

MASSACHUSETTS INSTITUTE OF TECHNOLOGY



REPORT ON THE AUDIT OF FEDERAL FINANCIAL ASSISTANCE PROGRAMS IN ACCORDANCE WITH THE Uniform Guidance

FOR THE YEAR ENDED JUNE 30, 2024

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Report on the Audit of Federal Financial Assistance Programs
in Accordance with the Uniform Guidance
For the Year Ended June 30, 2024

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SECTION I

FINANCIAL REPORTS

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Report of Independent Auditors

To the Members of the Corporation of the Massachusetts Institute of Technology

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the accompanying consolidated financial statements of the Massachusetts Institute of Technology and its subsidiaries (the “Institute”), which comprise the consolidated statements of financial position as of June 30, 2024 and 2023, and the related consolidated statements of activities for the year ended June 30, 2024, and of cash flows for the years ended June 30, 2024 and 2023, 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 consolidated financial position of the Institute as of June 30, 2024 and 2023, and the changes in its net assets for the year ended June 30, 2024 and its cash flows for the years ended June 30, 2024 and 2023 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 Institute and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter

We previously audited the consolidated statement of financial position as of June 30, 2023, 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 6, 2023, 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, 2023, is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

Responsibilities of Management for the Consolidated Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Institute'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 consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS and *Government Auditing Standards*, will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the 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 Institute'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 Institute'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, 2024 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 Information

Management is responsible for the other information included in the annual report. The other information comprises the contents of the Report of the Treasurer (not presented herein) but does not include the consolidated financial statements and our auditors' report thereon. Our opinion on the consolidated financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the consolidated financial statements or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 11, 2024, on our consideration of the Institute'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, 2024. 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 Institute's internal control over financial reporting and compliance.

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Boston, Massachusetts
October 11, 2024

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
as of June 30, 2024, and 2023

<i>(in thousands of dollars)</i>	2024	2023
Assets		
Cash	\$ 410,373	\$ 527,690
Accounts receivable, net	318,428	334,703
Pledges receivable, net, at fair value	626,904	611,187
Contracts in progress, principally US government	123,860	104,722
Deferred charges and other assets	261,534	249,249
Investments, at fair value	31,751,808	30,692,919
Operating leases - right-of-use assets	198,591	212,615
Net asset position - defined benefit pension plan	568,126	634,725
Net asset position - retiree welfare benefit plan	297,423	253,522
Land, buildings, and equipment (at cost of \$8,089,320 for June 2024; \$7,478,587 for June 2023), net of accumulated depreciation	5,425,451	5,016,660
Total assets	\$ 39,982,498	\$ 38,637,992
Liabilities and Net Assets		
Liabilities:		
Accounts payable, accruals, and other liabilities	\$ 673,726	\$ 641,934
Deferred revenue and other credits	311,041	323,871
Advance payments	528,226	516,203
Operating lease liabilities	208,729	222,911
Liabilities due under life income fund agreements, at fair value	279,503	265,640
Borrowings, net of unamortized issuance costs	4,430,396	4,484,462
Total liabilities	\$ 6,431,621	\$ 6,455,021
Net Assets:		
Without donor restrictions	\$ 14,792,904	\$ 13,999,705
With donor restrictions	18,757,973	18,183,266
Total net assets	\$ 33,550,877	\$ 32,182,971
Total liabilities and net assets	\$ 39,982,498	\$ 38,637,992

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

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CONSOLIDATED STATEMENT OF ACTIVITIES

For the year ended June 30, 2024

(with summarized financial information for the year ended June 30, 2023)

	2024		Total	
	Without Donor Restrictions	With Donor Restrictions	2024	2023
<i>(in thousands of dollars)</i>				
Operating Revenues				
Tuition and similar revenues, exclusive of financial aid of \$488,551 in 2024 and \$452,579 in 2023	\$ 427,993	\$ -	\$ 427,993	\$ 409,031
Sponsored support:				
Campus direct	706,963	-	706,963	657,193
Lincoln direct	1,305,146	-	1,305,146	1,166,956
SMART direct	23,588	-	23,588	23,857
Indirect cost recovery	289,172	-	289,172	215,004
Total sponsored support	2,324,869	-	2,324,869	2,063,010
Contributions	394,460	5,839	400,299	398,063
Other revenue	274,978	-	274,978	267,134
Support from investments:				
Endowment	1,166,597	-	1,166,597	1,093,281
Other investments	314,576	-	314,576	267,552
Total support from investments	1,481,173	-	1,481,173	1,360,833
Auxiliary enterprises	161,536	-	161,536	157,333
Total revenues	\$ 5,065,009	\$ 5,839	\$ 5,070,848	\$ 4,655,404
Operating Expenses				
Salaries and wages	\$ 1,993,165	-	\$ 1,993,165	\$ 1,839,997
Employee benefits	636,830	-	636,830	606,882
Supplies and services	1,290,865	-	1,290,865	1,226,705
Subrecipient agreements	183,957	-	183,957	163,808
Utilities, rent, and repairs	248,286	-	248,286	258,778
Total expenses before depreciation and interest	4,353,103	-	4,353,103	4,096,170
Results of operations before depreciation and interest	711,906	5,839	717,745	559,234
Depreciation	266,510	-	266,510	244,168
Interest	163,079	-	163,079	170,760
Results of operations	282,317	5,839	288,156	144,306
Net periodic benefit income other than service cost	196,503	-	196,503	172,824
Net results	\$ 478,820	\$ 5,839	\$ 484,659	\$ 317,130
Other Revenues, Gains, and Losses				
Contributions	\$ -	\$ 198,441	\$ 198,441	\$ 155,217
Net return on investments	741,530	1,414,205	2,155,735	(282,724)
Distribution of investment income and gains	(664,075)	(817,098)	(1,481,173)	(1,360,833)
Other changes	96,806	(6,905)	89,901	(49,899)
Postretirement plan changes other than net periodic benefit cost	(79,657)	-	(79,657)	173,549
Net asset reclassifications and transfers	219,775	(219,775)	-	-
Total other revenues, gains, and losses	314,379	568,868	883,247	(1,364,690)
Increase (decrease) in net assets	793,199	574,707	1,367,906	(1,047,560)
Net assets at the beginning of the year	13,999,705	18,183,266	32,182,971	33,230,531
Net assets at the end of the year	\$ 14,792,904	\$ 18,757,973	\$ 33,550,877	\$ 32,182,971

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

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended June 30, 2024, and 2023

<i>(in thousands of dollars)</i>	2024	2023
CASH FLOW FROM OPERATING ACTIVITIES:		
Increase (decrease) in net assets	\$ 1,367,906	\$ (1,047,560)
Adjustments to reconcile change in net assets to net cash used in operating activities:		
Net (gain) loss on investments	(1,962,290)	366,010
Change in retirement plan asset, net of accrued benefit liability	22,698	(193,018)
Change in allowances for uncollectible receivables	860	118,143
Depreciation	266,510	244,168
Net (gain) loss on life income funds and donor advised funds	(20,000)	40,288
Non-cash operating lease costs	44,006	24,208
Amortization of bond premiums and discounts and other adjustments	(3,711)	(3,224)
Change in operating assets and liabilities:		
Pledges receivable	(6,692)	(70,127)
Accounts receivable	4,255	(17,191)
Contracts in progress	(19,138)	18
Deferred charges and other assets	(23,730)	7,398
Accounts payable, accruals, and other liabilities, excluding building and equipment accruals	(32,634)	(35,177)
Liabilities due under life income fund agreements	39,054	6,179
Deferred revenue and other credits	(26,386)	7,318
Advance payments	12,023	(6,155)
Operating lease liability	(44,164)	(23,172)
Reclassification of donated securities	(26,032)	(7,471)
Reclassification of investment income for restricted purposes	(7,583)	(6,706)
Reclassification of contributions restricted for long-term investment	(207,375)	(179,408)
Net cash and restricted cash used in operating activities	(622,423)	(775,479)
CASH FLOW FROM INVESTING ACTIVITIES:		
Purchase of land, buildings, and equipment	(596,154)	(508,610)
Purchases of investments	(4,917,777)	(4,557,523)
Proceeds from sale of investments	5,805,616	6,022,585
Student notes issued	(3,777)	(3,827)
Collections from student notes	5,678	5,582
Net cash and restricted cash provided by investing activities	293,586	958,207
CASH FLOW FROM FINANCING ACTIVITIES:		
Contributions restricted for long-term investment	207,375	179,408
Payments to beneficiaries of life income funds	(25,191)	(26,780)
Proceeds from sale of donated securities restricted for endowment	26,032	7,471
Investment income for restricted purposes	7,583	6,706
Proceeds from borrowings	1,200	-
Repayment of borrowings	(51,455)	(168,534)
Repayments of government advance for student loans	(1,029)	(1,956)
Net cash and restricted cash provided by (used in) financing activities	164,515	(3,685)
Net (decrease) increase in cash and restricted cash	(164,322)	179,043
Cash and restricted cash at the beginning of the period	874,653	695,610
Cash and restricted cash at the end of the period	\$ 710,331	\$ 874,653
Supplemental Information on cash and restricted cash:		
Cash on Statements of Financial Position	\$ 410,373	\$ 527,690
Cash and restricted cash included in Investments (see Note B)	299,155	334,714
Restricted cash included in Other Assets (see Note G)	803	12,249
Total cash and restricted cash on Cash Flow	\$ 710,331	874,653

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

Notes to Consolidated Financial Statements

A. Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America. The consolidated financial statements (financial statements) include Massachusetts Institute of Technology (MIT or the Institute) and its wholly owned subsidiaries.

