Detection and Diagnosis Research	2004280406	93.394	41,172	-
Mayo Clinic of Rochester - Cancer Detection and Diagnosis Research	YAL-275155	93.394	64,581	-
			<u>132,230</u>	<u>-</u>
Children's Hospital of Philadelphia (The) - Cancer Treatment Research	FP00033922_SUB59_01	93.395	417	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Herbst	93.395	1,471	-
Mayo Clinic of Rochester - Cancer Treatment Research	YAL-289763/P.O.68352732	93.395	4,092	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Herbst	93.395	5,778	-
ECOG-ACRIN Cancer Research Group - Cancer Treatment Research	U10CA180820-06-YALE1C	93.395	6,657	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Pass-through: (Continued)</u>				
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Politi	93.395	\$ 7,004	\$ -
Research Foundation of State University of New York (SUNY) - Cancer Treatment Research	R1275687	93.395	7,634	-
Public Health Institute - Cancer Treatment Research	AR03424	93.395	7,834	-
US Department of Health and Human Services (DHHS) - Cancer Treatment Research	AR03259	93.395	7,834	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE	93.395	8,790	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Petrylak	93.395	8,894	-
Mayo Clinic of Rochester - Cancer Treatment Research	YTY-289763	93.395	10,565	-
Oregon Health Sciences University - Cancer Treatment Research	1013080-006_Yale	93.395	12,606	-
Mayo Clinic of Rochester - Cancer Treatment Research	YLE-289763	93.395	13,228	-
ECOG-ACRIN Cancer Research Group - Cancer Treatment Research	U10CA180820-06-YALE1C	93.395	13,336	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Politi	93.395	26,907	-
University of Minnesota - Cancer Treatment Research	N008125903	93.395	28,510	-
Children's Hospital of Philadelphia (The) - Cancer Treatment Research	FP00015221	93.395	31,213	-
University of Alabama at Birmingham - Cancer Treatment Research	000531215	93.395	40,593	-
Children's Hospital of Philadelphia (The) - Cancer Treatment Research	PO960236RSUB	93.395	41,430	-
Ohio State University - Cancer Treatment Research	SPC-1000006107	93.395	42,996	-
Mayo Clinic of Rochester - Cancer Treatment Research	YUN-289763/P.O. #68352733	93.395	45,917	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE	93.395	56,051	-
Oregon Health Sciences University - Cancer Treatment Research	1013080_YALE_Decker	93.395	63,920	-
Oregon Health Sciences University - Cancer Treatment Research	Grant	93.395	96,015	-
Medical University of South Carolina - Cancer Treatment Research	A00-2799-S001 / MUSC16-084-8C234	93.395	160,788	-
Alliance for Clinical Trials in Oncology - Cancer Treatment Research	125263	93.395	198,009	-
			<u>948,489</u>	<u>-</u>
University of Chicago - Cancer Biology Research	AWD102783 (SUB00000644)	93.396	3,877	-
University of Chicago - Cancer Biology Research	AWD101836 (SUB00000496)	93.396	6,411	-
University of Connecticut - Cancer Biology Research	410139	93.396	10,629	-
Columbia University - Cancer Biology Research	2(GG0013365-02)	93.396	17,217	-
University of Connecticut - Cancer Biology Research	148263429	93.396	21,283	-
Cincinnati Children's Hospital Medical Center - Cancer Biology Research	313686	93.396	42,199	-
Cincinnati Children's Hospital Medical Center - Cancer Biology Research	313686	93.396	43,316	-
Brown University - Cancer Biology Research	00001917	93.396	109,895	-
Washington University in St. Louis - Cancer Biology Research	WU-20-404-MOD-1	93.396	150,986	-
University of Arizona - Cancer Biology Research	586645	93.396	177,370	-
Dana Farber Cancer Institute - Cancer Biology Research	1174203	93.396	655,039	-
			<u>1,238,222</u>	<u>-</u>
Dana Farber Cancer Institute - Cancer Centers Support Grants	1230308	93.397	8,995	-
Johns Hopkins University - Cancer Centers Support Grants	2005391976	93.397	18,751	-
Cornell University - Cancer Centers Support Grants	78542-11319	93.397	89,226	-
			<u>116,972</u>	<u>-</u>
Dana Farber Cancer Institute - Cancer Research Manpower	1243005	93.398	13,924	-
			<u>13,924</u>	<u>-</u>
Oregon Health Sciences University - Cancer Control	1014562_YALE	93.399	41,630	-
			<u>41,630</u>	<u>-</u>
State of Rhode Island Dept. of Children, Youth & Families - Assistance Payments-Research	Rhode Island Evaluation 3594226	93.562	1,575	-
			<u>1,575</u>	<u>-</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
State of CT Dept of Mental Health and Addiction Services - Emergency Grants to Address Mental and Substance Use Disorders During Covid-19-19	22MHA1015	93.665	\$ 40,657	\$ -
State of CT Dept of Mental Health and Addiction Services - Emergency Grants to Address Mental and Substance Use Disorders During Covid-19-19	22MHA1016	93.665	147,714	-
			188,371	-
Children's Hospital Boston - Cardiovascular Diseases Research	GENFD0001966899	93.837	(1,614)	-
Cincinnati Children's Hospital Medical Center - Cardiovascular Diseases Research	13281 PCGC Protocol	93.837	(1)	-
University of Alabama at Birmingham - Cardiovascular Diseases Research	000503570-SC048	93.837	1,466	-
Research Institute at Nationwide Children's Hospital (The) - Cardiovascular Diseases Research	700250-0323-00	93.837	1,848	-
John B. Pierce Laboratory Inc. (The) - Cardiovascular Diseases Research	300-A	93.837	2,752	-
Massachusetts General Hospital - Cardiovascular Diseases Research	240133	93.837	3,215	-
MicroVide, LLC - Cardiovascular Diseases Research	Research Agreement	93.837	3,641	-
Cedars-Sinai Medical Center - Cardiovascular Diseases Research	0001703998	93.837	5,136	-
Massachusetts General Hospital - Cardiovascular Diseases Research	A5332	93.837	5,456	-
Cincinnati Children's Hospital Medical Center - Cardiovascular Diseases Research	2U01HL131003-06	93.837	5,770	-
Emory University - Cardiovascular Diseases Research	A575016	93.837	7,760	-
Cincinnati Children's Hospital Medical Center - Cardiovascular Diseases Research	313945 / OS0002510	93.837	10,888	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Cardiovascular Diseases Research	0255-A343-4605	93.837	11,244	-
Regents of the University of Michigan - Cardiovascular Diseases Research	SUB00012350	93.837	11,466	-
MedStar Health Research Institute - Cardiovascular Diseases Research	5U01HL117006-05	93.837	11,491	-
Cincinnati Children's Hospital Medical Center - Cardiovascular Diseases Research	138281 PCGC- Recruiter 2019 Supplemental Funding	93.837	12,192	-
John B. Pierce Laboratory Inc. (The) - Cardiovascular Diseases Research	281-B	93.837	14,096	-
Research Institute at Nationwide Children's Hospital (The) - Cardiovascular Diseases Research	700250-0322-00	93.837	19,123	-
Northwestern University - Cardiovascular Diseases Research	60058632 Yale	93.837	21,691	-
Weill Medical College of Cornell University - Cardiovascular Diseases Research	220683	93.837	22,190	-
Ohio State University - Cardiovascular Diseases Research	GR124557/PO #SPC-1000005405	93.837	22,431	-
Bonde Innovations LLC - Cardiovascular Diseases Research	Bonde	93.837	23,376	-
Vitalant Research Institute - Cardiovascular Diseases Research	11745YU148	93.837	27,036	-
The Trustees of Columbia University in the City of New York - Cardiovascular Diseases Research	4(G0012878-01)	93.837	27,392	-
University of California, San Francisco - Cardiovascular Diseases Research	13220sc	93.837	27,687	-
Case Western Reserve University - Cardiovascular Diseases Research	RES514115	93.837	29,784	-
Cedars-Sinai Medical Center - Cardiovascular Diseases Research	0001925985	93.837	33,667	-
Emory University - Cardiovascular Diseases Research	10T2HL152762-01	93.837	35,495	-
Weill Medical College of Cornell University - Cardiovascular Diseases Research	211248	93.837	38,431	-
Emory University - Cardiovascular Diseases Research	A591443	93.837	38,691	-
Vanderbilt University Medical Center - Cardiovascular Diseases Research	VUMC95997	93.837	41,623	-
Temple University - Cardiovascular Diseases Research	265891	93.837	42,066	-
Research Institute at Nationwide Children's Hospital (The) - Cardiovascular Diseases Research	700151-1121-00	93.837	45,581	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Cardiovascular Diseases Research	0255-A421-4609	93.837	46,679	-
Vanderbilt University Medical Center - Cardiovascular Diseases Research	VUMC84785	93.837	65,097	-
Texas A&M University - Cardiovascular Diseases Research	M2002222	93.837	77,066	-
Arrhythmia Dynamics, LLC - Cardiovascular Diseases Research	1R43HL158467-01	93.837	77,178	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Pass-through: (Continued)</u>				
The Miriam Hospital - Cardiovascular Diseases Research	710-7147188	93.837	\$ 83,938	\$ -
University of Pittsburgh - Cardiovascular Diseases Research	AWD00003099 (135921-1)	93.837	99,635	-
New York University School of Medicine - Cardiovascular Diseases Research	17-A1-00-005849-01, Project 111219	93.837	103,705	-
Georgia Institute of Technology - Cardiovascular Diseases Research	RK055-G1/AWD-102065-G1	93.837	122,287	-
Brown University - Cardiovascular Diseases Research	00001192	93.837	188,285	-
University of Illinois at Urbana-Champaign - Cardiovascular Diseases Research	097337-17689	93.837	188,381	-
New York University School of Medicine - Cardiovascular Diseases Research	17-A1-00-005849-01; Project 111223	93.837	450,850	-
New York University School of Medicine - Cardiovascular Diseases Research	17-A1-00-005849-01	93.837	496,817	-
			<u>2,602,988</u>	<u>-</u>
Children's Hospital of Philadelphia (The) - Lung Diseases Research	Route Key No. 3201160619	93.838	2,000	-
Medical University of South Carolina - Lung Diseases Research	A22-0205-S001	93.838	7,328	-
North Shore University Health System - Lung Diseases Research	EH17-325-S3	93.838	17,503	-
Wayne State University - Lung Diseases Research	WSU18079	93.838	21,616	-
Children's Research Institute - Lung Diseases Research	30006708-01	93.838	42,796	-
Duke University - Lung Diseases Research	A032808	93.838	63,070	-
Vanderbilt University Medical Center - Lung Diseases Research	VUMC73926	93.838	97,630	-
University of North Carolina - Lung Diseases Research	5114474-H3YALEUNI	93.838	173,368	-
			<u>425,311</u>	<u>-</u>
Washington University in St. Louis - Blood Diseases and Resources Research	WU-18-416	93.839	4,154	-
Baylor College of Medicine - Blood Diseases and Resources Research	7000001209	93.839	9,538	-
University of Texas M.D. Anderson Cancer Center - Blood Diseases and Resources Research	3001607487	93.839	13,051	-
Boston Medical Center - Blood Diseases and Resources Research	7375	93.839	50,581	-
University of Virginia - Blood Diseases and Resources Research	GB10756.PO #2214801	93.839	774,941	-
			<u>852,265</u>	<u>-</u>
University of Pittsburgh - Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	AWD00002957 (136570-1)	93.840	28,186	-
Infectious Diseases Research Collaboration - Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	IDRC0002sc	93.840	94,148	-
Vanderbilt University Medical Center - Translation and Implementation Science Research for Heart, Lung, Blood Diseases, and Sleep Disorders	VUMC 92554	93.840	169,418	-
			<u>291,752</u>	<u>-</u>
Jackson Laboratory - Arthritis, Musculoskeletal and Skin Diseases Research	210320-1122-02	93.846	22,387	-
University of Virginia - Arthritis, Musculoskeletal and Skin Diseases Research	GB10302	93.846	30,476	-
Salk Institute for Biological Studies - Arthritis, Musculoskeletal and Skin Diseases Research	18-0028-S001	93.846	54,481	-
Regents of the University of Michigan - Arthritis, Musculoskeletal and Skin Diseases Research	SUBK00014523	93.846	85,862	-
Johns Hopkins University - Arthritis, Musculoskeletal and Skin Diseases Research	2003134842	93.846	255,467	-
			<u>448,673</u>	<u>-</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
University of South Florida - Diabetes, Digestive, and Kidney Diseases Extramural Research	6163-1082-10-CC	93.847	\$ (9,879)	\$ -
University of Texas Southwestern Medical Center (The) - Diabetes, Digestive, and Kidney Diseases Extramural Research				
	GMO-160229	93.847	(810)	-
Johns Hopkins University - Diabetes, Digestive, and Kidney Diseases Extramural Research	2004418970	93.847	(233)	-
University of Washington, Seattle - Diabetes, Digestive, and Kidney Diseases Extramural Research	UWSC12516	93.847	9	-
CaroGen Corporation - Diabetes, Digestive, and Kidney Diseases Extramural Research	2R44DK11358-02_Yale	93.847	36	-
Medical University of South Carolina - Diabetes, Digestive, and Kidney Diseases Extramural Research	A00-3656-S017	93.847	50	-
George Washington University - Diabetes, Digestive, and Kidney Diseases Extramural Research	GRADE-Clinical CTR 37	93.847	533	-
The Trustees of Columbia University in the City of New York - Diabetes, Digestive, and Kidney Diseases Extramural Research				
	5(GG011642-04)/2(GG011642-05)	93.847	947	-
Ann & Robert H. Lurie Children's Hospital - Diabetes, Digestive, and Kidney Diseases Extramural Research	901628- Yale	93.847	1,000	-
University of Texas Southwestern Medical Center (The) - Diabetes, Digestive, and Kidney Diseases Extramural Research				
	GMO-170917	93.847	3,489	-
Research Foundation of State University of New York (SUNY) - Diabetes, Digestive, and Kidney Diseases Extramural Research				
	1138946-77867	93.847	5,845	-
Aptitude Medical Systems, Inc - Diabetes, Digestive, and Kidney Diseases Extramural Research	2R44DK101280-02A1 -S1	93.847	5,915	-
University of Texas Southwestern Medical Center (The) - Diabetes, Digestive, and Kidney Diseases Extramural Research				
	GMO-161122	93.847	7,909	-
New York Blood Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	RCP - NIH560	93.847	11,139	-
Hutchinson (Fred) Cancer Research Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	0001054074	93.847	11,335	-
New York Blood Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	RCP-NIH563	93.847	11,851	-
University of Connecticut Health Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	UCHC7-137141562	93.847	12,505	-
Hutchinson (Fred) Cancer Research Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	0001054075	93.847	13,946	-
Drexel University - Diabetes, Digestive, and Kidney Diseases Extramural Research	800159	93.847	15,733	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Diabetes, Digestive, and Kidney Diseases Extramural Research	0255-1981-4609	93.847	15,787	-
Vanderbilt University Medical Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	VUMC80143	93.847	19,698	-
Applikate Technologies, Inc - Diabetes, Digestive, and Kidney Diseases Extramural Research	Applikate (SBIR)- Torres	93.847	21,484	-
Temple University - Diabetes, Digestive, and Kidney Diseases Extramural Research	268595-Yale	93.847	24,983	-
Bessor Pharma, LLC - Diabetes, Digestive, and Kidney Diseases Extramural Research	2R44DK111251	93.847	25,454	-
Case Western Reserve University - Diabetes, Digestive, and Kidney Diseases Extramural Research	RES515413	93.847	27,067	-
George Washington University - Diabetes, Digestive, and Kidney Diseases Extramural Research	17-D20	93.847	34,172	-
University of Maryland at Baltimore - Diabetes, Digestive, and Kidney Diseases Extramural Research	F303286-1	93.847	34,961	-
Maine Medical Center Research Institute - Diabetes, Digestive, and Kidney Diseases Extramural Research	ROSEN R24-01	93.847	36,562	-
COVID-19 University of Washington, Seattle - Diabetes, Digestive, and Kidney Diseases Extramural Research	UWSC12429	93.847	36,910	-
Tufts--New England Medical Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	R01DK116790-01A1	93.847	37,105	-
University of Utah - Diabetes, Digestive, and Kidney Diseases Extramural Research	10055841-26-Yale	93.847	40,829	-
Johns Hopkins University - Diabetes, Digestive, and Kidney Diseases Extramural Research	2004418970	93.847	45,276	-
COVID-19 Northern California Institute for Research & Education - Diabetes, Digestive, and Kidney Diseases Extramural Research	Testani	93.847	45,882	-
Johns Hopkins University - Diabetes, Digestive, and Kidney Diseases Extramural Research	2004809308	93.847	46,670	-
George Washington University - Diabetes, Digestive, and Kidney Diseases Extramural Research	S-GRD2122-LL37	93.847	57,644	-
Regents University of California, San Francisco - Diabetes, Digestive, and Kidney Diseases Extramural Research	11967sc	93.847	68,043	-
George Washington University - Diabetes, Digestive, and Kidney Diseases Extramural Research	S-GRD1920-LL37	93.847	80,923	30,386
Mayo Clinic of Rochester - Diabetes, Digestive, and Kidney Diseases Extramural Research	YAL-232942-01 / PO 67409664	93.847	83,103	-
Hartford Hospital - Diabetes, Digestive, and Kidney Diseases Extramural Research	126357-SY	93.847	95,291	-
New York Blood Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	RCP-NIH563	93.847	121,468	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
University of South Florida - Diabetes, Digestive, and Kidney Diseases Extramural Research	6163-1082-10-CD	93.847	\$ 151,271	\$ -
Broad Institute, Inc - Diabetes, Digestive, and Kidney Diseases Extramural Research	5000850-5500001124	93.847	160,336	-
Case Western Reserve University - Diabetes, Digestive, and Kidney Diseases Extramural Research	RES516365	93.847	184,172	-
New York Blood Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	RCP - NIH560	93.847	237,218	-
University of South Florida - Diabetes, Digestive, and Kidney Diseases Extramural Research	6163-1082-10-CC	93.847	261,352	-
Cincinnati Children's Hospital Medical Center - Diabetes, Digestive, and Kidney Diseases Extramural Research	312604	93.847	295,098	-
HealthPartners Institute For Education & Research - Diabetes, Digestive, and Kidney Diseases Extramural Research	852223-Yale	93.847	359,921	-
University of Wisconsin-Madison - Diabetes, Digestive, and Kidney Diseases Extramural Research	0000000961	93.847	516,360	-
			<u>3,256,360</u>	<u>30,386</u>
University of Pennsylvania - Extramural Research Programs in the Neurosciences and Neurological Disorders	580268	93.853	(4)	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M123	93.853	75	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M36	93.853	197	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	20-M52	93.853	222	-
Marine Biological Laboratory - Extramural Research Programs in the Neurosciences and Neurological Disorders	54482	93.853	341	-
University of Rochester - Extramural Research Programs in the Neurosciences and Neurological Disorders	416965/FAO GR510545	93.853	577	-
Regents of the University of California - Extramural Research Programs in the Neurosciences and Neurological Disorders	12520sc	93.853	1,508	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	012043-138225	93.853	1,558	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	012340-138225	93.853	2,238	-
Mayo Clinic Jacksonville Florida - Extramural Research Programs in the Neurosciences and Neurological Disorders	YAL-232483	93.853	2,482	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M35	93.853	3,238	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	Nowak	93.853	3,303	-
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	235400	93.853	5,364	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M36	93.853	6,871	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	010785-138225	93.853	8,034	-
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS120901	93.853	9,448	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	014059-138225	93.853	9,560	-
Rutgers, the State University of New Jersey - Extramural Research Programs in the Neurosciences and Neurological Disorders	2287	93.853	10,807	-
Mayo Clinic Jacksonville Florida - Extramural Research Programs in the Neurosciences and Neurological Disorders	Carotid Revascularization YAL-224063-02	93.853	17,005	-
University College London - Extramural Research Programs in the Neurosciences and Neurological Disorders	WT PC 2298077 / CID 3685695	93.853	17,257	-
University of Southern California - Extramural Research Programs in the Neurosciences and Neurological Disorders	92336315	93.853	17,906	-
University of Connecticut - Extramural Research Programs in the Neurosciences and Neurological Disorders	148681307	93.853	19,177	-
Weill Medical College of Cornell University - Extramural Research Programs in the Neurosciences and Neurological Disorders	204427	93.853	19,645	-
University of Southern California - Extramural Research Programs in the Neurosciences and Neurological Disorders	83618959/PO 50516046	93.853	20,455	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	011961-138225	93.853	30,128	-
University of Arizona - Extramural Research Programs in the Neurosciences and Neurological Disorders	517040	93.853	30,358	-
Brain Electrophysiology Laboratory Company - Extramural Research Programs in the Neurosciences and Neurological Disorders	PAPADEMETRIS	93.853	33,337	-
Regents of the University of Michigan - Extramural Research Programs in the Neurosciences and Neurological Disorders	SUBK11056CSPR-002	93.853	34,346	-
Texas A&M University - Extramural Research Programs in the Neurosciences and Neurological Disorders	M2000369	93.853	35,427	-
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	U01NS114001	93.853	37,275	-
Marine Biological Laboratory - Extramural Research Programs in the Neurosciences and Neurological Disorders	54483	93.853	39,364	-
Children's Hospital Boston - Extramural Research Programs in the Neurosciences and Neurological Disorders	GENFD0002164228	93.853	42,010	-
Board of Trustees of Leland Stanford Junior University - Extramural Research Programs in the Neurosciences and Neurological Disorders	62161887-136511	93.853	46,445	-
University of Cincinnati Medical Center - Extramural Research Programs in the Neurosciences and Neurological Disorders	011337-138225	93.853	50,629	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M34	93.853	61,023	-
Cleveland Clinic Lerner College of Medicine of CWRU - Extramural Research Programs in the Neurosciences and Neurological Disorders	1409- SUB	93.853	62,096	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
Cleveland Clinic Lerner College of Medicine of CWRU - Extramural Research Programs in the Neurosciences and Neurological Disorders	1423-SUB	93.853	\$ 108,888	\$ -
University of Pennsylvania - Extramural Research Programs in the Neurosciences and Neurological Disorders	582577	93.853	131,827	-
Children's Research Institute - Extramural Research Programs in the Neurosciences and Neurological Disorders	30006326-01	93.853	156,956	-
George Washington University - Extramural Research Programs in the Neurosciences and Neurological Disorders	21-M35	93.853	159,666	-
Marine Biological Laboratory - Extramural Research Programs in the Neurosciences and Neurological Disorders	54484	93.853	177,657	-
Johns Hopkins University - Extramural Research Programs in the Neurosciences and Neurological Disorders	2005103274	93.853	224,724	-
Massachusetts General Hospital - Extramural Research Programs in the Neurosciences and Neurological Disorders	239604	93.853	230,577	-
			<u>1,869,997</u>	<u>-</u>
Massachusetts General Hospital - Allergy and Infectious Diseases Research	226292	93.855	(6,833)	-
Colorado State University - Allergy and Infectious Diseases Research	G-06044-01	93.855	(6,224)	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-8689-4609	93.855	(2,813)	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY17ITN162-FY21ITN162	93.855	(673)	-
Sloan-Kettering Institute for Cancer Research - Allergy and Infectious Diseases Research	BD519787D	93.855	(43)	-
Colorado State University - Allergy and Infectious Diseases Research	G-06044-01	93.855	3	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY17ITN162-FY21ITN162	93.855	454	-
Johns Hopkins University - Allergy and Infectious Diseases Research	2003037091	93.855	482	1,892
Albert Einstein College of Medicine - Allergy and Infectious Diseases Research	31192A	93.855	553	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-3225-4609	93.855	1,101	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-1359-4609	93.855	2,001	-
Beth Israel Deaconess Medical Center - Allergy and Infectious Diseases Research	01064145	93.855	3,660	-
Virginia Commonwealth University - Allergy and Infectious Diseases Research	FP00015516_SA001	93.855	3,741	-
Johns Hopkins University - Allergy and Infectious Diseases Research	P.O. 2004195224	93.855	4,052	-
Regents University of California, San Francisco - Allergy and Infectious Diseases Research	10516sc	93.855	4,326	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-B003-4609	93.855	5,424	-
Jackson Laboratory - Allergy and Infectious Diseases Research	210310-0221-12	93.855	5,990	-
J. David Gladstone Institutes - Allergy and Infectious Diseases Research	SC-00052	93.855	6,350	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	1R41AI149951-01	93.855	8,382	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-1351-4609/0255-B001-4609	93.855	8,531	-
Medical College of Wisconsin - Allergy and Infectious Diseases Research	1R21AI147573-01A	93.855	8,569	-
Johns Hopkins University - Allergy and Infectious Diseases Research	PO #: 2003649391	93.855	8,710	-
COVID-19 Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-B023-4609	93.855	9,570	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-C815-4609	93.855	9,722	-
Brigham and Women's Hospital - Allergy and Infectious Diseases Research	A5332-supplement	93.855	9,889	-
La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20010-03-105-384	93.855	10,858	-
Beth Israel Deaconess Medical Center - Allergy and Infectious Diseases Research	01063721	93.855	12,386	-
COVID-19 Johns Hopkins University - Allergy and Infectious Diseases Research	2004736824	93.855	12,459	-
The Miriam Hospital - Allergy and Infectious Diseases Research	7147085CD	93.855	13,601	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-C160-4609	93.855	16,900	-
Duke University - Allergy and Infectious Diseases Research	A03-4283	93.855	21,397	-
Emory University - Allergy and Infectious Diseases Research	T938313	93.855	21,719	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY21ITN510	93.855	21,978	-
Emory University - Allergy and Infectious Diseases Research	A344820/A253802/ A511681	93.855	24,088	-
Albert Einstein College of Medicine - Allergy and Infectious Diseases Research	31192A	93.855	26,436	-
Duke University - Allergy and Infectious Diseases Research	303000140	93.855	26,867	-
Cornell University - Allergy and Infectious Diseases Research	92710-20630	93.855	30,685	-
University of Connecticut Health Center - Allergy and Infectious Diseases Research	UCHC7-112779652	93.855	31,742	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
Harvard School of Public Health - Allergy and Infectious Diseases Research	117164-5113039	93.855	\$ 32,180	\$ -
University of Wisconsin-Madison - Allergy and Infectious Diseases Research	864K441	93.855	35,261	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-F071-4609	93.855	38,186	-
Cornell University - Allergy and Infectious Diseases Research	203763	93.855	39,431	-
COVID-19 Emory University - Allergy and Infectious Diseases Research	A547677	93.855	39,928	-
Weill Medical College of Cornell University - Allergy and Infectious Diseases Research	211594	93.855	41,428	-
Rutgers, the State University of New Jersey - Allergy and Infectious Diseases Research	1997	93.855	42,183	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-C160-4609	93.855	45,494	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0254-4123-4609	93.855	45,596	-
Johns Hopkins University - Allergy and Infectious Diseases Research	2005164209	93.855	46,799	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0255-B003-4609	93.855	47,072	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	1R41AI145779-01	93.855	52,473	-
Massachusetts General Hospital - Allergy and Infectious Diseases Research	233034	93.855	52,640	-
Columbia University - Allergy and Infectious Diseases Research	2(GG014397-01)	93.855	55,738	-
Massachusetts General Hospital - Allergy and Infectious Diseases Research	236800	93.855	58,675	-
Board of Regents of the University of Wisconsin System on Behalf of the University of Wisconsin-Madison - Allergy and Infectious Diseases Research	0000001028	93.855	65,058	-
Dana Farber Cancer Institute - Allergy and Infectious Diseases Research	1277007	93.855	67,278	-
Colorado State University - Allergy and Infectious Diseases Research	G-06144-01	93.855	68,213	-
Stanford University - Allergy and Infectious Diseases Research	61485128-124916	93.855	68,371	-
State University of New York at Buffalo (SUNY) - Allergy and Infectious Diseases Research	R1193049	93.855	70,073	-
East Carolina University - Allergy and Infectious Diseases Research	A18-0229-S001	93.855	74,504	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	1R41AI157014-01A1	93.855	75,418	-
University of Massachusetts Medical School - Allergy and Infectious Diseases Research	OSP30213-YALE	93.855	76,403	-
Colorado State University - Allergy and Infectious Diseases Research	G-06145-01	93.855	81,127	-
Massachusetts General Hospital - Allergy and Infectious Diseases Research	237011	93.855	82,719	-
Veterans Medical Research Foundation - Allergy and Infectious Diseases Research	09473003-322237	93.855	95,658	-
Family Health International (FHI 360) - Allergy and Infectious Diseases Research	PO17001520	93.855	96,303	-
Emory University - Allergy and Infectious Diseases Research	A549955	93.855	97,374	-
La Jolla Institute for Allergy and Immunology - Allergy and Infectious Diseases Research	20010-02-105-384	93.855	115,076	-
Johns Hopkins University - Allergy and Infectious Diseases Research	2005166598	93.855	116,913	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Allergy and Infectious Diseases Research	0254-4124-4609	93.855	121,296	-
New York University - Allergy and Infectious Diseases Research	20-A0-00-1004049	93.855	126,537	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	1R41AI142846-01	93.855	131,021	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	1R41AI52904	93.855	150,313	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	R41AI145778	93.855	161,021	-
Scripps Health - Allergy and Infectious Diseases Research	5-54361	93.855	169,623	-
Benaroya Research Institute - Allergy and Infectious Diseases Research	FY19ITN356-FY20ITN356	93.855	178,371	-
Emory University - Allergy and Infectious Diseases Research	A651106	93.855	179,461	-
Children's Hospital of Philadelphia (The) - Allergy and Infectious Diseases Research	3201750624	93.855	195,914	-
L2 Diagnostics, LLC - Allergy and Infectious Diseases Research	2R44AI136118-02	93.855	214,465	-
Albert Einstein College of Medicine - Allergy and Infectious Diseases Research	311254	93.855	228,943	-
Family Health International (FHI 360) - Allergy and Infectious Diseases Research	PO20000547	93.855	241,484	-
University of California, Irvine - Allergy and Infectious Diseases Research	2018-3660	93.855	277,714	-
Regents of the University of Michigan - Allergy and Infectious Diseases Research	SUBK00011478	93.855	325,095	-
J. David Gladstone Institutes - Allergy and Infectious Diseases Research	SC-00053	93.855	340,572	-
University of Maryland - Allergy and Infectious Diseases Research	64882-Z0158203	93.855	679,630	-
			<u>6,001,072</u>	<u>1,892</u>