Net assets, revenues, expenses, and gains and losses are classified into two categories based on the existence or absence of donor-imposed restrictions: net assets with donor restrictions and net assets without donor restrictions.

Net assets with donor restrictions include gifts, pledges, trusts, and remainder interests, and income and gains that are either required by donors to be permanently retained or for which restrictions have not yet been met. Such restrictions include purpose restrictions (donors have specified the purpose for which the net assets are to be spent), time restrictions imposed by donors or implied by the nature of the gift (*e.g.*, capital projects, pledges to be paid in the future, life income funds), or by interpretations of law (net gains on donor-endowed gifts, where the gains have not yet been appropriated for spending). Net assets without donor restrictions are all the remaining net assets of MIT.

Donor-restricted gifts and grants (including gifts of long-lived assets) and distributed restricted endowment income (for which the restrictions are met within the same year of gift, grant, or distribution) are reported as revenue without donor restrictions. Amounts for which the restrictions are not met within the same year of gift, grant, or distribution are reclassified to net assets with donor restrictions through the net asset reclassifications and transfers line in the Consolidated Statement of Activities. These amounts are released back to net assets without donor restrictions, through the net asset reclassifications and transfers line, during the years in which the restrictions are met. Gifts specified for the acquisition or construction of long-lived assets are reported as net assets with donor restrictions until the monies are expended and the long-lived assets (*e.g.*, buildings) are put into use, at which point they are reclassified to net assets without donor restrictions, also through the net asset reclassifications and transfers line.

MIT administers its various funds, including endowments, funds functioning as endowments, school or departmental funds, and related accumulated gains, in accordance with the principles of fund accounting. Endowed gifts are recorded in fund accounts, and investment income is distributed to funds annually. Income distributed to funds may be a combination of capital appreciation and yield pursuant to MIT's total return investment and spending policies. Each year, the Executive Committee of the Corporation approves the rates of distribution of investment return to funds from MIT's investment pools. See Note J for further information on income distributed to funds.

MIT's operating revenues include tuition, sponsored support, contributions (expendable gifts and pledge payments), other revenue, support from investments, and auxiliary revenue.

Net results, as presented in MIT's Consolidated Statement of Activities, is the measure to which the Institute manages its annual budget and is used in financial reports presented to MIT's leadership, including the Executive Committee and the Corporation. It is a comprehensive measure of MIT's annual financial performance, including operating activity and the non-service-cost components of net periodic benefit costs or income that serve as a basis for cost recovery.

The Consolidated Statement of Activities also shows results of operations, a measure of ongoing activities, which excludes the impacts of the components of net periodic retirement benefit costs or income other than service costs, and results of operations before depreciation and interest, which is a valuable measure for the Institute as it highlights the impacts of financing and capital development costs that are included in net results.

A. Accounting Policies (continued)

Tax Status

MIT is a nonprofit organization that is tax-exempt under Section 501(c)(3) of the Internal Revenue Code, originally recognized in October 1926, with the most recent affirmation letter dated September 2017.

U.S. GAAP requires MIT to evaluate tax positions taken by the Institute to recognize a tax liability (or asset) if the Institute has taken an uncertain tax position that, more likely than not, would not be sustained upon examination by the IRS. MIT has analyzed the tax positions taken and has concluded that as of June 30, 2024, and 2023, there are no significant uncertain positions taken or expected to be taken.

Cash

Certain cash balances, totaling \$73.4 million and \$54.7 million as of June 30, 2024, and 2023, respectively, are restricted for use under certain sponsored research agreements and government regulations. These amounts are included within the cash line in the Consolidated Statements of Financial Position.

The Institute had approximately \$367.9 million and \$485.8 million as of June 30, 2024, and 2023, respectively, of its cash accounts with a single institution. The Institute has not experienced any losses associated with deposits at this institution.

Land, Buildings, and Equipment

Land, buildings, and equipment are shown at cost when purchased, or at fair value as of the date of a gift when received as a gift, net of accumulated depreciation. When expended, costs associated with the construction of new facilities are shown as construction in progress until such projects are completed and put into use. Depreciation is computed on a straight-line basis over the estimated useful lives of 25 to 50 years for buildings, 3 to 25 years for equipment, and 6 years for software.

Fully depreciated assets were removed from the consolidated financial statements in the amount of \$107.2 million and \$97.1 million during 2024 and 2023, respectively. Land, buildings, and equipment as of June 30, 2024, and 2023, are shown in Table 1 below.

TABLE 1. LAND, BUILDINGS, AND EQUIPMENT

<i>(in thousands of dollars)</i>	2024	2023
Land	\$ 119,063	\$ 119,063
Land improvements	115,637	117,512
Educational buildings	6,562,290	6,183,878
Equipment	583,741	449,136
Software	21,738	24,933
Total	7,402,469	6,894,522
Less: accumulated depreciation	(2,663,869)	(2,461,927)
Construction in progress	679,604	574,146
Software projects in progress	7,247	9,919
Net land, buildings, and equipment	\$ 5,425,451	\$ 5,016,660

Depreciation expense was \$266.5 million in fiscal 2024 and \$244.2 million in fiscal 2023. Interest of \$12.9 million and \$10.1 million was capitalized during fiscal 2024 and fiscal 2023, respectively, in connection with MIT's construction projects.

A. Accounting Policies (continued)

Tuition and Student Support

Tuition and similar revenues, shown in Table 2 below, include tuition and fees for degree programs as well as tuition and fees for executive and continuing education programs. Tuition revenue is recognized over the period during which the courses are taken.

TABLE 2. TUITION AND SIMILAR REVENUES

<i>(in thousands of dollars)</i>	2024	2023
Undergraduate and graduate programs*	\$ 312,832	\$ 316,934
Executive and continuing education programs	115,161	92,097
Tuition and similar revenues	\$ 427,993	\$ 409,031

* Undergraduate and graduate programs at published rates totaled \$801,383 and \$769,513 in 2024 and 2023, respectively, and financial aid applied to undergraduate and graduate programs was \$488,551 and \$452,579 in 2024 and 2023, respectively.

Tuition support shown in Table 3 below is awarded to undergraduate students by MIT based on need. Graduate students are provided with tuition support in connection with research assistance, teaching assistance, and fellowship appointments.

TABLE 3. STUDENT SUPPORT

<i>(in thousands of dollars)</i>	2024			2023		
	Institute Sources	External Sponsors	Total Student Support	Institute Sources	External Sponsors	Total Student Support
Undergraduate tuition support	\$ 159,307	\$ 16,623	\$ 175,930	\$ 153,329	\$ 20,539	\$ 173,868
Graduate tuition support	329,244	57,212	386,456	299,250	56,711	355,961
Fellowship stipends	61,436	19,500	80,936	50,128	18,712	68,840
Student employment	68,481	92,600	161,081	63,507	88,072	151,579
Total	\$ 618,468	\$ 185,935	\$ 804,403	\$ 566,214	\$ 184,034	\$ 750,248

A. Accounting Policies (continued)

Sponsored Support and Advance Payments

Almost all of Lincoln Laboratory and Singapore-MIT Alliance for Research and Technology (SMART) sponsored revenue, as well as a portion of campus sponsored revenue, come from exchange contracts. Sponsored revenue related to exchange contracts is recognized as MIT fulfills the terms of the agreements, which generally span fewer than five years. Almost all of campus sponsored revenue—and a portion of Lincoln Laboratory and SMART sponsored revenue—comes from non-exchange contracts. Sponsored revenue associated with non-exchange contracts is recognized as the qualified expenditures are incurred. Sponsored activities at Lincoln Laboratory (which are contractually authorized by the sponsor but for which costs have not yet been incurred) totaled \$974.8 million and \$907.4 million as of fiscal 2024 and fiscal 2023, respectively. Sponsored activities on campus (which are contractually authorized by the sponsor but for which costs have not yet been incurred) totaled \$1,099.8 million and \$1,157.3 million as of fiscal 2024 and fiscal 2023, respectively.

Advance payments are amounts received by MIT from sponsors under the terms of agreements that generally require the exchange of assets, rights, or privileges between MIT and the sponsor. Advance payments are made for activity that will occur in the near future, generally within the next fiscal year.

Indirect sponsored revenue includes the portion of facilities and administrative expenses that is attributed to sponsored activities. MIT has recorded reimbursement of indirect costs relating to sponsored research activities at negotiated fixed billing rates. For non-research activities (such as instruction and other sponsored activity) MIT records reimbursement of indirect costs on federal awards using the de minimis rate allowed by Uniform Guidance, and for non-federal awards using rates that are agreed to with the sponsor.

The revenue generated by the negotiated indirect research rates is adjusted each fiscal year to reflect any variance between the negotiated fixed rates and rates based on actual costs; any adjustment in the rate is charged or credited to net assets without donor restrictions. The actual cost rate is audited by the Defense Contract Audit Agency (DCAA), and a final fixed-rate agreement is signed by the U.S. government and MIT. The variance between the negotiated fixed rate and the final audited rate results in a carryforward (over- or under-recovery). The carryforward is included in the calculation of negotiated fixed billing rates in future years.