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
University of Utah - Biomedical Research and Research Training	10044932-15	93.859	\$ (3,189)	\$ -
Drexel University - Biomedical Research and Research Training	800132	93.859	(1,688)	-
Nano Engineering Corporation - Biomedical Research and Research Training	Yale Dr. Juan Fernandez de la Mora	93.859	263	-
Drexel University - Biomedical Research and Research Training	800132-5876	93.859	1,688	-
Georgetown University - Biomedical Research and Research Training	AWD7772899-GR206224	93.859	11,893	-
University of Pittsburgh - Biomedical Research and Research Training	CNVA00056812 (134885-9)	93.859	14,401	-
University of Arkansas, Little Rock - Biomedical Research and Research Training	230214-21Yale	93.859	31,917	-
Drexel University - Biomedical Research and Research Training	910001	93.859	33,345	-
University of Puerto Rico en Cayey - Biomedical Research and Research Training	Sub 1R25GM121270	93.859	36,509	-
Fox Chase Cancer Center - Biomedical Research and Research Training	15119-01	93.859	40,720	-
University of Texas at Austin - Biomedical Research and Research Training	UTA17-001388	93.859	44,787	-
University of Pennsylvania - Biomedical Research and Research Training	581297	93.859	50,681	-
New York University - Biomedical Research and Research Training	F8635-02	93.859	51,467	-
University of Massachusetts - Biomedical Research and Research Training	20-015448 A02	93.859	69,165	-
University of Pittsburgh - Biomedical Research and Research Training	CNVA00056812 (136461-9)	93.859	97,773	-
Purdue University - Biomedical Research and Research Training	4102-83303	93.859	109,155	-
Princeton University - Biomedical Research and Research Training	SUB0000405	93.859	149,487	-
Michigan State University - Biomedical Research and Research Training	RC110379YU	93.859	192,970	-
Drexel University - Biomedical Research and Research Training	910001	93.859	237,366	-
University of Utah - Biomedical Research and Research Training	10044932-09	93.859	328,858	-
University of Pittsburgh - Biomedical Research and Research Training	CNVA00056812 (136461-6)	93.859	347,763	-
			<u>1,845,331</u>	<u>-</u>
Women & Infants Hospital of Rhode Island - Child Health and Human Development Extramural Research	9585-61051	93.865	86	-
Schell Games LLC - Child Health and Human Development Extramural Research	Fiellin	93.865	509	-
University of North Carolina - Child Health and Human Development Extramural Research	5115518	93.865	785	-
University of Alabama at Birmingham - Child Health and Human Development Extramural Research	000529934-SC003	93.865	1,100	-
Ann & Robert H. Lurie Children's Hospital - Child Health and Human Development Extramural Research	901615- Yale University	93.865	1,402	-
University of Pittsburgh - Child Health and Human Development Extramural Research	AWD00001006 (133278-3)	93.865	3,535	-
University of Pennsylvania - Child Health and Human Development Extramural Research	579312	93.865	7,369	-
University of Texas at San Antonio - Child Health and Human Development Extramural Research	1000003231	93.865	17,896	-
Board of Trustees of Leland Stanford Junior University - Child Health and Human Development Extramural Research	62369298-136965	93.865	18,222	-
University of Texas at Austin - Child Health and Human Development Extramural Research	UTA20-000650	93.865	19,118	-
University of South Florida - Child Health and Human Development Extramural Research	R01HD06221/5112-5506-00-A	93.865	20,905	-
Board of Trustees of Leland Stanford Junior University - Child Health and Human Development Extramural Research	61420432-120659	93.865	26,020	-
George Mason University - Child Health and Human Development Extramural Research	E2050721	93.865	30,618	-
Nemours Children's Clinic - Child Health and Human Development Extramural Research	NCC	93.865	35,969	-
Haskins Laboratories, Inc. - Child Health and Human Development Extramural Research	2-A214	93.865	37,415	-
Imperial College School of Medicine - Child Health and Human Development Extramural Research	P78100	93.865	51,828	-
University of Colorado, Denver - Child Health and Human Development Extramural Research	FY19.571.001/2-5-A7254	93.865	61,263	-
University of Utah - Child Health and Human Development Extramural Research	10051369-13	93.865	63,405	-
University of Massachusetts - Child Health and Human Development Extramural Research	OSP2018143	93.865	85,951	-
Women & Infants Hospital of Rhode Island - Child Health and Human Development Extramural Research	9585-5000555	93.865	95,741	-
Duke University - Child Health and Human Development Extramural Research	A033207	93.865	102,683	-
The Curators of the University of Missouri - Child Health and Human Development Extramural Research	C00075381-8	93.865	107,998	-
Haskins Laboratories, Inc. - Child Health and Human Development Extramural Research	A222	93.865	145,938	-
Emory University - Child Health and Human Development Extramural Research	A248527	93.865	151,026	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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				
Department of Health & Human Services				
Pass-through: (Continued)				
Johns Hopkins University - Child Health and Human Development Extramural Research	2004681455	93.865	\$ 160,415	\$ -
University of California, San Francisco - Child Health and Human Development Extramural Research	9774sc	93.865	174,231	-
Louisiana State University - Child Health and Human Development Extramural Research	PO-0000143113	93.865	349,240	-
University of Colorado, Denver - Child Health and Human Development Extramural Research	1559816	93.865	567,347	37,800
			<u>2,338,015</u>	<u>37,800</u>
Medical University of South Carolina - Aging Research	MUSC-14-078/A00-1735-S017	93.866	(1,530)	-
Cognition Therapeutics, Inc. - Aging Research	1RF1AG057553-Y	93.866	(1,062)	-
University of Southern California - Aging Research	75686199-PO10458952	93.866	(349)	-
University of Southern California - Aging Research	125896878/PO #50886859	93.866	6	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-0044-4609	93.866	369	-
University of California, San Diego - Aging Research	72751728 / 72752638	93.866	783	-
Northern California Institute for Research & Education - Aging Research	STE2196-10	93.866	1,253	-
Albert Einstein College of Medicine - Aging Research	312066	93.866	1,929	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-B533-4609	93.866	2,627	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-0042-4609	93.866	3,055	-
Pennsylvania State University - Aging Research	YALEAG072484	93.866	3,669	-
Washington University in St. Louis - Aging Research	WU-19-278-MOD-3	93.866	5,000	-
University of Florida - Aging Research	SUB00001794	93.866	7,017	-
University of Southern California - Aging Research	107936659	93.866	9,480	-
Washington University in St. Louis - Aging Research	WU-22-0359	93.866	15,492	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-B541-4609	93.866	16,899	-
University of Southern California - Aging Research	140478298	93.866	18,182	-
Duke University - Aging Research	A03-4562	93.866	18,566	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-F201-4609	93.866	22,339	-
Ohio State University - Aging Research	GR124920 SPC-1000005839	93.866	25,037	-
University of Washington, Seattle - Aging Research	UWSC13018	93.866	26,596	-
Brown University - Aging Research	00001622	93.866	28,500	5,868
Kaiser Foundation Hospitals - Aging Research	RNG210267-02	93.866	32,518	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-E261-4609	93.866	32,923	-
University of Alabama at Birmingham - Aging Research	000528982-SC001	93.866	35,504	-
University of Southern California - Aging Research	139456908	93.866	36,014	-
Regents of the University of Michigan - Aging Research	SUBK00015454	93.866	36,684	-
Mayo Clinic of Rochester - Aging Research	YAL-263807-03/PO # 67847283	93.866	37,624	-
University of North Carolina - Aging Research	5116216	93.866	38,385	-
American Federation for Aging Research - Aging Research	19-CSTAR-YALE	93.866	43,505	-
Oregon Health Sciences University - Aging Research	1011170_YALE	93.866	43,507	-
Massachusetts General Hospital - Aging Research	239476	93.866	43,875	-
University of New Haven - Aging Research	FD45-S001	93.866	44,624	-
University of Kentucky - Aging Research	3200001330-18-016	93.866	48,181	-
Brigham and Women's Hospital - Aging Research	111014-Gill	93.866	56,402	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Human Services</u>				
<u>Pass-through: (Continued)</u>				
Cognition Therapeutics, Inc. - Aging Research	R01AG065248	93.866	\$ 58,920	\$ -
University of Massachusetts Medical School - Aging Research	OSP2018109	93.866	59,752	-
Duke University - Aging Research	A032814 - Trial # 7916 Preventable - Site #1804	93.866	61,385	-
Beth Israel Deaconess Medical Center - Aging Research	01062008	93.866	79,425	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-8443-4609	93.866	85,196	-
University of Alabama at Birmingham - Aging Research	000526683-SC001	93.866	85,276	-
Indiana University - Aging Research	9048_YU	93.866	96,794	-
Oregon Health Sciences University - Aging Research	1013624_YALE	93.866	99,557	-
University of Southern California - Aging Research	105746775	93.866	100,857	-
Indiana University - Aging Research	9047_YU	93.866	102,605	-
Board of Regents of the University of Wisconsin System on Behalf of the University of Wisconsin-Madison - Aging Research				
	0000001240	93.866	106,300	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Aging Research	0255-E701-4609	93.866	115,015	-
Board of Trustees of Leland Stanford Junior University - Aging Research	61666772-45510	93.866	121,755	-
Dartmouth College - Aging Research	R1032	93.866	142,673	-
University of Southern California - Aging Research	120126042/PO #50886674	93.866	149,543	-
University of Southern California - Aging Research	129138899/PO #50886624	93.866	173,559	-
University of Southern California - Aging Research	129210955/PO #50888848	93.866	178,577	-
University of Southern California - Aging Research	79658009	93.866	182,382	-
Mayo Clinic of Rochester - Aging Research	YAL-234899	93.866	190,721	-
Massachusetts General Hospital - Aging Research	233344	93.866	330,561	-
Brown University - Aging Research	00001365	93.866	391,448	-
Research Foundation of State University of New York (SUNY) - Aging Research	79368-1142422/2	93.866	472,920	-
Regents of the University of California - Aging Research	1558 G WA348	93.866	620,764	-
			<u>4,739,589</u>	<u>5,868</u>
Jaeb Center for Health Research - Vision Research	U10EY11751	93.867	1,298	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Vision Research	0255-C691-4609	93.867	6,321	-
University of Alabama at Birmingham - Vision Research	000527995-SC001	93.867	57,251	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Vision Research	0255-C691-4609	93.867	61,041	-
University of Maryland - Vision Research	92379-Z0300201	93.867	110,780	-
Duke University - Vision Research	A034048	93.867	128,751	-
University of Nebraska Medical Center - Vision Research	34-5270-2024-023	93.867	162,740	-
			<u>528,182</u>	<u>-</u>
University of Hawaii - Medical Library Assistance	KA1108	93.879	(1)	-
Rutgers, the State University of New Jersey - Medical Library Assistance	2021	93.879	13,029	-
Temple University - Medical Library Assistance	265483-YALE	93.879	51,484	-
			<u>64,512</u>	<u>-</u>
University of California, Davis - Grants for Primary Care Training and Enhancement	A17-0284-S004	93.884	9,967	-
			<u>9,967</u>	<u>-</u>
University of Texas Medical Branch - International Research and Research Training	19-84028-04	93.989	(286)	-
University of Texas Medical Branch - International Research and Research Training	21-85448-06	93.989	4,311	-
Kathmandu University - International Research and Research Training	PI - Donna Spiegelman	93.989	25,208	-
Rutgers (the State University of New Jersey) - International Research and Research Training	1685	93.989	35,375	-
University of California, Berkeley - International Research and Research Training	00009519	93.989	219,813	-
			<u>284,421</u>	<u>-</u>
Subtotal - Department of Health & Human Services - Pass Through			<u>53,253,225</u>	<u>194,965</u>
Subtotal - Department of Health & Human Services			602,304,631	78,426,356