Gifts and Pledges (Contributions)

Gifts and pledges (contributions) are recognized when MIT has an unconditional right to receive payment. Gifts of securities are recorded at their fair value at the date of contribution. Donated securities received totaled \$101.3 million and \$94.4 million in fiscal 2024 and fiscal 2023, respectively. Gifts of equipment received from manufacturers and other donors are put into use and recorded by MIT at fair value. Gifts of equipment totaled \$0.5 million in fiscal 2024 and \$0.8 million in fiscal 2023. Pledges consist of unconditional promises to contribute to MIT in the future. Pledges are reported at their estimated fair values. Pledges receivable are classified as Level 3 under the valuation hierarchy described in Note B.

Pledges, trusts, and remainder interests are reported at their estimated fair values. MIT does not recognize donated works of art, historical treasures, and similar assets in the financial statements if they are part of a collection. Items that are part of a collection are received for educational purposes, and most are displayed throughout MIT. In general, collections are not disposed of for financial gain or otherwise encumbered in any manner.

Other Revenue and Auxiliary Enterprises

For the revenue streams included in other revenue and auxiliary enterprises, revenue is recognized at the point in time when goods or services are provided and are included in the without donor restrictions net asset category. Other revenue includes patent royalty revenue, membership agreement revenue, medical services revenue, and various other types. Auxiliary enterprises revenue includes room and board revenue, as well as revenue earned by MIT Press, Technology Review, and Endicott House.

A. Accounting Policies (continued)

Life Income Funds

MIT’s life income fund agreements with donors consist primarily of irrevocable charitable gift annuities, pooled income funds, and charitable remainder trusts for which MIT serves as trustee. Assets are invested and payments are made to donors and other beneficiaries in accordance with the respective agreements. MIT records the assets that are associated with each life income fund at fair value and records as liabilities the present value of the estimated future payments at current interest rates to be made to the donors and beneficiaries under these agreements. Life income fund assets are included within investments in the Consolidated Statements of Financial Position. A rollforward of liabilities due under life income fund agreements is presented in Table 4 below.

New Accounting Standards

On July 1, 2023, the Institute adopted the FASB-issued ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments* (Topic 326), which replaces the current GAAP incurred loss impairment methodology with one that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The adoption of this standard did not have a significant impact on the Institute’s financial statements.

TABLE 4. LIABILITIES DUE UNDER LIFE INCOME FUNDS

<i>(in thousands of dollars)</i>	2024	2023
Balance at the beginning of the year	\$ 265,640	\$ 286,241
Additions for new gifts	1,673	4,057
Termination and payments to beneficiaries	(23,419)	(25,863)
Net investment and actuarial gain	35,609	1,205
Balance at the end of the year	\$ 279,503	\$ 265,640

A. Accounting Policies (continued)

Non-Cash Items

Non-cash transactions excluded from the Consolidated Statements of Cash Flows include \$24.5 million and \$18.3 million of accrued liabilities related to plant and equipment purchases as of June 30, 2024, and 2023, respectively.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Subsequent Events

MIT has evaluated subsequent events through October 11, 2024, the date on which the financial statements were issued. There were no subsequent events that occurred after the date of the Consolidated Statements of Financial Position that have a material impact on MIT's financial statements.

Summarized Information

The Consolidated Statement of Activities includes certain prior-year summarized comparative information in total, but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP in the United States of America. Accordingly, such information should be read in conjunction with MIT's financial statements for the year ended June 30, 2023, from which the summarized information was derived.

Related Parties

There are three categories of related-party entities that are not fully consolidated in MIT's consolidated financial statements and may have transactions with MIT. The first category is certain non-investment entities with an education- or research-based mission. These entities are all U.S. corporations. Income from shared research, royalties for intellectual property, and administration or other services provided to these entities is included as other revenue on the Consolidated Statement of Activities. Costs to pay for services from, provide services to, and support these organizations are included in operating expenses on the Consolidated Statement of Activities.

Second are trusts for the benefit of employees that are managed by or under the trusteeship of MIT management. The assets of these U.S. trusts offset the benefit obligations of the defined benefit pension and retiree welfare benefit plans to arrive at the net funded status of each plan, both of which are shown on separate line items on the Consolidated Statements of Financial Position. Please refer to Note I for further details.

Third are certain investment entities for which MIT invests in their equity securities. These entities are limited partnership or equivalent entities located in both the U.S. and internationally. The Institute recognizes these as investments, at fair value on the Consolidated Statements of Financial Position and in net return on investments in the Consolidated Statement of Activities. Please refer to Note B for further details.

MIT related parties also include Executive Committee members and senior management, their family members, and in some cases entities with which they are associated that may do business with MIT. Transactions between MIT and members of the Executive Committee, senior management, or members of their families can include philanthropic gifts to MIT or similar transactions reported in contributions and other changes on the Consolidated Statement of Activities.

B. Investments

Investments are presented at fair value in accordance with GAAP.

Cash and short-term investments include cash, money market funds, repurchase agreements, and negotiable certificates of deposit, and are valued at cost, which approximates fair value. Instruments listed or traded on a securities exchange are valued at the last quoted price on the primary exchange where the securities are traded.

Over-the-counter positions, such as interest rate and total return swaps, credit default swaps, options, exchange agreements, and interest rate cap and floor agreements, are valued using broker quotes or models using market-observable inputs.

Investments in non-exchange-traded debt are primarily valued using independent pricing sources that use broker quotes or models using observable market inputs.

Investments managed by external managers include those in (i) absolute return; (ii) domestic, foreign, and private equity; (iii) real estate; and (iv) real asset commingled funds. The fair value of securities held in external investment funds that do not have readily determinable fair values are determined by the external managers based upon industry-standard valuation approaches that require varying degrees of judgment, taking into consideration, among other things: the cost of the securities, valuations, and transactions of comparable public companies; the securities' estimated future cash flow streams; and the prices of recent significant placements of securities of the same issuer. Using these valuations, most of these external managers calculate MIT's capital account or net asset value (NAV) in accordance with, or in a manner consistent with, GAAP's fair value principles.

As a practical expedient, MIT is permitted under GAAP to estimate the fair value of its investments with external managers using the external managers' reported NAV without further adjustment, unless MIT expects to sell the investment at a value other than NAV or the NAV is not calculated in accordance with GAAP.

MIT has elected to measure certain equity securities (those without a readily determinable fair value that do not qualify to use NAV as a practical expedient) at cost or fair value on the date of investment less impairment, adjusted for changes in observable prices of the same issuer (the "measurement alternative"). The election to apply the measurement alternative is applied on a security-by-security basis. MIT reassesses whether these investments qualify for the measurement alternative and performs an impairment analysis on an annual basis.

As of June 30, 2024, and 2023, MIT held \$261.3 million and \$260.1 million, respectively, of investments that are valued using the measurement alternative. These investments are included within Level 3 of the fair value hierarchy table as explained further in Note B.

There have been no impairment adjustments or observable price changes recognized.

Split-interest agreements are generally valued at the present value of the future distributions expected to be received over the term of the agreement.

MIT performs ongoing due diligence to determine that the fair value of investments is reasonable. In particular, to ensure that the valuation techniques for investments that are categorized within the fair value hierarchy are fair, consistent, and verifiable, MIT has established a Valuation Committee ("the Committee") that oversees the valuation processes and procedures and ensures that the policies are fair and consistently applied. The Committee is responsible for conducting annual reviews of the valuation policies and evaluating the overall fairness and consistent application of the valuation policies. The Committee reviews external manager due diligence to substantiate the use of NAV as a practical expedient for estimates of fair value for externally managed funds. The Committee is comprised of senior personnel with members who are independent of investment functions. The Committee meets semiannually or more frequently, and members of the Committee report to MIT's Risk and Audit Committee as needed.

The methods described in this note may produce a fair value that may not be indicative of net realizable value or reflective of future fair values. While MIT believes its valuation methods are appropriate and consistent with those of other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

MIT leverages certain real estate investments to optimize the use of invested capital in support of the Institute's mission. The liabilities associated with these financings are presented, on a net basis, with the investment balances on the associated real estate asset found in Table 5. The liabilities associated with real estate investments were \$1,324.4 million as of each of June 30, 2024, and 2023. MIT's real estate subsidiaries are separate legal entities, whose assets and credit are not available to satisfy the liabilities of MIT as a stand-alone entity. Also, the liabilities of MIT's subsidiaries do not constitute obligations of MIT as a stand-alone entity.

MIT may enter into short sales whereby it sells securities that may or may not be owned by MIT in anticipation of a decline in the price of such securities or in order to hedge portfolio positions. Cash collateral and certain securities owned by MIT may be held at counterparty brokers to collateralize these positions and are included in investments in the Consolidated Statements of Financial Position and in restricted cash included in investments on the Consolidated Statements of Cash Flows.

GAAP establishes a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the entity's own assumptions about how market participants

B. Investments (continued)

would value an asset or liability based on the best information available. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. MIT follows a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last is considered unobservable.

The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used by MIT for financial instruments measured at fair value on a recurring basis. The three levels of inputs are as follows:

Level 1 – Valuations based upon observable inputs that reflect quoted prices in active markets for identical assets and liabilities;

Level 2 – Valuations based upon: (i) quoted market prices for similar assets or liabilities in active markets; (ii) quoted prices for identical or similar assets or liabilities in markets that are not active; or (iii) other significant market-based inputs that are observable, either directly or indirectly; and

Level 3 – Valuations based upon unobservable inputs that are significant to the overall fair value measurements. Level 3 investments are valued by MIT based upon valuation information received from the relevant entity, which may include last trade information, third-party appraisals of real estate, or valuations prepared in connection with the administration of an employee stock ownership plan. MIT may also utilize industry-standard valuation techniques, including discounted cash flow models. The significant unobservable inputs used in the fair value measurements of MIT's direct investments may include their cost of capital, equity, and industry risk premiums.