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 Homeland Security</u>				
Direct:				
Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection	2016-DN-077-ARI107/16DNARI00024-03-00	97.077	\$ 241,092	\$ -
			241,092	-
	Subtotal - Department of Homeland Security - Direct		241,092	-
	Subtotal - Department of Homeland Security		241,092	-
<u>Department of Housing and Urban Development</u>				
Pass Through:				
University of Tulsa - Healthy Homes Technical Studies Grants	14-2-12-148316-66019	14.906	40,361	-
	Subtotal - Department of Housing and Urban Development - Pass Through		40,361	-
	Subtotal - Department of Housing and Urban Development		40,361	-
<u>Department of Justice</u>				
Direct:				
OVW Research and Evaluation Program	2018-SI-AX-0005	16.026	11,079	-
			11,079	-
National Institute of Justice Research, Evaluation, and Development Project Grants	2013-ZD-CX-0001	16.560	7,558	28,211
			7,558	28,211
	Subtotal - Department of Justice - Direct		18,637	28,211
Pass-through:				
University of Pittsburgh - National Institute of Justice Research, Evaluation, and Development Project Grants	CNVA00059288 (413841-2)	16.560	482,969	-
			482,969	-
	Subtotal - Department of Justice - Pass Through		482,969	-
	Subtotal - Department of Justice		501,606	28,211
<u>Department of the Interior</u>				
Direct:				
Water Desalination Research and Development	R21AC10502-00	15.506	29,670	-
			29,670	-
	Subtotal - Department of the Interior- Direct		29,670	-
	Subtotal - Department of the Interior		29,670	-
<u>Department of State</u>				
Direct:				
Public Diplomacy Programs	SJO10021GR3024	19.040	26,670	-
Public Diplomacy Programs	SSU40020GR0028	19.040	40,030	-
			66,700	-
Criminal Justice Systems	SINLEC17CA2007	19.703	1,010,567	906,533
			1,010,567	906,533
	Subtotal - Department of State - Direct		1,077,267	906,533
	Subtotal - Department of State		1,077,267	906,533

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 Transportation</u>				
Direct:				
Department of Transportation	DTNH2216C00022	20.RD	\$ 21,488	\$ 3,788
	Subtotal - Department of Transportation - Direct		21,488	3,788
	Subtotal - Department of Transportation		21,488	3,788
<u>Environmental Protection Agency</u>				
Direct:				
Environmental Protection Agency	4987-RFA20-1A/21-10	66.	14,098	-
			14,098	-
Science To Achieve Results (STAR) Research Program	RD83587101	66.509	1,106,551	503,110
			1,106,551	503,110
Office of Research and Development Consolidated Research/Training/Fellowships	83924901	66.511	65,128	703
			65,128	703
P3 Award: National Student Design Competition for Sustainability	84016501	66.516	6,372	-
			6,372	-
	Subtotal - Environmental Protection Agency - Direct		1,192,149	503,813
Pass-through:				
RTI International - Environmental Protection Agency	12-312-0217117-66587L	66.RD	51,676	-
			51,676	-
	Subtotal - Environmental Protection Agency - Pass Through		51,676	-
	Subtotal - Environmental Protection Agency		1,243,825	503,813
<u>National Aeronautics & Space Administration</u>				
Direct:				
National Aeronautics & Space Administration	HST-GO-15695.001	43.RD	949	-
National Aeronautics & Space Administration	HST-GO-15852.001-A	43.RD	3,621	-
National Aeronautics & Space Administration	HST-GO-16284.004-A	43.RD	17,380	-
National Aeronautics & Space Administration	HST-GO-15851.001-A	43.RD	22,160	-
National Aeronautics & Space Administration	#1665641	43.RD	23,430	-
National Aeronautics & Space Administration	HST-GO-16259.004-A	43.RD	72,417	-
National Aeronautics & Space Administration	80NSSC20K0511	43.RD	136,403	-
			276,360	-
Science	80NSSC22K0793	43.001	307	-
Science	NNX17AI74G	43.001	5,592	5,592
Science	GOO-21039A	43.001	6,475	-
Science	80NSSC18K1396	43.001	10,965	-
Science	80NSSC18K0418	43.001	24,862	14,812
Science	80NSSC21K2041	43.001	34,527	-
Science	80NSSC20K1634	43.001	39,360	-
Science	80NSSC20K1538	43.001	44,203	-
Science	80NSSC18K1404	43.001	45,412	-
Science	80NSSC18K0524	43.001	58,649	-
Science	80NSSC21K1509	43.001	63,155	-
Science	80NSSC21K1095	43.001	64,238	-
Science	80NSSC21K0558	43.001	88,735	-
Science	80NSSC19K0638	43.001	103,992	-
Science	80NSSC20K0483	43.001	106,103	-
Science	80NSSC21K1034	43.001	120,582	-
Science	80NSSC20K0202	43.001	368,441	101,516
			1,185,598	121,920
Space Operations	80NSSC19K1634	43.007	94,769	-
Space Operations	NNX17AD49A	43.007	123,422	-
			218,191	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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 & Space Administration</u>				
Direct: (Continued)				
Space Technology	80NSSC17K0164	43.012	\$ 1,406	\$ -
Space Technology	80NSSC20M0098	43.012	36,494	-
Space Technology	80NSSC18K1160	43.012	50,815	-
Space Technology	80NSSC19K1131	43.012	59,960	-
Space Technology	80NSSC21K1269	43.012	60,262	-
Space Technology	80NSSC17K0553	43.012	167,110	-
			<u>376,047</u>	<u>-</u>
Subtotal - National Aeronautics & Space Administration - Direct			<u>2,056,196</u>	<u>121,920</u>
<u>National Aeronautics & Space Administration</u>				
Pass-through:				
InnoSense, LLC - National Aeronautics & Space Administration	80NSSC20C0318	43.RD	18	-
Johns Hopkins University - National Aeronautics & Space Administration	FPR/JJM-05-0198	43.RD	15,674	-
Arizona State University - National Aeronautics & Space Administration	17-252	43.RD	66,826	-
Space Telescope Science Institute (STSCI)/NASA - National Aeronautics & Space Administration	HST-HF2-51486.001-A	43.RD	93,924	-
			<u>176,442</u>	<u>-</u>
Jet Propulsion Laboratory (JPL)/NASA - Science	RSA 2384	43.001	1,679	-
Massachusetts Institute of Technology (MIT) - Science	S5044 - PO 454253	43.001	6,475	-
University of California, Riverside - Science	S-001143	43.001	10,894	-
San Francisco State University - Science	S21-0001	43.001	13,151	-
University of Washington, Seattle - Science	UWSC10433	43.001	24,982	-
Space Science Institute - Science	000994	43.001	33,312	-
Rensselaer Polytechnic Institute - Science	A19-0117-S001	43.001	68,450	-
University of California, Riverside - Science	S-001433	43.001	182,955	-
			<u>341,898</u>	<u>-</u>
University of Hartford - Education	1850	43.008	71	-
University of Hartford - Education	P-1788	43.008	218	-
University of Hartford - Education	P-1559	43.008	500	-
University of Hartford - Education	P-1698	43.008	778	-
University of Hartford - Education	P-1719	43.008	979	-
University of Hartford - Education	P-1789	43.008	999	-
University of Hartford - Education	P-1780	43.008	1,000	-
University of Hartford - Education	P-1786	43.008	1,000	-
University of Hartford - Education	P-1561	43.008	1,511	-
University of Hartford - Education	P-1776	43.008	2,667	-
University of Hartford - Education	P-1693	43.008	4,500	-
University of Hartford - Education	P-1635	43.008	5,048	-
University of Hartford - Education	P-1725	43.008	7,300	-
			<u>26,571</u>	<u>-</u>
Subtotal - National Aeronautics & Space Administration - Pass Through			<u>544,911</u>	<u>-</u>
Subtotal - National Aeronautics & Space Administration			2,601,107	121,920
<u>National Science Foundation</u>				
Direct:				
Engineering Grants	ECCS-1941316	47.041	(2,513)	-
Engineering Grants	CMMI-1812948	47.041	987	-
Engineering Grants	CBET-1603806	47.041	2,568	-
Engineering Grants	1804077	47.041	5,935	-
Engineering Grants	IIS- 2143109	47.041	11,123	-
Engineering Grants	CBET-1603806	47.041	14,771	-
Engineering Grants	CMMI-2024670	47.041	20,897	-
Engineering Grants	ECCS-1809099	47.041	24,126	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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)				
Engineering Grants	2132823	47.041	\$ 33,440	\$ -
Engineering Grants	2129963	47.041	42,207	40,583
Engineering Grants	CBET-2120418	47.041	58,632	-
Engineering Grants	CBET-2011362	47.041	60,488	-
Engineering Grants	CBET-2110138	47.041	69,389	-
Engineering Grants	CBET-1936183	47.041	70,517	-
Engineering Grants	CBET-1749742	47.041	70,989	-
Engineering Grants	1853150	47.041	71,477	-
Engineering Grants	EFMA-1640959	47.041	74,658	30,180
Engineering Grants	CBET-2002782	47.041	81,877	-
Engineering Grants	1953959	47.041	81,907	-
Engineering Grants	CBET-1955793	47.041	96,331	-
Engineering Grants	CMMI-1653160	47.041	101,415	-
Engineering Grants	CBET-2038439	47.041	103,067	2,739
Engineering Grants	CBET2028351	47.041	106,031	-
Engineering Grants	ECCS-1917879	47.041	110,289	-
Engineering Grants	CBET-2001219	47.041	124,871	-
Engineering Grants	CBET-2024473	47.041	127,077	-
Engineering Grants	CBET-1751971	47.041	137,232	-
Engineering Grants	CBET-2055416	47.041	167,672	-
Engineering Grants	CMMI-2046120	47.041	170,519	-
Engineering Grants	CMMI-1901613	47.041	184,462	-
Engineering Grants	ECCS-1930601	47.041	227,785	-
Engineering Grants	CMMI-1901959	47.041	232,001	-
Engineering Grants	CBET-1903342	47.041	254,774	-
Engineering Grants	CMMI-2118988	47.041	312,543	-
Engineering Grants	CMMI-2029756	47.041	384,688	189,198
Engineering Grants	1830870	47.041	409,769	177,376
Engineering Grants	CMMI-1928448	47.041	425,978	-
Engineering Grants	1832795	47.041	433,381	259,294
Engineering Grants	1830904	47.041	497,476	-
			<u>5,400,836</u>	<u>699,370</u>
Mathematical and Physical Sciences	1811740	47.049	(100)	-
Mathematical and Physical Sciences	CHE-1740549	47.049	1,403	-
Mathematical and Physical Sciences	DMS-2129023	47.049	3,858	-
Mathematical and Physical Sciences	CHE1464957	47.049	6,002	-
Mathematical and Physical Sciences	2110303	47.049	6,202	-
Mathematical and Physical Sciences	PHY-1827906	47.049	6,242	-
Mathematical and Physical Sciences	1828190	47.049	6,876	-
Mathematical and Physical Sciences	DMS-1916246	47.049	9,506	-
Mathematical and Physical Sciences	1849892	47.049	12,592	-
Mathematical and Physical Sciences	2140196	47.049	16,417	-
Mathematical and Physical Sciences	2006911	47.049	20,366	-
Mathematical and Physical Sciences	DMR-1838463	47.049	21,894	-
Mathematical and Physical Sciences	DMS-1723128	47.049	26,136	-
Mathematical and Physical Sciences	DMS-1951394	47.049	26,242	-