Investments managed by external managers in fund structures are not readily marketable and are reported at fair value utilizing the most current information provided by the external manager, subject to assessments that the information is representative of fair value and in consideration of any factors deemed pertinent to the fair value measurement. These investments are shown in the NAV column of Table 5.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to its fair value measurement. Market information is considered when determining the proper categorization of the investment's fair value measurement within the fair valuation hierarchy.

B. Investments (continued)

Table 5 presents MIT's investments at fair value as of June 30, 2024, and 2023, respectively, grouped by the valuation hierarchy described herein. All net realized and unrealized gains and losses related to financial instruments held by MIT included in Table 5 are reflected in the Consolidated Statement of Activities. Cumulative unrealized gains related to Level 3 investments totaled \$1,694.3 million and \$2,263.7 million as of June 30, 2024, and 2023, respectively.

TABLE 5. INVESTMENTS

<i>(in thousands of dollars)</i>	Level 1	Level 2	Level 3	NAV	Total Fair Value
Fiscal Year 2024					
Cash and short-term investments	\$ 201,967	\$ 67,682	\$ -	\$ -	\$ 269,649
US Treasury	1,403,002	-	-	-	1,403,002
US government agency	-	181,811	-	-	181,811
Domestic bonds	9,412	1,092,412	159,312	-	1,261,136
Foreign bonds	349	144,247	-	-	144,596
Common equity:					
Domestic	506,130	1	246,840	-	752,971
Foreign	1,587,977	70,261	14,603	-	1,672,841
Equity:**					
Absolute return	-	-	-	4,943,175	4,943,175
Domestic	-	-	-	2,540,222	2,540,222
Foreign	-	-	-	2,012,138	2,012,138
Private	-	-	-	11,284,910	11,284,910
Real estate*	1,192	-	3,306,974	1,580,242	4,888,408
Real assets*	16,620	-	368	277,784	294,772
Split-interest agreements	-	-	86,932	-	86,932
Other	-	-	14,779	-	14,779
Derivatives, assets/(liabilities)	3,561	(3,095)	-	-	466
Investments, at fair value	\$ 3,730,210	\$ 1,553,319	\$ 3,829,808	\$ 22,638,471	\$ 31,751,808
Fiscal Year 2023					
Cash and short-term investments	\$ 313,843	\$ -	\$ -	\$ -	\$ 313,843
US Treasury	1,727,353	-	-	-	1,727,353
US government agency	-	34,263	-	-	34,263
Domestic bonds	6,916	1,221,061	146,166	-	1,374,143
Foreign bonds	377	249,784	-	-	250,161
Common equity:					
Domestic	155,930	1	233,650	-	389,581
Foreign	1,635,001	49,884	23,965	-	1,708,850
Equity:**					
Absolute return	-	-	-	4,671,478	4,671,478
Domestic	-	-	-	2,191,364	2,191,364
Foreign	-	-	-	2,135,508	2,135,508
Private	-	-	-	10,544,528	10,544,528
Real estate*	1,231	-	3,486,773	1,499,767	4,987,771
Real assets*	8,159	-	346	262,770	271,275
Split-interest agreements	-	-	81,355	-	81,355
Other	-	-	12,245	-	12,245
Derivatives, assets/(liabilities)	43	(842)	-	-	(799)
Investments, at fair value	\$ 3,848,853	\$ 1,554,151	\$ 3,984,500	\$ 21,305,415	\$ 30,692,919

* Includes direct investments and investments held through commingled vehicles.

** Includes commingled vehicles that invest in these types of investments.

B. Investments (continued)

Table 6 below is a rollforward of the investments classified by MIT within Level 3 of the fair value hierarchy defined earlier in this note as of June 30, 2024, and 2023.

TABLE 6. ROLLFORWARD OF LEVEL 3 INVESTMENTS

<i>(in thousands of dollars)</i>	Fair Value Beginning	Realized Gains (Losses)	Unrealized Gains (Losses)	Purchases	Sales	Other Changes and Transfers	Fair Value Ending
Fiscal Year 2024							
Domestic bonds	\$ 146,166	\$ 57	\$ (57)	\$ 21,232	\$ (8,086)	-	\$ 159,312
Common equity:							
Domestic	233,650	(2)	(1,267)	14,461	(2)	-	246,840
Foreign	23,965	-	(232)	12	-	(9,142)	14,603
Real estate	3,486,773	991	(573,182)	410,694	(2,806)	(15,496)	3,306,974
Real assets	346	-	22	-	-	-	368
Split-interest agreements	81,355	-	4,677	1,092	(192)	-	86,932
Other	12,245	-	2,534	-	-	-	14,779
Investments, at fair value	\$ 3,984,500	\$ 1,046	\$ (567,505)	\$ 447,491	\$ (11,086)	\$ (24,638)	\$ 3,829,808
Fiscal Year 2023							
Domestic bonds	\$ 127,650	\$ 23	\$ 577	\$ 25,615	\$ (7,699)	-	\$ 146,166
Common equity:							
Domestic	236,320	2,211	(3,103)	449	(2,227)	-	233,650
Foreign	15,398	-	(491)	9,058	-	-	23,965
Real estate	3,884,874	15,874	(394,542)	259,681	(246,493)	(32,621)	3,486,773
Real assets	317	-	29	-	-	-	346
Split-interest agreements	80,970	245	692	3	(555)	-	81,355
Other	19,720	3	(7,474)	-	(4)	-	12,245
Investments, at fair value	\$ 4,365,249	\$ 18,356	\$ (404,312)	\$ 294,806	\$ (256,978)	\$ (32,621)	\$ 3,984,500

Table 7 below sets forth a summary of valuation techniques and quantitative information utilized in determining the fair value of MIT's Level 3 investments as of June 30, 2024, and 2023.

TABLE 7. LEVEL 3 VALUATION TECHNIQUES

<i>(in thousands of dollars)</i>	Fair Value as of June 30, 2024	Fair Value as of June 30, 2023	Valuation Technique	Unobservable Input	2024 Rates	2024 Weighted Average	2023 Rates	2023 Weighted Average
Real estate	\$ 4,252,685	\$ 3,824,407	Income approach	Discount Rate	5.25 - 9.00%	7.35%	5.00 - 8.00%	6.89%
				Capitalization Rate	4.25 - 7.25%	6.20%	4.00 - 7.25%	5.65%
				Terminal Capitalization Rate	4.50 - 8.25%	6.47%	4.25 - 7.0%	6.03%
	1,105	240,208	Market approach	Comparable sales	\$99-299/FAR	\$217/FAR	\$170-365/FAR	\$289/FAR
Equity and real asset securities	7,643	8,954	Discounted cash flow	Discount Rate	25.00%	25.00%	25.00%	25.00%
Split-interest agreements	86,932	81,355	Net present value	Discount Rate	5.85%	5.85%	4.45%	4.45%
Total assets*	\$ 4,348,365	\$ 4,154,924						

* Certain Level 3 investments and debt totaling (\$779,898) and (\$430,480) as of June 30, 2024 and June 30, 2023, respectively, have been valued at cost which approximates fair value or using unadjusted third party quotations and thus have been excluded from this table.

** Certain Level 3 investments totaling \$261,344 and \$260,056 as of June 30, 2024 and June 30, 2023, respectively, have been valued using the measurement and thus have been excluded from this table.

*** FAR stands for Floor Area Ratio

B. Investments (continued)

MIT has made commitments to make periodic contributions in future periods to investments managed by external managers, and certain of these investments may be subject to restrictions that: (i) limit MIT's ability to withdraw capital after such investment; and (ii) may limit the amount that may be withdrawn as of a given redemption date due to notice periods, lock-ups, and gates. Most absolute return, domestic equity, and foreign equity commingled funds limit withdrawals to monthly, quarterly, or other periods, and may require notice periods. In addition, some of these funds are able to designate a portion of the investments as illiquid in "side-pockets," and these funds may not be available for

withdrawal until liquidated by the investing fund. For the funds where MIT's ability to withdraw capital is limited, primarily with private equity, real estate, and real asset funds, distributions are made when sales of assets within these funds are made, and the investment cycle for these funds can be as long as 15 to 20 years. These restrictions may limit MIT's ability to respond quickly to changes in market conditions. However, MIT does have various sources of liquidity at its disposal. Refer to Note E for further details. Details on the remaining unfunded commitments and current redemption terms and restrictions by asset class and type of investment are provided below in Table 8 as of June 30, 2024, and 2023.

TABLE 8. UNFUNDED COMMITMENTS AND REDEMPTION TERMS AND RESTRICTIONS

(in thousands of dollars)	2024		2023		Redemption Terms	Days Notice
	Unfunded Commitments	Fair Value	Unfunded Commitments	Fair Value		
Equity:						
Absolute return ¹	\$ 91,761	\$ 4,943,175	\$ 66,190	\$ 4,671,478	Ranges from daily to 48 months ⁴	0 to 730 days
Domestic ²	29,546	2,540,222	52,685	2,191,364	Ranges from daily to 48 months ⁴	5 to 120 days
Foreign ³	-	2,012,138	517	2,135,508	Ranges from daily to 48 months ⁴	0 to 180 days
Private	2,736,211	11,284,910	3,041,935	10,544,528	Close-ended funds not available for redemption	Not redeemable
Real estate	634,273	1,580,242	737,402	1,499,767	Close-ended funds not available for redemption	Not redeemable
Real assets	18,551	277,784	16,949	262,770	13 months ⁴	90 days
Total	\$ 3,510,342	\$ 22,638,471	\$ 3,915,678	\$ 21,305,415		

¹Absolute return funds include funds that have remaining lock-up provisions up to 53 months.

²Domestic funds include funds that have remaining lock-up provisions up to 44 months.

³Foreign funds include funds that have remaining lock-up provisions up to 8 months.

⁴Includes funds that are not available for redemption.

C. Derivative Financial Instruments and Collateral

For its investment management, MIT uses a variety of financial instruments with off-balance-sheet risk involving contractual or optional commitments for future settlement. MIT uses these instruments primarily to manage or hedge its exposure to extreme market events and fluctuations in asset classes or currencies. Instruments utilized include fixed income, currency and equity futures, options, and swaps. The risks of these instruments, to varying degrees, include the possibility for imperfect correlation between the change in the market value of assets being hedged and the prices of the derivative or hedge instruments, and interest, credit market, liquidity, and counterparty risk.

To manage the counterparty risk, MIT requires collateral to the maximum extent possible under normal trading practices. Collateral is moved on a daily basis as required by fluctuations in the market. The collateral is generally in the form of debt obligations issued by the U.S. Treasury or cash. In the event of counterparty default, MIT has the right to use the collateral to offset the loss associated with the replacement of the agreements. Maximum risk of loss from counterparty credit risk on over-the-counter derivatives is generally the aggregate unrealized appreciation in excess of any collateral pledged by the counterparty. ISDA (International Swaps and Derivatives Association) Master Agreements under which many derivatives are traded allow MIT or the counterparties to an over-the-counter derivative to terminate the contract prior to maturity in the event either party fails to meet the terms in the ISDA Master Agreements. This would cause an accelerated payment of net liability, if owed to the counterparty.

MIT enters into arrangements only with counterparties believed to be creditworthy. On June 30, 2024, and 2023, cash collateral and certain securities owned by MIT were held at counterparty brokers to collateralize these positions and are included in investments in the Consolidated Statements of Financial Position.

Derivatives held by limited partnerships and commingled investment vehicles pose no off-balance sheet risk to MIT due to the limited liability structure of these investments.

The net fair value related to derivatives for the years ended June 30, 2024, and 2023, were \$0.5 million and short \$0.8 million, respectively. Net losses related to derivatives totaled \$146.2 million and \$78.6 million for the years ended June 30, 2024, and 2023, respectively. The average net notional related to derivatives for the years ended June 30, 2024, and 2023, were short \$777.7 million and short \$606.1 million, respectively.

Please refer to Note F for information regarding MIT's Series J interest rate swap.

D. Pledges Receivable

Table 9 below shows the time periods in which pledges receivable as of June 30, 2024, and 2023, are expected to be realized.

TABLE 9. PLEDGES RECEIVABLE		
<i>(in thousands of dollars)</i>	2024	2023
In one year or less	\$ 325,313	\$ 348,241
Between one year and five years	316,685	367,618
More than five years	135,226	54,674
Less: allowance for unfulfilled pledges	(150,320)	(159,346)
Pledges receivable, net	\$ 626,904	\$ 611,187

A review of pledges is conducted periodically regarding collectability. As a result, the allowance for unfulfilled pledges is adjusted, and some pledges have been cancelled and are no longer recorded in the financial statements.

Pledges were discounted in the amount of \$145.1 million and \$115.7 million in 2024 and 2023, respectively. The pledge discount rate ranged from fiscal 2024 at 5.4 percent to fiscal 2044 at 5.0 percent. MIT had gross conditional pledges, not recorded, for the promotion of education and research of \$107.2 million and \$193.4 million in fiscal 2024 and 2023, respectively. Conditional pledges are categorized as follows: fundraising challenge, building construction progress, foundation grants, and other.

Table 10 below shows the breakout of conditional pledge amounts as of June 30, 2024, and 2023.

TABLE 10. CONDITIONAL PLEDGES		
<i>(in thousands of dollars)</i>	2024	2023
Building Construction	\$ 40,746	\$ 110,746
Fundraising Challenge	22,471	25,309
Foundation Grants	28,914	30,162
Other	15,038	27,188
Total conditional pledges	\$ 107,169	\$ 193,405

Table 11 below is a rollforward of pledges receivable as of June 30, 2024, and 2023.

TABLE 11. ROLLFORWARD OF PLEDGES RECEIVABLE		
<i>(in thousands of dollars)</i>	2024	2023
Balance at beginning of the year	\$ 611,187	\$ 585,003
New pledges	272,144	311,774
Pledge payments received	(236,070)	(204,206)
Change in pledge discount	(29,382)	(37,441)
Change in allowance for unfulfilled pledges	9,025	(43,943)
Balance at the end of the year	\$ 626,904	\$ 611,187

E. Liquidity

Table 12 below details the Institute's financial assets and resources available to meet cash needs for general expenditures within one year of the date of the Consolidated Statements of Financial Position.

TABLE 12. LIQUIDITY AND AVAILABILITY OF RESOURCES

<i>(in thousands of dollars)</i>	2024	2023
Financial assets:		
Cash and liquid operating investments	\$ 2,234,089	\$ 2,741,231
Accounts receivable	306,844	320,984
Pledges receivable	144,019	132,617
Investments appropriated for spending in the following year	1,379,171	1,300,710
Total financial assets available within one year	\$ 4,064,123	\$ 4,495,542

As part of MIT's liquidity management strategy, financial assets are structured to be available as its general expenditures, liabilities, and other obligations come due. MIT invests its working capital, which is comprised of cash and capital project funds in excess of daily requirements, in various investment vehicles. To help manage unanticipated liquidity needs, MIT also maintains a bank line of credit for \$500.0 million, which was undrawn as of June 30, 2024, and 2023.

F. Net Borrowings

MIT's outstanding borrowings as of June 30, 2024, and 2023, are shown in Table 13 below.

TABLE 13. NET BORROWINGS

<i>(in thousands of dollars / due dates are calendar based / par values as of 2024)</i>	2024	2023
Educational plant		
Massachusetts Health and Educational Facilities Authority (MassDevelopment)		
Series I, 5.20%, due 2028, par value \$30,000	\$ 30,199	\$ 30,257
Series J-1, variable rate, due 2031, par value \$125,000	125,000	125,000
Series J-2 variable rate, due 2031, par value \$125,000	125,000	125,000
Series K, 5.5%, due 2032, par value \$121,500	125,600	126,010
Series L, 5.25%, due 2033, par value \$64,215	67,633	119,391
Series M, 5.25%, due 2024-2030, par value \$68,760	70,654	71,206
Series P, 5.0%, due 2050, par value \$136,055	200,017	202,475
Total MassDevelopment	\$ 744,103	\$ 799,339
Taxable		
Medium Term Notes Series A, 7.125% due 2026, par value \$17,415	17,406	17,402
Medium Term Notes Series A, 7.25%, due 2096, par value \$45,604	45,489	45,485
Taxable Bonds, Series B, 5.60%, due 2111, par value \$750,000	747,270	747,238
Taxable Bonds, Series C, 4.678%, due 2114, par value \$550,000	550,000	550,000
Taxable Bonds, Series D, 3.308-3.959%, due 2026-2038, par value \$456,000	456,000	456,000
Taxable Bonds, Series E, 3.885%, due 2116, par value \$500,000	500,000	500,000
Taxable Bonds, Series F, 2.989%, due 2050, par value \$525,000	546,566	547,395
Taxable Bonds, Series G, 2.294% due 2051, par value \$350,000	350,000	350,000
Taxable Bonds, Series H, 3.067% due 2052, par value \$500,000	500,000	500,000
Total taxable	\$ 3,712,731	\$ 3,713,520
Total educational plant*	\$ 4,456,834	\$ 4,512,859
Consolidated entity debt	\$ 1,200	\$ -
Total borrowings	\$ 4,458,034	\$ 4,512,859
Unamortized bond issuance costs	(27,638)	(28,397)
Total borrowings net of unamortized debt issuance costs	\$ 4,430,396	\$ 4,484,462

** Proceeds from recent issuances were in the process of being invested in physical assets in 2024 and 2023 with unused balances held in investments.*

F. Net Borrowings (continued)

The aggregate amounts of debt payments and sinking fund requirements for each of the next five fiscal years are shown in Table 14 below.

TABLE 14. DEBT PRINCIPAL OBLIGATIONS		
<i>(in thousands of dollars)</i>		
2025	\$	13,585
2026		13,030
2027		103,415
2028		30,000
2029		13,715

MIT maintains an undrawn line of credit with a major financial institution for an aggregate commitment of \$500.0 million. The line of credit expires on March 31, 2026.

Cash paid for interest on long-term debt in fiscal 2024 and fiscal 2023 was \$182.4 million and \$188.2 million, respectively.

Variable interest rates as of June 30, 2024, are shown in Table 15 below.

TABLE 15. VARIABLE INTEREST RATES		
<i>(in thousands of dollars)</i>	Amount	Rate
MassDevelopment Series J-1	\$ 125,000	3.38%
MassDevelopment Series J-2	125,000	3.08%

In the event that MIT receives notice of any optional tender on its Series J-1 and Series J-2 variable-rate bonds, or if these bonds become subject to mandatory tender, the purchase price of the bonds will be paid from the remarketing of such bonds. However, if the remarketing proceeds are insufficient, MIT will be obligated to purchase the bonds tendered at 100.0 percent of par on the tender date. In the event that MIT is obligated to purchase the bonds, cash on hand or liquidation of short-term investments from operating funds would be used as a source of funds.