The accompanying notes are an integral part of this schedule

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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	DMS-2146997	47.049	\$ 26,968	\$ -
Mathematical and Physical Sciences	CHE-2108690	47.049	28,192	-
Mathematical and Physical Sciences	DMS-1916251	47.049	30,643	-
Mathematical and Physical Sciences	1955237	47.049	31,100	-
Mathematical and Physical Sciences	1954453	47.049	31,264	-
COVID-19 Mathematical and Physical Sciences	DMR 2030545	47.049	36,559	-
Mathematical and Physical Sciences	DMS-2200713	47.049	39,622	-
Mathematical and Physical Sciences	DMS-2000533	47.049	48,438	-
Mathematical and Physical Sciences	2112711	47.049	48,961	-
Mathematical and Physical Sciences	DMR-1724923	47.049	58,936	-
Mathematical and Physical Sciences	1743235	47.049	62,683	-
Mathematical and Physical Sciences	AST-1909101	47.049	62,724	-
Mathematical and Physical Sciences	AST-1715512	47.049	63,572	-
Mathematical and Physical Sciences	DMR-1905621	47.049	66,138	-
Mathematical and Physical Sciences	2132343-DMR	47.049	67,637	-
Mathematical and Physical Sciences	DMS-2137909	47.049	76,118	-
Mathematical and Physical Sciences	DMS-1900101	47.049	78,716	-
Mathematical and Physical Sciences	DMS-2054841	47.049	78,997	-
Mathematical and Physical Sciences	1953708	47.049	79,179	-
Mathematical and Physical Sciences	DMR-2114081	47.049	80,284	-
Mathematical and Physical Sciences	DMS-2050398	47.049	81,185	-
Mathematical and Physical Sciences	DMR-1846109	47.049	81,717	-
Mathematical and Physical Sciences	DMS-2141529	47.049	82,008	-
Mathematical and Physical Sciences	CHE-1900119	47.049	82,746	-
Mathematical and Physical Sciences	DMS-1916198	47.049	84,151	-
Mathematical and Physical Sciences	CHE-1651717	47.049	89,441	-
Mathematical and Physical Sciences	DMS-2005328	47.049	90,710	-
Mathematical and Physical Sciences	DMS-1900743	47.049	92,316	-
Mathematical and Physical Sciences	CHE-1900160	47.049	92,479	-
Mathematical and Physical Sciences	CHE-2108681	47.049	93,351	-
Mathematical and Physical Sciences	2042888	47.049	94,114	-
Mathematical and Physical Sciences	2002275	47.049	94,416	-
Mathematical and Physical Sciences	DMS-2001139	47.049	101,151	-
Mathematical and Physical Sciences	2012406	47.049	101,272	-
Mathematical and Physical Sciences	DMS-2134315	47.049	102,355	-
Mathematical and Physical Sciences	1905465	47.049	103,588	-
Mathematical and Physical Sciences	1945324	47.049	103,828	-
Mathematical and Physical Sciences	PHY-2102789	47.049	106,273	-
Mathematical and Physical Sciences	CHE-1653793	47.049	106,519	-
Mathematical and Physical Sciences	DMS-2112918	47.049	107,742	-
Mathematical and Physical Sciences	PHY-1653232	47.049	108,257	-
Mathematical and Physical Sciences	DMS-1952751	47.049	109,818	-
Mathematical and Physical Sciences	AST 1714710	47.049	115,524	-
Mathematical and Physical Sciences	CHE-1808422	47.049	117,891	-
Mathematical and Physical Sciences	2034345	47.049	118,050	60,341
Mathematical and Physical Sciences	DMS-1918925	47.049	118,578	-
Mathematical and Physical Sciences	DMR-2103730	47.049	123,374	-
Mathematical and Physical Sciences	1954319	47.049	124,020	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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	2015397	47.049	\$ 129,909	\$ -
Mathematical and Physical Sciences	CHE-1752847	47.049	130,217	-
Mathematical and Physical Sciences	1954348	47.049	130,674	-
Mathematical and Physical Sciences	CHE-1845184	47.049	133,536	-
Mathematical and Physical Sciences	AST-1751763	47.049	138,193	-
Mathematical and Physical Sciences	CHE-1904813	47.049	140,151	-
Mathematical and Physical Sciences	AST-2009528	47.049	145,209	-
Mathematical and Physical Sciences	DMR-2003875	47.049	145,649	-
Mathematical and Physical Sciences	DMR-2104316	47.049	151,298	-
Mathematical and Physical Sciences	1913742	47.049	158,908	-
Mathematical and Physical Sciences	CHE-1905169	47.049	160,066	-
Mathematical and Physical Sciences	1954254	47.049	161,419	-
Mathematical and Physical Sciences	AST-2108341	47.049	189,854	-
Mathematical and Physical Sciences	OMA-2137740	47.049	190,408	104,774
Mathematical and Physical Sciences	DMS-2005312	47.049	231,917	-
Mathematical and Physical Sciences	2124511	47.049	248,420	129,702
Mathematical and Physical Sciences	2011357	47.049	259,322	-
			<u>6,932,391</u>	<u>294,817</u>
Geosciences	AGS-1253222	47.050	(27)	(27)
Geosciences	EAR-1764271	47.050	463	-
Geosciences	EAR-1650313	47.050	2,108	-
Geosciences	AGS-2131084	47.050	7,822	-
Geosciences	EAR-2208229	47.050	11,580	-
Geosciences	2102853	47.050	13,343	-
Geosciences	EAR-1645057	47.050	19,121	19,121
Geosciences	2024574	47.050	21,047	-
Geosciences	AGS-1903528	47.050	22,222	-
Geosciences	OPP-1741841	47.050	25,959	-
Geosciences	2140281	47.050	39,121	-
Geosciences	Long- 1820815	47.050	40,819	-
Geosciences	EAR-1753553	47.050	43,362	-
Geosciences	EAR-2026917	47.050	45,104	-
Geosciences	AGS-1764126	47.050	45,795	8,583
Geosciences	1818792	47.050	59,570	-
Geosciences	2026843	47.050	70,713	-
Geosciences	2102777	47.050	75,556	-
Geosciences	OCE-1829835	47.050	77,556	-
COVID-19 Geosciences	EAR-1926421	47.050	79,765	-
Geosciences	2053096	47.050	80,952	-
Geosciences	EAR-1800923	47.050	101,308	-
Geosciences	OPP-1737687	47.050	111,540	-
Geosciences	1829224	47.050	121,543	6,036
Geosciences	EAR-1929597	47.050	125,067	-
Geosciences	2001339	47.050	129,322	-
Geosciences	1753916	47.050	129,597	-
Geosciences	1933630	47.050	137,605	-
Geosciences	1953549	47.050	154,370	-
Geosciences	ICER-1824770	47.050	188,827	160,943
Geosciences	2021319	47.050	258,619	-
			<u>2,239,749</u>	<u>194,656</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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)				
Computer and Information Science and Engineering	CCF-1521523	47.070	\$ 83	\$ -
Computer and Information Science and Engineering	CCF-2004561	47.070	180	-
Computer and Information Science and Engineering	CNS-1651945	47.070	1,000	-
Computer and Information Science and Engineering	CNS-2128530	47.070	12,035	-
Computer and Information Science and Engineering	CCF-1715387	47.070	13,411	-
Computer and Information Science and Engineering	2147946	47.070	14,188	-
Computer and Information Science and Engineering	2047856	47.070	14,306	-
Computer and Information Science and Engineering	IIS-1565310	47.070	15,291	-
Computer and Information Science and Engineering	CCF-1900507	47.070	22,773	-
Computer and Information Science and Engineering	CCF-1562041	47.070	29,229	-
Computer and Information Science and Engineering	CCF-1947826	47.070	33,020	-
Computer and Information Science and Engineering	IIS 1734190	47.070	33,584	-
Computer and Information Science and Engineering	CNS-2132573	47.070	33,979	-
Computer and Information Science and Engineering	CNS-2054957	47.070	43,383	-
Computer and Information Science and Engineering	1815115	47.070	48,267	-
Computer and Information Science and Engineering	CNS-1813797	47.070	54,189	-
Computer and Information Science and Engineering	CCF-2131466	47.070	54,623	-
Computer and Information Science and Engineering	IIS-1813651	47.070	63,265	-
Computer and Information Science and Engineering	CCF-1521523	47.070	66,558	-
Computer and Information Science and Engineering	CNS-1945541	47.070	67,779	-
Computer and Information Science and Engineering	CCF-2131356	47.070	71,051	-
Computer and Information Science and Engineering	CCF-2131476	47.070	77,644	-
Computer and Information Science and Engineering	2045951-IIS	47.070	78,359	-
Computer and Information Science and Engineering	CCF-1839308	47.070	85,215	-
Computer and Information Science and Engineering	CNS-1901901	47.070	88,940	-
Computer and Information Science and Engineering	IIS-1900681	47.070	89,580	-
Computer and Information Science and Engineering	1918784	47.070	92,277	-
Computer and Information Science and Engineering	CCF-1763399	47.070	92,888	-
Computer and Information Science and Engineering	CNS-1651945	47.070	94,678	-
Computer and Information Science and Engineering	CNS-2047220	47.070	94,916	-
Computer and Information Science and Engineering	IIS-1845032	47.070	96,713	-
Computer and Information Science and Engineering	CCF-1908347	47.070	108,746	-
Computer and Information Science and Engineering	CNS-1955204	47.070	109,969	-
Computer and Information Science and Engineering	CNS-2130257	47.070	113,861	-
Computer and Information Science and Engineering	CCF-1651588	47.070	114,006	-
Computer and Information Science and Engineering	IIS-1924802	47.070	128,945	-
Computer and Information Science and Engineering	IIS-1822650	47.070	130,716	-
Computer and Information Science and Engineering	CCF-2118851	47.070	131,471	-
Computer and Information Science and Engineering	IIS-1637647	47.070	134,917	-
Computer and Information Science and Engineering	CNS-1565208	47.070	138,075	-
Computer and Information Science and Engineering	IIS-2007283	47.070	139,173	-
Computer and Information Science and Engineering	CCF-1942583	47.070	167,802	-
Computer and Information Science and Engineering	CCF-2019285	47.070	169,226	81,839
Computer and Information Science and Engineering	CCF-2106845	47.070	175,930	-
Computer and Information Science and Engineering	CNS-1815676	47.070	187,392	-
Computer and Information Science and Engineering	IIS-2106690	47.070	187,517	-
Computer and Information Science and Engineering	CCF-2019529	47.070	191,375	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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)				
Computer and Information Science and Engineering	IIS-1955225	47.070	\$ 213,462	\$ -
Computer and Information Science and Engineering	OAC-2018873	47.070	228,641	131,338
Computer and Information Science and Engineering	IIS-1954591	47.070	236,448	-
Computer and Information Science and Engineering	CNS-2016422	47.070	251,400	-
			<u>4,842,476</u>	<u>213,177</u>
Biological Sciences	DEB-1558568	47.074	(26,470)	-
Biological Sciences	MCB-1615415	47.074	2,337	-
Biological Sciences	DEB-1754012	47.074	5,528	-
Biological Sciences	DBI-1701769	47.074	9,924	-
Biological Sciences	2128034	47.074	10,617	-
Biological Sciences	2223675	47.074	12,575	-
Biological Sciences	DBI-1756217	47.074	19,861	-
Biological Sciences	1950498	47.074	20,671	-
Biological Sciences	DBI-1802270	47.074	24,257	23,117
Biological Sciences	DBI-2027228	47.074	25,104	-
Biological Sciences	IOS-2151063	47.074	25,980	-
COVID-19 Biological Sciences	DEB-2031204	47.074	28,603	28,603
COVID-19 Biological Sciences	DEB-214720	47.074	31,932	-
COVID-19 Biological Sciences	DBI-1759959	47.074	33,134	-
COVID-19 Biological Sciences	2032073	47.074	33,872	-
COVID-19 Biological Sciences	IOS-1923321	47.074	34,548	-
COVID-19 Biological Sciences	DBI-00201547	47.074	37,127	35,634
COVID-19 Biological Sciences	DBI-1935771	47.074	38,328	-
COVID-19 Biological Sciences	IOS-1856452	47.074	65,142	-
COVID-19 Biological Sciences	DEB-2054569	47.074	82,524	-
COVID-19 Biological Sciences	MCB-2038000	47.074	86,795	-
COVID-19 Biological Sciences	DEB-2102750	47.074	88,306	-
COVID-19 Biological Sciences	DEB-2017987	47.074	88,710	-
COVID-19 Biological Sciences	DEB-1929533	47.074	90,450	-
COVID-19 Biological Sciences	DBI- 2104149	47.074	93,494	4,136
COVID-19 Biological Sciences	IOS - 2031806	47.074	94,144	-
COVID-19 Biological Sciences	MCB-1749662	47.074	94,422	-
COVID-19 Biological Sciences	DBI-2021988	47.074	96,238	-
COVID-19 Biological Sciences	2046868	47.074	99,680	-
COVID-19 Biological Sciences	DBI-2050777	47.074	100,477	-
COVID-19 Biological Sciences	2140322	47.074	113,469	-
COVID-19 Biological Sciences	DEB-1845403	47.074	154,982	-
COVID-19 Biological Sciences	EF-1935120	47.074	161,306	-
COVID-19 Biological Sciences	DEB-1856279	47.074	172,317	139,250
COVID-19 Biological Sciences	1840243	47.074	201,334	131,803
COVID-19 Biological Sciences	IOS-1916137	47.074	203,031	-
COVID-19 Biological Sciences	DEB-1753727	47.074	206,313	38,153