MIT maintains an interest rate swap agreement to manage the interest cost and risk associated with a portion of the variable rate debt included in Table 15 above. Under the agreement, MIT pays a fixed rate of 4.91 percent and receives a payment indexed to the Securities Industry and Financial Market Association (SIFMA) index on a notional amount of \$125.0 million. The notional amount of this derivative is not recorded on MIT's Consolidated Statements of Financial Position. As of June 30, 2024, and 2023, the swap agreement had fair values of (\$15.6) million and (\$17.3) million, respectively, included in the accounts payable, accruals, and other liabilities line item on the Consolidated Statements of Financial Position. Fair value is measured using Level 2 inputs as defined in Note B. This swap had net gains of \$1.7 million and \$8.2 million in fiscal 2024 and 2023, respectively.

G. Commitments and Contingencies

Federal Government Funding

MIT receives funding or reimbursement from federal agencies for sponsored programs under government grants and contracts. These grants and contracts provide for reimbursement of indirect costs. MIT's indirect cost reimbursements for sponsored research activities are based on rates negotiated with the Office of Naval Research (ONR), MIT's cognizant federal agency. Indirect research rates are based on fixed rates with carryforward of under- or over-recoveries. MIT recorded a net under-recovery of \$94.0 million and \$87.3 million as of June 30, 2024, and 2023, respectively. The Institute recorded an additional \$9.6 million reserve in fiscal 2024 after recording a \$75.0 million reserve in fiscal 2023 to reflect that MIT may not, over time, fully recover the \$94.0 million under-recovery.

The DCAA is responsible for auditing indirect charges to research grants and contracts in support of ONR's negotiating responsibility. The Institute's rates have been audited by DCAA through fiscal 2022, and the audit for fiscal 2023 is in progress. ONR has completed negotiations of final rates through fiscal 2022 and forward pricing rates through fiscal 2024.

Leases

The Institute is the lessee of space under operating (rental) leases with contractual terms longer than twelve months. The Institute determines whether a contract is a lease at inception. Identified leases are subsequently measured, classified, and recognized at lease commencement. The Institute's leases generally have terms that range from one to fifteen years for property, with certain leases inclusive of renewal options if they are considered to be reasonably assured at lease commencement. Right-of-use assets and lease liabilities for operating leases are included in the operating leases - right-of-use assets and operating lease liabilities line items, respectively, in the Consolidated Statements of Financial Position. Lease assets represent our right to use an underlying asset for the lease term, and lease liabilities represent our obligation to make lease payments arising from the lease.

Operating lease right-of-use assets and associated lease liabilities are recognized based on the present value of future minimum lease payments to be made over the expected lease term, using the incremental borrowing rate at the commencement date in determining the present value of future payments. Rent expense related to operating leases, including short-term leases, was \$44.7 million and \$41.1 million in fiscal 2024 and fiscal 2023, respectively.

Future minimum lease payments with a reconciliation to the operating lease liabilities number in the Consolidated Statements of Financial Position as of June 30, 2024, are shown below.

TABLE 16. ANNUAL MINIMUM LEASE

(in thousands of dollars)

2025	\$	43,059
2026		40,413
2027		40,512
2028		37,127
2029		21,408
Thereafter		37,733
Total minimum lease payments		220,252
Less: Amount representing interest		(11,523)
Present value of net minimum lease payments	\$	208,729

The lease cost and other required information for the year ended June 30, 2024, and 2023, are shown below:

TABLE 17. QUANTITATIVE DISCLOSURES

(in thousands of dollars)

	2024	2023
Accretion of the Lease Liability	\$ 47,397	\$ 23,172
Operating Cash Flows from Operating Leases*	\$ 43,872	\$ 43,607
Weighted Average Remaining Lease Term in Years	5.8	6.1
Weighted Average Discount Rate	1.6%	1.2%

* Supplemental cash flow information representing lease cost is reported in Utilities, rent, and repairs in the Consolidated Statement of Activities.

Assets Pledged as Collateral

As of June 30, 2024, and 2023, \$0.8 million and \$12.2 million of assets, respectively, were pledged as collateral to various suppliers and government agencies. This is classified as restricted cash on the Consolidated Statements of Cash Flows.

G. Commitments and Contingencies (continued)

Future Construction

As of June 30, 2024, MIT had contractual obligations of approximately \$349.5 million in connection with educational plant construction projects. It is expected that the resources to satisfy these commitments will be provided from unexpended plant funds, anticipated gifts, bond proceeds, and funds without donor restrictions.

MIT has also made commitments related to the development of its commercial real estate holdings in Kendall Square and to the enhancement of its East Campus gateway. As of June 30, 2024, the outstanding commitments included approximately \$64.8 million of contractual obligations related to the Kendall Square Initiative and \$22.3 million related to other commercial real estate projects. In 2017, MIT and the federal government entered into an agreement whereby MIT agreed to construct a new transportation center on four of the fourteen acres of federally owned land located at the John A. Volpe National Transportation Systems Center site in Kendall Square in exchange for the fee interest to and the right to redevelop the adjacent ten acres of land. MIT has invested a total of \$748.5 million in the project. Costs incurred for construction of the new facility and in completion of the final exchange, which are included in investments, were \$270.6 million and \$89.9 million in fiscal 2024 and fiscal 2023, respectively. The exchange was completed in January of 2024 upon completion of the construction of the new facility by delivery of the building with a cost to MIT of \$529.5 million and cash of \$219.0 million. The Volpe property was then marked-to-market and is carried at fair value in investments as of June 30, 2024.

General

MIT has entered into agreements, including collaborations with third-party not-for-profit and for-profit entities, for education, research, and technology transfers. Some of these agreements involve funding from foreign governments. These agreements subject MIT to greater financial risk than do its normal operations. In the opinion of management, the likelihood of realization of increased financial risks by MIT under these agreements is remote.

MIT is subject to certain other legal proceedings and claims that arise in the normal course of operations. In the opinion of management, the ultimate outcome of these actions will not have a material effect on MIT's financial position.

H. Functional Expense Classification

MIT's expenditures on a functional basis for the years ended June 30, 2024, and 2023, are shown in Table 18 below.

TABLE 18. EXPENDITURES BY FUNCTIONAL CLASSIFICATION

<i>(in thousands of dollars)</i>	General and administrative	Instruction and unsponsored research	Sponsored research	Total
Fiscal Year 2024				
Compensation	\$ 559,934	\$ 736,573	\$ 1,136,985	\$ 2,433,492
Other operating	144,894	594,929	734,999	1,474,822
Space-related	211,387	235,623	230,865	677,875
2024 Total	\$ 916,215	\$ 1,567,125	\$ 2,102,849	\$ 4,586,189
Fiscal Year 2023				
Compensation	\$ 593,496	\$ 669,520	\$ 1,011,039	\$ 2,274,055
Other operating	187,315	508,481	694,717	1,390,513
Space-related	213,671	238,846	221,189	673,706
2023 Total	\$ 994,482	\$ 1,416,847	\$ 1,926,945	\$ 4,338,274

Expenses are presented by functional classification in alignment with the overall mission of the Institute. Each functional classification displays all expenses related to the underlying operation by natural classification. Natural expenses attributable to more than one functional expense category are allocated using reasonable cost allocation techniques. Depreciation and utilities, rent, and repair expenses are allocated directly and/or based on square footage. Interest expense on indebtedness is allocated to the functional categories that have benefited from the proceeds of the associated debt.

I. Retirement Benefits

MIT offers a defined benefit pension plan and a defined contribution plan to its employees. The plans cover substantially all MIT employees.

MIT also offers a retiree welfare benefit plan (certain healthcare and life insurance benefits) for retired employees. Substantially all MIT employees may become eligible for those benefits if they reach a qualifying retirement age while working for MIT. The healthcare component of the welfare plan is paid for in part by retirees, their covered dependents, and beneficiaries. Benefits are provided through various insurance companies whose charges are based either on the claims and administrative expenses paid during the year or annual insured premiums. The life insurance component of the welfare plan includes basic life insurance and supplemental life insurance. The basic life insurance plan is non-contributory and covers the retiree only. The supplemental life insurance plan is paid for by the retiree. MIT maintains a trust to pay for the retiree welfare benefit plan.

MIT contributes to the defined benefit pension plan amounts that are actuarially determined to provide the retirement plan with sufficient assets to meet future benefit requirements. There were no designated contributions to the defined benefit pension plan and the retiree welfare benefit plan for fiscal 2024 and fiscal 2023.

For the defined contribution plan, the amounts contributed and expenses recognized during fiscal 2024 and fiscal 2023 were \$83.7 million and \$76.4 million, respectively.

For purposes of calculating net periodic benefit cost, plan amendments for the defined benefit pension plan are amortized on a straight-line basis over the average future service of active participants at the date of the amendment. Plan amendments to the retiree welfare benefit plan are amortized on a straight-line basis over the average future service to full eligibility of active participants at the date of amendment.

Cumulative gains and losses (including changes in assumptions) more than 10.0 percent of the greater of the benefit obligation or the market-related value of assets for both the defined benefit pension plan and the retiree welfare benefit plan are amortized over the average future service of active participants. MIT accelerates recognition of cumulative gains or losses to the extent that the unrecognized balance partially or fully offsets the preliminary net periodic benefit cost or income calculated prior to this accelerated amount. In no event shall the annual amortization be less than the total amount of unrecognized gains and losses up to \$1.0 million.