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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)				
Biological Sciences	DBI-1660648	47.074	\$ 206,564	\$ 3,830
Biological Sciences	DEB-1926482	47.074	206,608	41,691
Biological Sciences	IOS-1754286	47.074	207,375	-
Biological Sciences	1846010	47.074	212,632	-
Biological Sciences	EF-1802453	47.074	214,238	-
Biological Sciences	DEB2011884	47.074	218,889	-
Biological Sciences	DEB-2039476	47.074	234,345	-
Biological Sciences	IOS-1953903	47.074	243,637	-
Biological Sciences	IOS-1754662	47.074	248,613	-
Biological Sciences	IOS-1923127	47.074	248,932	-
Biological Sciences	2114084	47.074	293,178	-
Biological Sciences	IOS-2015622	47.074	656,411	-
Biological Sciences	DBI-2015276	47.074	1,509,076	613,149
			<u>7,361,560</u>	<u>1,059,366</u>
Social, Behavioral, and Economic Sciences	BCS-2051220	47.075	39	-
Social, Behavioral, and Economic Sciences	BCS-2117557	47.075	396	-
Social, Behavioral, and Economic Sciences	BCS-2023376	47.075	595	-
Social, Behavioral, and Economic Sciences	BCS-1928750	47.075	804	-
Social, Behavioral, and Economic Sciences	BCS-2017837	47.075	1,686	-
Social, Behavioral, and Economic Sciences	BCS-2138007	47.075	3,375	-
Social, Behavioral, and Economic Sciences	BCS-1918769	47.075	3,379	-
Social, Behavioral, and Economic Sciences	SES-1656313	47.075	4,222	-
Social, Behavioral, and Economic Sciences	2116661	47.075	4,361	-
Social, Behavioral, and Economic Sciences	1757186	47.075	5,738	-
Social, Behavioral, and Economic Sciences	1824324	47.075	9,304	-
Social, Behavioral, and Economic Sciences	2001261	47.075	11,558	-
Social, Behavioral, and Economic Sciences	BCS-2116164	47.075	11,988	-
Social, Behavioral, and Economic Sciences	SES-1917993	47.075	13,394	-
Social, Behavioral, and Economic Sciences	1759158	47.075	15,830	-
Social, Behavioral, and Economic Sciences	BCS-2121697	47.075	17,627	-
Social, Behavioral, and Economic Sciences	SES-2117288	47.075	23,923	-
Social, Behavioral, and Economic Sciences	SMS-1659085	47.075	28,388	-
Social, Behavioral, and Economic Sciences	2123026	47.075	29,962	-
Social, Behavioral, and Economic Sciences	SES-1850860	47.075	45,560	-
Social, Behavioral, and Economic Sciences	BCS-2049090	47.075	46,914	19,185
Social, Behavioral, and Economic Sciences	SES-1919076	47.075	47,335	17,050
Social, Behavioral, and Economic Sciences	SES-2143098	47.075	49,928	-
Social, Behavioral, and Economic Sciences	SES-1948336	47.075	53,935	-
Social, Behavioral, and Economic Sciences	SMA-1659085	47.075	57,828	-
Social, Behavioral, and Economic Sciences	BCS 2024335	47.075	58,535	-
Social, Behavioral, and Economic Sciences	SES-1949374	47.075	64,543	-
Social, Behavioral, and Economic Sciences	SES-1758262	47.075	81,357	-
Social, Behavioral, and Economic Sciences	BCS-1941651	47.075	91,633	-
Social, Behavioral, and Economic Sciences	SES-1851524	47.075	92,157	-
Social, Behavioral, and Economic Sciences	BCS-1919321	47.075	92,897	-
Social, Behavioral, and Economic Sciences	205039	47.075	117,853	-
Social, Behavioral, and Economic Sciences	BCS-2045778	47.075	120,090	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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)				
Social, Behavioral, and Economic Sciences	SES-1954016	47.075	\$ 120,191	\$ 35,281
Social, Behavioral, and Economic Sciences	1751483	47.075	120,513	-
Social, Behavioral, and Economic Sciences	1823763	47.075	135,700	72,501
Social, Behavioral, and Economic Sciences	BCS-1848954	47.075	181,855	-
Social, Behavioral, and Economic Sciences	BCS-1955653	47.075	184,778	-
Social, Behavioral, and Economic Sciences	SES-1949522	47.075	235,978	214,432
Social, Behavioral, and Economic Sciences	BCS-1829439	47.075	301,636	-
			<u>2,487,785</u>	<u>358,449</u>
COVID-19 Education and Human Resources	DUE-2027658	47.076	44,451	-
Education and Human Resources	2005812	47.076	49,055	-
Education and Human Resources	DUE-1856150	47.076	54,456	-
Education and Human Resources	DUE-2126613	47.076	93,746	-
Education and Human Resources	DRL-1561143	47.076	103,074	-
Education and Human Resources	DUE-2000417	47.076	139,301	-
Education and Human Resources	DGE-2139841	47.076	1,155,233	-
Education and Human Resources	DGE-1752134	47.076	3,449,942	-
			<u>5,089,258</u>	<u>-</u>
Polar Programs	OPP-2113399	47.078	19,801	-
Polar Programs	1950077	47.078	153,056	-
			<u>172,857</u>	<u>-</u>
Office of International Science and Engineering	OISE-1952072	47.079	44,781	-
			<u>44,781</u>	<u>-</u>
Office of Integrative Activities	IOS-1934860	47.083	19,267	-
			<u>19,267</u>	<u>-</u>
	Subtotal - National Science Foundation - Direct		<u>34,590,960</u>	<u>2,819,835</u>
Pass-through:				
COVID-19 Sonata Scientific - National Science of Foundation	Sonata- Murray	47.RD	180	-
Computing Research Association - National Science of Foundation	2021CIF-Yale-32	47.RD	102,253	-
Computing Research Association - National Science of Foundation	2021CIF-Yale-31	47.RD	109,173	-
			<u>211,586</u>	<u>-</u>
Environmental Law Institute - Engineering Grants	LIFSET	47.041	2,462	-
American Society for Engineering Education - Engineering Grants	769-2071	47.041	60,265	-
Abalone Bio, Inc. - Engineering Grants	Wilen	47.041	65,454	-
Ohio State University - Engineering Grants	60061666	47.041	91,102	-
University of Utah - Engineering Grants	10058563	47.041	101,068	-
North Carolina State University - Engineering Grants	2017-1718-01	47.041	107,479	-
University of Arizona - Engineering Grants	581207	47.041	439,746	-
Rice University - Engineering Grants	R3F80C	47.041	1,125,504	-
			<u>1,993,080</u>	<u>-</u>
National Radio Astronomy Observatory (NRAO)/NSF - Mathematical and Physical Sciences	ARCE	47.049	421	-
University of Colorado, Denver - Mathematical and Physical Sciences	1554887/PO 1000779642	47.049	9,661	-
National Radio Astronomy Observatory (NRAO)/NSF - Mathematical and Physical Sciences	1519126	47.049	9,969	-
Drexel University - Mathematical and Physical Sciences	920104	47.049	13,718	-
University of Maryland - Mathematical and Physical Sciences	105667-Z3846201	47.049	29,622	-
University of Pennsylvania - Mathematical and Physical Sciences	581708	47.049	67,758	-
Regents of the University of Minnesota - Mathematical and Physical Sciences	P007533601	47.049	109,056	-
University of California, San Diego - Mathematical and Physical Sciences	109242238	47.049	192,354	-
University of California, Berkeley - Mathematical and Physical Sciences	00010388-2002182	47.049	270,116	-
			<u>702,675</u>	<u>-</u>

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>				
Pass-through: (Continued)				
The Trustees of Columbia University in the City of New York - Geosciences	64B(GG009393-04)	47.050	\$ 3,391	\$ -
University of Massachusetts, Amherst - Geosciences	22-016550-A	47.050	3,822	-
Georgia Institute of Technology - Geosciences	AWD-002863-G2	47.050	36,181	-
			43,394	-
COVID-19 The Trustees of Columbia University in the City of New York - Computer and Information Science and Engineering	GG014586	47.070	4,479	-
Columbia University - Computer and Information Science and Engineering	13(GG014586-02)	47.070	7,731	-
US Ignite - Computer and Information Science and Engineering	CNS-1719547	47.070	9,800	-
Princeton University - Computer and Information Science and Engineering	SUB0000479	47.070	32,752	-
US Ignite - Computer and Information Science and Engineering	CNS-1827940	47.070	41,178	-
Rice University - Computer and Information Science and Engineering	R3H299	47.070	105,843	-
Computing Research Association - Computer and Information Science and Engineering	CIF2020-YU-21	47.070	130,410	-
University of California, San Diego - Computer and Information Science and Engineering	KR 704616	47.070	148,026	-
Duke University - Computer and Information Science and Engineering	333-2826	47.070	271,414	-
			751,633	-
COVID-19 Michigan State University - Biological Sciences	RC062075YU	47.074	1,343	-
Florida State University - Biological Sciences	R000002664	47.074	12,883	-
University of Tennessee - Biological Sciences	A21-0345-S004	47.074	13,045	-
Delaware Museum of Natural History - Biological Sciences	2001523-01	47.074	41,509	-
University of Florida - Biological Sciences	SUB00002457	47.074	42,019	-
			110,799	-
University of Chicago - Social, Behavioral, and Economic Sciences	AWD067826-01-PR (SUB00000159)	47.075	1,797	-
National Bureau of Economic Research - Social, Behavioral, and Economic Sciences	36335.00.00.00.7700	47.075	38,079	-
			39,876	-
University of Massachusetts - Education and Human Resources	18-009960 A	47.076	3,628	-
University of Wisconsin-Madison - Education and Human Resources	782K526	47.076	6,989	-
			10,617	-
COVID-19 University of Wisconsin-Madison - Office of International Science and Engineering	0000000760	47.079	8,372	-
			8,372	-
University of Iowa - Office of Integrative Activities	S02070-01	47.083	3,247	-
Vanderbilt University - Office of Integrative Activities	61734 /UNIV61734	47.083	145,311	-
			148,558	-
	Subtotal - National Science Foundation - Pass Through		4,020,590	-
	Subtotal - National Science Foundation		38,611,550	2,819,835
<u>U.S. Agency for International Development</u>				
Direct:				
Agency for International Development	7200AA21FA00016	98.RD	24,819	-
Agency for International Development	7200AA21CA00010	98.RD	1,481,023	778,695
			1,505,842	778,695
	Subtotal - U.S. Agency for International Development - Direct		1,505,842	778,695
Pass - Through:				
Family Health International (FHI 360) - USAID Foreign Assistance for Programs Overseas	102137.002.003.001.007	98.001	28,878	-
University of Colorado, Denver - USAID Foreign Assistance for Programs Overseas	1559392	98.001	48,155	-
The Human Resources for Health - USAID Foreign Assistance for Programs Overseas	HRH2030-YSPH-FAA-2021-001	98.001	126,078	-
Family Health International (FHI 360) - USAID Foreign Assistance for Programs Overseas	21002085	98.001	306,067	-
			509,178	-
	Subtotal - U.S. Agency for International Development - Pass Through		509,178	-
	Subtotal - U.S. Agency for International Development		2,015,020	778,695