I. Retirement Benefits (continued)

Components of Net Periodic Benefit Cost

Table 19 below summarizes the components of net periodic benefit cost recognized in net results and other amounts recognized in other revenues, gains, and losses without donor restrictions for the years ended June 30, 2024, and 2023.

TABLE 19. COMPONENTS OF NET PERIODIC BENEFIT COST AND OTHER AMOUNTS RECOGNIZED IN OTHER REVENUES, GAINS, AND LOSSES

	Defined Benefit Pension Plan		Retiree Welfare Benefit Plan	
	2024	2023	2024	2023
<i>(in thousands of dollars)</i>				
Components of net periodic benefit cost recognized in net results:				
Service cost	\$ 110,231	\$ 125,296	\$ 29,313	\$ 28,059
Interest cost	254,078	247,139	38,643	32,352
Expected return on plan assets	(391,526)	(373,076)	(64,763)	(62,020)
Amortization of net actuarial (gain)/loss	(15,323)	1,000	(19,605)	(20,212)
Amortization of prior service cost	347	347	1,646	1,646
Net periodic benefit (income)/cost recognized in net results	(42,193)	706	(14,766)	(20,175)
Other amounts recognized in other revenues, gains and losses:				
Current year prior service cost	-	-	-	-
Current year actuarial loss (gain)	93,816	(251,221)	(47,094)	60,453
Amortization of actuarial gain (loss)	15,323	(1,000)	19,605	20,212
Amortization of prior service (cost)	(347)	(347)	(1,646)	(1,646)
Total other amounts recognized in other revenues, gains and losses	108,792	(252,568)	(29,135)	79,019
Total recognized	\$ 66,599	\$ (251,862)	\$ (43,901)	\$ 58,844

Cumulative amounts recognized in net assets without donor restrictions are summarized in Table 20 below for the years ended June 30, 2024, and 2023.

TABLE 20. CUMULATIVE AMOUNTS RECOGNIZED IN NET ASSETS WITHOUT DONOR RESTRICTION

	Defined Benefit Pension Plan		Retiree Welfare Benefit Plan	
	2024	2023	2024	2023
<i>(in thousands of dollars)</i>				
Amounts recognized in unrestricted net assets without donor restrictions consist of:				
Net actuarial (gain)	\$ (308,242)	\$ (417,382)	\$ (257,243)	\$ (229,753)
Prior service cost	1,901	2,249	11,018	12,663
Total cumulative amounts recognized in net assets without donor restrictions	\$ (306,341)	\$ (415,133)	\$ (246,225)	\$ (217,090)

I. Retirement Benefits (continued)

Benefit Obligations and Fair Value of Assets

Table 21 below summarizes the benefit obligations, plan assets, and amounts recognized in the Consolidated Statements of Financial Position for MIT's retirement benefit plans. MIT uses a June 30 measurement date for its defined benefit pension plan and retiree welfare benefit plan.

The projected benefit obligation for the defined benefit pension plan, as shown in Table 21, was \$4,980.8 million and \$4,570.0 million as of June 30, 2024, and 2023, respectively. Another measure of the plan's liabilities is the

accumulated benefit obligation. While the projected benefit obligation factors in future salary increases, the accumulated benefit obligation does not. The accumulated benefit obligation of MIT's defined benefit pension plan was \$4,845.6 million and \$4,430.6 million as of June 30, 2024, and 2023, respectively.

MIT provides retiree drug coverage through an EGWP. Under an EGWP, the cost of drug coverage is offset through direct federal subsidies, brand-name drug discounts, and reinsurance reimbursements.

TABLE 21. BENEFIT OBLIGATIONS* AND FAIR VALUE OF ASSETS

	Defined Benefit Pension Plan		Retiree Welfare Benefit Plan	
	2024	2023	2024	2023
<i>(in thousands of dollars)</i>				
Change in benefit obligations*:				
Benefit obligations* at beginning of year	\$ 4,570,000	\$ 5,074,737	\$ 661,227	\$ 640,049
Service cost	110,231	125,296	29,313	28,059
Interest cost	254,078	247,139	38,643	32,352
Retiree contributions	-	-	12,385	11,065
Net benefit payments, transfers, and other expenses	(194,765)	(200,460)	(51,934)	(50,996)
Employer Group Waiver Plan (EGWP) reimbursement	-	-	12,973	12,221
Plan amendments	-	-	-	-
Assumption changes and actuarial net loss (gain)	241,300	(676,712)	(14,551)	(11,523)
Benefit obligations* at end of the year	4,980,844	4,570,000	688,056	661,227
Change in plan assets:				
Fair value of plan assets at beginning of the year	5,204,725	5,457,600	914,749	952,415
Actual return on plan assets	539,010	(52,415)	97,306	(9,956)
Employer contributions	-	-	-	-
Employer Group Waiver Plan (EGWP) reimbursement	-	-	12,973	12,221
Retiree contributions	-	-	12,385	11,065
Net benefit payments, transfers, and other expenses	(194,765)	(200,460)	(51,934)	(50,996)
Fair value of plan assets at end of the year	5,548,970	5,204,725	985,479	914,749
Funded status at end of the year	568,126	634,725	297,423	253,522
Amounts recognized in the Consolidated Statements of Financial Position consist of:				
Net asset position	\$ 568,126	\$ 634,725	\$ 297,423	\$ 253,522

*The benefit obligation for the Defined Benefit Pension Plan is the Projected Benefit Obligation (PBO); for the Retiree Welfare Benefit Plan it is the Accumulated Postretirement Benefit Obligation (APBO).

I. Retirement Benefits (continued)

Assumptions for Financial Parameters and Healthcare Trend Rates

Table 22 below summarizes assumptions and healthcare trend rates. The expected long-term rate-of-return assumption represents the expected average rate of earnings on the funds invested, or to be invested, to provide for the benefits included in the benefit obligation. The long-term rate-of-return assumption is determined based on several factors, including historical market index returns, the anticipated long-term asset allocation of the plans, historical plan return data, plan expenses, and the potential to outperform market index returns.

TABLE 22. ASSUMPTIONS

	Defined Benefit Pension Plan		Retiree Welfare Benefit Plan	
	2024	2023	2024	2023
<i>(in thousands of dollars)</i>				
Assumptions used to determine benefit obligation				
as of June 30:				
Discount rate	5.68%	5.56%	5.84%	5.73%
Rate of compensation increase*	5.50%	7.00%/5.50%		
Pension increases for in-payment benefits**	3.38%/1.88%	3.75%/1.88%		
Cash balance interest crediting rate	6.00%	6.00%		
Assumptions used to determine net periodic benefit cost				
for the year ended June 30:				
Discount rate	5.56%	4.85%	5.73%	4.96%
Expected long-term return on plan assets	7.25%	7.25%	6.75%	6.75%
Rate of compensation increase	7.00%/5.50%	5.75%		
Cash balance interest crediting rate	6.00%	6.00%		
Assumed health care cost trend rates:				
Healthcare cost trend rate assumed for next year (pre-65/post-65/EGWP)***			7.75%/7.25%/-17.58%	8.00%/7.50%/13.00%
Ultimate health care cost trend rate (pre-65/post-65/EGWP)****			5.00%/5.00%/5.00%	5.25%/5.25%/4.00%
Year the rate reaches the ultimate trend rate			2031/2031/2033	2030/2030/2030

*As of June 30, 2024, salary increases are at 5.50% for fiscal years ending 2025 and beyond, updated from June 30, 2023 assumption of salary increases of 7.00% on average in fiscal 2024 and 5.50% thereafter.

**As of June 30, 2024, the pension increase assumption for in-payment benefits is assumed to be 3.38% in 2024, grading down to 1.88% over 5 years, updated from June 30, 2023 assumption of 3.75% grading down to 1.88% over 6 years.

***As of June 30, 2024, the health care cost trend for next year is assumed to be 7.75% for pre-65 costs, 7.25% for post-65 costs and -17.58% for EGWP reimbursement.

****As of June 30, 2024, the ultimate health care cost trend is assumed to be 5.00% for pre-and post-65 costs and for EGWP reimbursements.

Plan Investments

The investment objectives for the assets of the plans are to minimize expected funding contributions and to meet or exceed the rates of return assumed for plan funding purposes over the long term. The nature and duration of benefit obligations, along with assumptions concerning asset class returns and return correlations, are considered when determining an appropriate asset allocation to achieve the investment objectives.

Investment policies and strategies governing the assets of the plans are designed to achieve investment objectives within prudent risk parameters. Risk management practices include the use of external investment managers, the maintenance of a portfolio diversified by asset class, investment approach, security holdings, and the maintenance of sufficient liquidity to meet benefit obligations as they come due.

I. Retirement Benefits (continued)

Tables 23A and 23B present investments at fair value of MIT's defined benefit pension plan and retiree welfare benefit plan, which are included in fair value of plan assets as of June 30, 2024, and 2023, grouped by the valuation hierarchy detailed in Note B. The investment values in these tables exclude certain items included in the assets and liabilities shown in Table 21.