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>Social Security Administration</u>				
Pass - Through:				
University of Michigan - Social Security Research and Demonstration	SUBK00014587	96.007	\$ 17,397	\$ -
			17,397	-
	Subtotal - Social Security Administration - Pass Through		17,397	-
	Subtotal - Social Security Administration		17,397	-
<u>Veterans Affairs</u>				
Direct:				
Department Of Veterans' Affairs	36C24E22P0001	64.RD	7,170	-
	Subtotal - Veterans Affairs - Direct		7,170	-
	Subtotal - Veterans Affairs		7,170	-
	Total Research & Development Cluster		704,755,636	86,156,862
II. Student Financial Assistance Cluster				
<u>Department of Education</u>				
Federal Supplemental Education Opportunity Grant Program				
Direct:				
Federal Supplemental Educational Opportunity Grants	P007A200809	84.007	4,377	-
Federal Supplemental Educational Opportunity Grants	P007A210809	84.007	1,483,457	-
			1,487,834	-
	Subtotal - Federal Supplemental Education Opportunity Grant Program		1,487,834	-
Federal Work Study Program				
Direct:				
Federal Work-Study Program	P033A210809	84.033	1,790,329	-
			1,790,329	-
	Subtotal - Federal Work Study Program		1,790,329	-
Federal Perkins Loan Program				
Outstanding loans as of July 1, 2021		84.038	10,404,593	-
			10,404,593	-
	Subtotal - Federal Perkins Loan Program		10,404,593	-
Federal Pell Grant Program				
Direct:				
Federal Pell Grant Program	P063P201232	84.063	(48,281)	-
Federal Pell Grant Program	P063P211232	84.063	6,203,629	-
			6,155,348	-
	Subtotal - Federal Pell Grant Program		6,155,348	-
Federal Direct Student Loan Program				
Direct:				
Federal Direct Student Loan		84.268	82,385,294	-
			82,385,294	-
	Subtotal - Federal Direct Student Loan Program		82,385,294	-
	Subtotal - Department of Education		102,223,398	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>
II. Student Financial Assistance Cluster				
Department of Health & Human Services				
Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students				
Direct:				
Primary Care Loan				
Outstanding loans as of July 1, 2021		93.342	\$ 97,583	\$ -
Loans for Disadvantaged Students				
Outstanding loans as of July 1, 2021		93.342	1,228,938	-
New loans issued during 2022		93.342	115,989	-
Health Professions Student Loans				
Outstanding loans as of July 1, 2021		93.342	3,158	-
Subtotal - Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students			1,445,668	-
Nursing Student Loan Program				
Direct:				
Nursing Student Loan				
Outstanding loans as of July 1, 2021		93.364	2,029,693	-
New loans issued during 2022		93.364	132,700	-
Subtotal - Nursing Student Loan Program			2,162,393	-
Subtotal - Department of Health & Human Services - Direct			2,162,393	-
Subtotal - Department of Health & Human Services			3,608,061	-
Total Student Financial Assistance Cluster			105,831,459	-
III. CDBG - Entitlement Grants				
Department of Housing and Urban Development				
Pass-through:				
COVID-19 City of New Haven - Community Development Block Grants/Entitlement Grants				
New Haven CARES - Covid 19 Prevention		14.218	4,041	-
Subtotal - Department of Housing and Urban Development - Pass Through			4,041	-
Total CDBG - Entitlement Grants			4,041	-
IV. Other Federal Assistance				
Department of Agriculture				
Direct:				
Wholesale Farmers and Alternative Market Development				
		21-TMMSD-CT-0010	84,954	-
			84,954	-
Acer Access Development Program				
		AM200100XXXXG014	98,352	-
			98,352	-
Subtotal - Department of Agriculture - Direct			183,306	-
Pass-through:				
University of Vermont - Sustainable Agriculture Research and Education				
		GNE19-221-33243	1,913	-
			1,913	-
Subtotal - Department of Agriculture - Pass Through			1,913	-
Subtotal - Department of Agriculture			185,219	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>
IV. Other Federal Assistance				
<u>Department of Education</u>				
Direct:				
National Resource Centers Program	P015A140027-15	84.015A	\$ 10	\$ -
National Resource Centers Program	P015A180117	84.015A	311,220	-
			311,230	-
National Resource Centers Program	P015B180082	84.015B	270,618	-
			270,618	-
Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program	P022A200044	84.022A	(100)	-
Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program	P022A210043	84.022A	11,427	-
Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program	P022A190046	84.022A	17,185	-
			28,512	-
Social and Behavioral Context for Academic Learning	R305A180293	84.305A	179,095	42,101
			179,095	42,101
COVID-19 HEERF II Student Grants	P425E205901	84.425E	493,294	-
			493,294	-
COVID-19 HEERF II Institutional Grants	P425F205218	84.425F	162,915	-
			162,915	-
	Subtotal - Department of Education - Direct		1,445,664	42,101
Pass-through:				
University of Virginia - Social and Behavioral Context for Academic Learning	GM10170.PO#2247557	84.305A	42,287	-
			42,287	-
	Subtotal - Department of Education - Pass Through		42,287	-
	Subtotal - Department of Education		1,487,951	42,101
<u>Environmental Protection Agency</u>				
Pass-through:				
National Fish and Wildlife Foundation (NFWF) - Long Island Sound Program	1401.19.065618	66.437	6,845	-
			6,845	-
	Subtotal - Environmental Protection Agency - Pass Through		6,845	-
	Subtotal - Environmental Protection Agency		6,845	-
<u>Department of Health & Human Services</u>				
Direct:				
COVID-19 Department Of Health And Human Services	Covid-19 Response	93.U01	(1,955)	-
Department Of Health And Human Services	6590-83-35-S001	93.U02	101	-
Department Of Health And Human Services	20-185026-02	93.U03	466	-
Department Of Health And Human Services	19-185023-02	93.U04	1,350	-
			(38)	-
Maternal and Child Health Federal Consolidated Programs	5 T20MC21953-07-00	93.110	2,061	-
			2,061	-
Injury Prevention and Control Research and State and Community Based Programs	R01CE002989-01-00	93.136	485,672	101,865
			485,672	101,865
Protection and Advocacy for Individuals with Mental Illness	2021-0012	93.138	96,298	37,654
			96,298	37,654
State Capacity Building	DPH29599 - 2021-0102	93.240	52,840	-
			52,840	-
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	H79TI081659	93.243	63,294	-
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	21MHA6064	93.243	167,052	-
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	H79TI080736	93.243	348,042	75,193
Substance Abuse and Mental Health Services_Projects of Regional and National Significance	1H79TI080561-03	93.243	403,494	68,926

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>
IV. Other Federal Assistance				
<u>Department of Health & Human Services</u>				
Direct: (Continued)				
Substance Abuse and Mental Health Services Projects of Regional and National Significance	H79SM085114-01	93.243	427,137	\$ -
Substance Abuse and Mental Health Services Projects of Regional and National Significance	5H79SM081775/3H79SM081775	93.243	995,893	687,798
			2,404,912	831,917
Occupational Safety and Health Program	2T03OH008607-17	93.262	163,584	-
			163,584	-
COVID-19 Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	2021-0071-3	93.323	945,351	-
COVID-19 Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	DPH2021-0071PSA	93.323	969,281	-
			1,914,632	-
COVID-19 Provider Relief Funds	Covid Relief Funds	93.498	77,696,232	-
			77,696,232	-
Mental and Behavioral Health Education and Training Grants	1T25HP376310100	93.732	555,249	-
			555,249	-
Grants for Primary Care Training and Enhancement	T0BHP33107	93.884	434,316	-
			434,316	-
Special Projects of National Significance	1 U90HA33191	93.928	1,224,363	162,189
			1,224,363	162,189
Block Grants for Prevention and Treatment of Substance Abuse	21MHA1070	93.959	3,712	-
			3,712	-
PPHF Geriatric Education Centers	U1QHP28745-05	93.969	791,072	-
			791,072	-
	Subtotal - Department of Health & Human Services - Direct		85,824,905	1,133,625
Pass-through:				
American Academy of Addiction Psychiatry - Department Of Health And Human Services	MFG-19-3	93.U05	2,340	-
Yale New Haven Health Systems - Department Of Health And Human Services	3500183055	93.U06	27,129	-
Mathematica Policy Research, Inc. - Department Of Health And Human Services	50718S07716	93.U07	28,105	-
Connecticut Children's Medical Center - Department Of Health And Human Services	21-185030-02	93.U08	76,452	-
COVID-19 Office of the Assistant Secretary for Preparedness ASPR/DHHS - Department Of Health And Human Services	75A50121C00053	93.U09	118,670	-
State of CT Dept of Children and Family Services - Department Of Health And Human Services	P.S. 20DCF6919AA	93.U10	159,724	-
Connecticut Dept. of Mental Health and Addiction Services - Department Of Health And Human Services	20MHA1063	93.U11	167,705	-
			580,125	-
Stanford University - Prevention of Disease, Disability, and Death by Infectious Diseases	62338663-148206	93.084	23,298	-
Stanford University - Prevention of Disease, Disability, and Death by Infectious Diseases	62338663-148206	93.084	54,762	-
			78,060	-
Icahn School of Medicine at Mount Sinai (ISMMS) - Maternal and Child Health Federal Consolidated Programs	0253-6540-4609	93.110	17,299	-
University Hospitals Cleveland Medical Center - Maternal and Child Health Federal Consolidated Programs	1 U1IMC43532-01-00	93.110	131,069	-
			148,368	-
Griffin Hospital - Preventive Medicine and Public Health Residency Training Program, Integrative Medicine Program, and National Center for Integrative Primary Healthcare	D33HP31664	93.117	9,322	-
			9,322	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>
IV. Other Federal Assistance				
Department of Health & Human Services				
Pass-through: (Continued)				
Connecticut Dept. of Mental Health and Addiction Services - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	13MHA1199	93.243	\$ 7,069	\$ -
University of Maryland at Baltimore - Substance Abuse and Mental Health Services Projects of Regional and National	3001568/ref no. 4046	93.243	7,309	-
University of Maryland at Baltimore - Substance Abuse and Mental Health Services Projects of Regional and National	20451/ref no. 1382	93.243	10,437	-
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	PCSSMAT-26	93.243	13,198	-
University of Maryland at Baltimore - Substance Abuse and Mental Health Services Projects of Regional and National	20450/ref no. 1364	93.243	13,710	-
Child Health & Development Inst. of Connecticut - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	Early Child NCTSN Evaluation	93.243	22,023	-
American Academy of Addiction Psychiatry - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	MFG-18-1	93.243	46,241	-
Cornell Scott-Hill Health Center - Substance Abuse and Mental Health Services Projects of Regional and National	MAT-PDOA Program	93.243	88,877	-
Connecticut Dept. of Mental Health and Addiction Services - Substance Abuse and Mental Health Services_Projects of Regional and National Significance	19MHA6117	93.243	259,729	-
Yale New Haven Health Systems - Substance Abuse and Mental Health Services_Projects of Regional and National	3900192831-YSM-01	93.243	282,686	-
			751,279	-
Community Health Center, Inc. - Advanced Nursing Education Grant Program	801300-100268	93.247	34,224	-
Community Health Center, Inc. - Advanced Nursing Education Grant Program	100299	93.247	40,586	-
			74,810	-
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	677,128	-
			677,128	-
State of Connecticut Department of Public Health - Immunization Cooperative Agreements	Federal Vaccines	93.268	-	-
			-	-
State of CT Dept of Mental Health and Addiction Services - Advanced Education Nursing Traineeships	21MHA1072	93.358	39,735	-
			39,735	-
COVID-19 Southern Connecticut State University (SCSU) - Nursing Research	HHS-126-001	93.391	14,313	-
			14,313	-
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	16,152	-
			16,152	-
University of Washington, Seattle - National Harm Reduction Technical Assistance and Syringe Services Program (SSP) Monitoring and Evaluation Funding Opportunity (B)	UWSC12949	93.488	146,949	-
			146,949	-
Boston University - Public Health Training Centers Program	4500004065	93.516	123,498	-
			123,498	-
Southern Connecticut State University (SCSU) - PPHF: Racial and Ethnic Approaches to Community Health Program financed solely by Public Prevention and Health Funds	HHS076-3007	93.738	12,370	-
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	36,979	-
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	161,395	-
			210,744	-
American Academy of Addiction Psychiatry - Opioid STR	SOR-CARE-38	93.788	42,419	-
State of CT Dept of Mental Health and Addiction Services - Opioid STR	21MHA6065	93.788	166,891	-
			209,310	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>
IV. Other Federal Assistance				
<u>Department of Health & Human Services</u>				
Pass-through: (Continued)				
City of New Haven - HIV Emergency Relief Project Grants	A22-0840	93.914	\$ 279,779	\$ -
City of New Haven - HIV Emergency Relief Project Grants	A21-0828	93.914	1,367,753	-
			1,647,532	-
Community Foundation for Greater New Haven - Healthy Start Initiative	Community Health Van	93.926	(1,150)	-
Community Foundation for Greater New Haven - Healthy Start Initiative	NHHS Prog Yr 4	93.926	30,622	-
Community Foundation for Greater New Haven - Healthy Start Initiative	NHHS Prog Yr 3	93.926	70,770	-
			100,242	-
State of CT Dept of Public Health - HIV Prevention Activities Health Department Based	2019-0142	93.940	85,757	-
			85,757	-
State of CT Dept of Mental Health and Addiction Services - Block Grants for Community Mental Health Services	21MHA1073	93.958	11,155	-
			11,155	-
State of CT Dept of Mental Health and Addiction Services - Block Grants for Prevention and Treatment of Substance Abuse	21MHA1075	93.959	13,900	-
State of CT Dept of Mental Health and Addiction Services - Block Grants for Prevention and Treatment of Substance Abuse	21MHA1074	93.959	17,250	-
State of Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals - Block Grants for Prevention and Treatment of Substance Abuse	BHDDH-Bellamy	93.959	40,793	-
Liberty Community Services, Inc. - Block Grants for Prevention and Treatment of Substance Abuse	LCS Van Service	93.959	76,976	-
			148,919	-
	Subtotal - Department of Health & Human Services - Pass Through		5,073,398	-
	Subtotal - Department of Health & Human Services		90,898,303	1,133,625
<u>Department of Housing and Urban Development</u>				
Pass-through:				
Liberty Community Services, Inc. - Supportive Housing Program	Van Service	14.235	78	-
			78	-
	Subtotal - Department of Housing and Urban Development - Pass Through		78	-
	Subtotal - Department of Housing and Urban Development		78	-
<u>Department of Justice</u>				
Direct:				
Crime Victim Assistance	02-1817-39	16.575	352,456	-
			352,456	-
	Subtotal - Department of Justice - Direct		352,456	-
	Subtotal - Department of Justice		352,456	-
<u>Department of State</u>				
Direct:				
U.S Department of State	19AQMM22P0402	19.U12	22,908	-
			22,908	-
Public Diplomacy Programs	SKS70022CA0015	19.040	65,894	-
			65,894	-
	Subtotal - Department of State - Direct		88,802	-
	Subtotal - Department of Justice		88,802	-

Yale University
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

<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>
IV. Other Federal Assistance				
<u>National Endowment for the Arts</u>				
Direct:				
Museums for America	MA-30-18-0459-18	45.301	\$ 675	\$ -
Museums for America	MA-30-17-0390-17	45.301	5,524	-
			6,199	-
Laura Bush 21st Century Librarian Program	RE-36-19-0081-19	45.313	64,656	14,276
			64,656	14,276
	Subtotal - Endowment for the Humanities - Direct		70,855	14,276
	Subtotal - Endowment for the Humanities		70,855	14,276
<u>National Endowment for the Humanities</u>				
Direct:				
Promotion of the Humanities_Division of Preservation and Access	PW-264077-19	45.149	78,929	-
			78,929	-
Promotion of the Humanities_Office of Digital Humanities	HND-284978-22	45.169	3,655	-
Promotion of the Humanities_Office of Digital Humanities	HAA-266508-19	45.169	23,703	-
			27,358	-
	Subtotal - Endowment for the Humanities - Direct		106,287	-
	Subtotal - Endowment for the Humanities		106,287	-
<u>U.S. Agency for International Development</u>				
Direct:				
Agency for International Development	7200AA21FA00014	98.U13	221,308	121,134
			221,308	121,134
	Subtotal - U.S. Agency for International Development - Direct		221,308	121,134
Pass-through:				
Chemonics International, Inc. - Agency for International Development	SUB-1199	98.U14	20,669	-
National Academy of Sciences - Agency for International Development	2000009598	98.U15	36,050	-
			56,719	-
	Subtotal - U.S. Agency for International Development - Pass Through		56,719	-
	Subtotal - U.S. Agency for International Development		278,027	121,134
	Total Other Federal Assistance		93,474,823	1,311,136
	Total Federal Expenditures		904,065,959	\$ 87,467,998

Yale University

Notes to Schedule of Expenditures of Federal Awards

Year Ended June 30, 2022

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 220, *Cost Principles for Educational Institutions* except for awards received after December 26, 2014 which are subject to 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, 2022 consists of:

	Federal Assistance Listing Numbers	Year End Loan Balance
Perkins	84.038	\$ 7,327,200
Primary Care Loan (PCL) and Health Professions Student Loans (HPSL)	93.342	84,370
Nursing Student Loan (NSL)	93.364	1,608,582
Loans for Disadvantaged Students (LDS)	93.342	1,111,015
		<u>\$ 10,131,167</u>

3. Department of Health and Human Services (HHS) Coronavirus Aid Relief and Economic Security (CARES) Act

The Schedule includes grant activity related to the Department of Health and Human Services (HHS) Coronavirus Aid Relief and Economic Security (CARES) Act Assistance Listing Number 93.498. As required based on guidance in the 2022 OMB Compliance Supplement, the Schedule

Yale University
Notes to Schedule of Expenditures of Federal Awards
Year Ended June 30, 2022

includes all Period 3 funds received between January 1, 2021 and June 30, 2021 and expended by June 30, 2021 as reported to the Health Resources and Services Administration (HRSA) Agency via the Provider Relief Fund Reporting Portal. The Schedule thus includes \$2,824,682 of direct expenditures and \$74,871,550 of lost revenue.

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, 2022, 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 21, 2022.

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 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 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 21, 2022



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, 2022. 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, 2022.

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 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

The results of our auditing procedures disclosed an instance of noncompliance, which is required to be reported in accordance with the Uniform Guidance and which is described in the accompanying schedule of findings and questioned costs as item 2022-001. Our opinion on each major federal program is not modified with respect to this matter.

Government Auditing Standards requires the auditor to perform limited procedures on the University's response to the noncompliance finding 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 19, 2022

PART IV

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

Yale University
Schedule of Findings and Questioned Costs
For the Year Ended June 30, 2022

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
93.928
93.498
93.243

COVID-19

Research and Development Cluster
Special Projects of National Significance
Provider Relief Funds
Substance Abuse and Mental Health Services
Projects of Regional and National Significance

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, 2022

Section II – 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, 2022

Section III – Federal Financial Assistance Findings and Questioned Costs

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

Criteria

Quarterly Public Reporting for (a)(I) Institutional Portion, (a)(2), and (a)(3) funds (Assistance Listings 84.425F, 84.425J, 84.425K, 84.425L, 84.425M, 84.425N, 84.425S, as applicable)

The CARES, CRRSAA, and ARP institutional quarterly portion reporting requirements involve publicly posting completed forms on the institution's website.

The forms must be conspicuously posted on the institution's primary website on the same page the reports of the IHE's activities as to the emergency financial aid grants to students (Student Aid Portion) are posted.

A new, separate form must be posted covering aggregate amounts spent for HEERF I, HEERF II, and HEERF III funds each quarterly reporting period (September 30, December 31, March 31, June 30), concluding after an institution has expended and liquidated all (a)(I) Institutional Portion, (a)(2), and (a)(3) funds and checks the "final report" box. IHEs must post this quarterly report form no later than 10 days after the end of each calendar quarter (October 10, January 10, April 10, July 10) apart from the first report, which was due October 30, 2020, and the report covering the first quarter of 2021, which is due July 10, 2021.

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 require 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.

Questioned Costs

No questioned costs as the finding is related to a reporting matter.

Cause

It was an oversight on management's behalf regarding the required institutional filing. Management believed that the University complied with its reporting obligation by reporting all of the student grant expenditures within the required student reports. The University should have publicly posted the required institutional report and noted that all funds were given to students through grants.

Yale University
Schedule of Findings and Questioned Costs
For the Year Ended June 30, 2022

Section III – Federal Financial Assistance Findings and Questioned Costs, Continued

Effect

The University did not comply with the requirement to submit the institutional report within 10 days after June 30, 2021. Management has subsequently filed the required institutional report.

Recommendation

We recommend the University continue to monitor the required reporting requirements related to COVID related funding. As periodic updates are made to the reporting requirements, management should ensure processes are enhanced to allow for complete and timely filing of all required reports.

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, 2022

Finding No. 2021-001 – Allowable Costs/Cost Principles

Award Information

Grantor: National Heart, Lung and Blood Institute (NHLBI)/NIH/DHHS, Army Medical Research Acquisition Activity (AMRAA)/Army/DoD, Connecticut Dept. of Public Health (DPH)

Award Name: Insights into the Molecular and Cellular Mechanisms governing Endothelial Function, The Collaboration Linking Opioid Use Disorder and Sleep ("CLOUDS") Study, Behavior Therapy for Irritability & Aggression in Adolescents with Autism, Emerging Infections Program (EIP)/COVID19

Award Year: 1/1/21-12/31/21 (AWD0000824), 9/1/20-8/31/21 (AWD0003836), 8/1/20-7/31/21 (AWD0005208), 10/19/20-10/18/21 (AWD0005465)

Federal Assistance Listing Number: 93.837, Cardiovascular Diseases Research; 93.233, National Center on Sleep Disorders Research; 12.420, Military Medical Research and Development; 93.323, Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)

Pass Through Number: SUBK00014315 (AWD0005465)

Condition

1. PwC selected 31 accounts payable expenditure transactions totaling \$304,987 for direct cost testing within the R&D cluster and noted one selection totaling \$2,715 that was initiated by an individual that was not the PI and the individual had not been delegated approval authority within the respective limits of the charges under the respective awards. There were additionally three charges that were not submitted timely in accordance with Yale policy. These expenditures were in compliance in terms of allowability.
2. PwC selected 10 accounts payable expenditure transactions totaling \$85,938 for direct cost testing within the award, Connecticut Dept. of Public Health (DPH) Epidemiology and Laboratory Capacity for Infectious Diseases (ELC), and noted one selection totaling \$429 that was initiated by an individual that was not the PI and the individual had not been delegated approval authority within the respective limits of the charges under the respective awards. There was additionally one charge that was not submitted timely in accordance with Yale policy. These expenditures were in compliance in terms of allowability.

Status Update

Beginning in May 2021, the University provided "Finance Internal Controls - Foundational training" which was mandatory for all staff who initiate or approve transactions within Workday. In total, 1,424 staff attended the training. Beginning in October 2021, a second live training module, "Finance Internal Controls Approval Authority Training" was provided to 1,050 staff. Both of these training courses continue to be provided to new employees through eLearning modules.

Policy 3215 Yale Purchasing Card was reiterated to the sponsored award community in our OSP News & Updates December 21, 2021 issue. The communication reminded all staff that "individuals are expected to prepare and submit expense reports, with supporting documentation, within thirty (30) days from the date the expense is incurred."

The University continues to focus on and enhance compliance, internal controls and standard operating procedures over the initiation, approval and expense of goods and services. During fiscal 2022, we established a university wide program called *OneFinance* to identify, risk assess, and prioritize process and internal control improvements across all financial cycles. Delegation of authority and source to pay have

Yale University
Summary Schedule of Prior Audit Findings
For the Year Ended June 30, 2022

both been prioritized as a focus area for fiscal 2023 with a goal of further developing standard operating procedures, monitoring programs and training, including expense report training.

PART V

MANAGEMENT'S VIEWS AND CORRECTIVE ACTION PLAN

PO Box 208372
New Haven CT 06520-8372

T 203 432-5524
F 203 432-5577
www.yale.edu

Courier
25 Science Park
150 Munson Street, 6th Floor
New Haven CT 06511

Finding No. 2022-001 – Reporting

Views of Responsible Officials and Corrective Action Plan

The University agrees with this finding. As mentioned, this was an oversight. When the University became aware of the missing reporting, the University immediately publicly posted the institutional quarterly public report and now has a process to ensure that all reports for HEERF funding are posted timely.

University contacts:

David Blackmon, Director of University Financial Aid
David.Blackmon@yale.edu

Kerry Worsencroft, Deputy Director of University Financial Aid
Kerry.Worsencroft@yale.edu