TABLE 23A. DEFINED BENEFIT PENSION PLAN INVESTMENTS

<i>(in thousands of dollars)</i>	Level 1	Level 2	Level 3	NAV	Total Fair Value
Fiscal Year 2024					
Cash and short-term investments	\$ 134,925	\$ 3,100	\$ -	\$ -	\$ 138,025
US Treasury	473,126	-	-	-	473,126
US government agency	-	67,778	-	-	67,778
Domestic bonds	-	13	-	-	13
Common equity:					
Domestic	322,282	-	-	-	322,282
Foreign	400,472	16,732	2,867	-	420,071
Equity:*					
Absolute return	-	-	-	759,274	759,274
Domestic	-	-	-	467,971	467,971
Foreign	-	-	-	527,793	527,793
Private	-	-	-	2,009,924	2,009,924
Real estate*	4	-	-	338,672	338,676
Real assets*	-	-	-	67,856	67,856
Other	3,001	-	1,577	-	4,578
Derivatives	-	8,636	-	-	8,636
Total plan investments assets	\$ 1,333,810	\$ 96,259	\$ 4,444	\$ 4,171,490	\$ 5,606,003
Liabilities associated with investments					
Investments sold, but not yet purchased	(65,042)	-	-	-	(65,042)
Other liabilities	(2,131)	(1,761)	-	-	(3,892)
Total plan investment liabilities	(67,173)	(1,761)	-	-	(68,934)
Total plan investments	\$ 1,266,637	\$ 94,498	\$ 4,444	\$ 4,171,490	\$ 5,537,069
Fiscal Year 2023					
Cash and short-term investments	\$ 157,776	\$ -	\$ -	\$ -	\$ 157,776
US Treasury	537,480	-	-	-	537,480
US government agency	-	4,800	-	-	4,800
Domestic bonds	-	87	-	-	87
Common equity:					
Domestic	197,973	-	173	-	198,146
Foreign	373,994	10,600	2,943	-	387,537
Equity:*					
Absolute return	-	-	-	682,055	682,055
Domestic	-	-	-	428,764	428,764
Foreign	-	-	-	569,442	569,442
Private	-	-	-	1,943,173	1,943,173
Real estate*	799	-	-	315,555	316,354
Real assets*	-	-	-	65,228	65,228
Other	2,976	-	1,577	-	4,553
Derivatives	74	1,577	-	-	1,651
Total plan investments assets	\$ 1,271,072	\$ 17,064	\$ 4,693	\$ 4,004,217	\$ 5,297,046
Liabilities associated with investments					
Investments sold, but not yet purchased	(97,424)	-	-	-	(97,424)
Other liabilities	(3,753)	(1,972)	-	-	(5,725)
Total plan investment liabilities	(101,177)	(1,972)	-	-	(103,149)
Total plan investments	\$ 1,169,895	\$ 15,092	\$ 4,693	\$ 4,004,217	\$ 5,193,897

* Equity, real estate, and real assets categories include commingled vehicles that invest in these types of investments.

I. Retirement Benefits (continued)

TABLE 23B. RETIREE WELFARE BENEFIT PLAN INVESTMENTS

<i>(in thousands of dollars)</i>	Level 1	Level 2	Level 3	NAV	Total Fair Value
Fiscal Year 2024					
Cash and short-term investments	\$ 30,569	\$ -	\$ -	\$ -	\$ 30,569
US Treasury	123,894	-	-	-	123,894
US government agency	-	17,671	-	-	17,671
Domestic bonds	-	2	-	-	2
Common equity:					
Domestic	57,126	-	-	-	57,126
Foreign	69,977	2,953	538	-	73,468
Equity*:					
Absolute return	-	-	-	131,447	131,447
Domestic	-	-	-	74,227	74,227
Foreign	-	-	-	101,660	101,660
Private	-	-	-	311,668	311,668
Real estate*	1	-	-	55,924	55,925
Real assets*	-	-	-	10,983	10,983
Other	536	-	278	-	814
Derivatives	-	1,521	-	-	1,521
Total plan investment assets	\$ 282,103	\$ 22,147	\$ 816	\$ 685,909	\$ 990,975
Liabilities associated with investments					
Investments sold, but not yet purchased	(11,442)	-	-	-	(11,442)
Other liabilities	(376)	(310)	-	-	(686)
Total plan investment liabilities	(11,818)	(310)	-	-	(12,128)
Total plan investments	\$ 270,285	\$ 21,837	\$ 816	\$ 685,909	\$ 978,847
Fiscal Year 2023					
Cash and short-term investments	\$ 29,984	\$ -	\$ -	\$ -	\$ 29,984
US Treasury	143,492	-	-	-	143,492
US government agency	-	1,587	-	-	1,587
Domestic bonds	-	15	-	-	15
Common equity:					
Domestic	35,006	-	-	-	35,006
Foreign	66,664	1,871	519	-	69,054
Equity*:					
Absolute return	-	-	-	117,866	117,866
Domestic	-	-	-	67,526	67,526
Foreign	-	-	-	105,107	105,107
Private	-	-	-	296,593	296,593
Real estate*	141	-	-	51,008	51,149
Real assets*	-	-	-	10,051	10,051
Other	523	-	278	-	801
Derivatives	13	278	-	-	291
Total plan investment assets	\$ 275,823	\$ 3,751	\$ 797	\$ 648,151	\$ 928,522
Liabilities associated with investments					
Investments sold, but not yet purchased	(17,129)	-	-	-	(17,129)
Other liabilities	(661)	(347)	-	-	(1,008)
Total plan investment liabilities	(17,790)	(347)	-	-	(18,137)
Total plan investments	\$ 258,033	\$ 3,404	\$ 797	\$ 648,151	\$ 910,385

* Equity, real estate, and real assets categories include commingled vehicles that invest in these types of investments.

I. Retirement Benefits (continued)

The plans have made commitments to make periodic contributions in future periods to investments managed by external managers, and in other cases have entered into contractual arrangements that may limit their ability to initiate redemptions due to notice periods, lock-ups, and gates. Details on the remaining unfunded commitments and current redemption terms and restrictions by asset class and type of investment for both the defined benefit pension plan and retiree welfare benefit plan are provided in Table 24 below as of June 30, 2024, and 2023.

TABLE 24. UNFUNDED COMMITMENTS AND REDEMPTION TERMS AND RESTRICTIONS

	2024		2023				
(in thousands of dollars)	Unfunded Commitments	Fair Value	Unfunded Commitments	Fair Value	Redemption Terms	Days Notice	
Defined Benefit Pension Plan							
Equity:							
Absolute return ¹	\$ 28,874	\$ 759,274	\$ 17,848	\$ 682,055	Ranges from 60 days to 48 months ⁴	30 to 730 days	
Domestic ²	387	467,971	387	428,764	Ranges from 4 months to 48 months ⁴	60 to 120 days	
Foreign ³	-	527,793	-	569,442	Ranges from 4 months to 48 months ⁴	40 to 91 days	
Private	476,522	2,009,924	514,984	1,943,173	Close-ended funds not available for redemption	Not redeemable	
Real estate	198,198	338,672	215,100	315,555	Close-ended funds not available for redemption	Not redeemable	
Real Assets	4,054	67,856	3,905	65,228	13 months ⁴	90 days	
Total	\$ 708,035	\$ 4,171,490	\$ 752,224	\$ 4,004,217			
Retiree Welfare Benefit Plan							
Equity:							
Absolute return ¹	\$ 4,662	\$ 131,447	\$ 2,581	\$ 117,866	Ranges from 60 days to 48 months ⁴	30 to 730 days	
Domestic ²	43	74,227	43	67,526	Ranges from 4 months to 48 months ⁴	60 to 120 days	
Foreign ³	-	101,660	-	105,107	Ranges from 4 months to 48 months ⁴	40 to 91 days	
Private	79,231	311,668	84,811	296,593	Close-ended funds not available for redemption	Not redeemable	
Real estate	35,849	55,924	36,284	51,008	Close-ended funds not available for redemption	Not redeemable	
Real Assets	676	10,983	651	10,051	13 months ⁴	90 days	
Total	\$ 120,461	\$ 685,909	\$ 124,370	\$ 648,151			

¹Absolute return funds include funds that have remaining lock-up provisions up to 54 months.

²Domestic funds include funds that have remaining lock-up provisions up to 23 months.

³Foreign funds include funds that have remaining lock-up provisions up to 13 months.

⁴Includes funds that are not available for redemption.

I. Retirement Benefits (continued)

Target allocations and weighted-average asset allocations of the investment portfolios for MIT's defined benefit pension plan and retiree welfare benefit plan as of June 30, 2024, and 2023, are shown in Table 25 below.

TABLE 25. PLAN INVESTMENT ALLOCATION

	Defined Benefit Pension Plan			Retiree Welfare Benefit Plan		
	2024 Target Allocation	2024	2023	2024 Target Allocation	2024	2023
Cash and short-term investments	0-10%	2%	3%	0-10%	3%	3%
Fixed income	3-13%	10%	11%	10-20%	15%	16%
Equities	41.5-88.5%	67%	66%	34-84%	62%	61%
Marketable alternatives	12-22%	14%	13%	12.5-22.5%	13%	13%
Real assets	0-6%	1%	1%	0-5.5%	1%	1%
Real estate	0.5-10.5%	6%	6%	0-8%	6%	6%
Total		100%	100%		100%	100%

Expected Future Benefit Payments

In fiscal 2025, MIT does not expect to contribute to its defined benefit pension plan or to the retiree welfare benefit plan as determined by their valuations. These valuations assume a 7.25 percent and 6.75 percent expected return on assets for the defined benefit pension plan and retiree welfare benefit plan, respectively. MIT elected to adopt Pri-2012 mortality tables for employees and retirees issued by the Society of Actuaries (SOA) with an experience adjustment multiplier of 0.8 to reflect MIT experience.

Mortality rates are projected generationally from the base year of 2012 using Scale MP-2021.

Table 26 below reflects the total expected benefit payments for the defined benefit pension plan and retiree welfare benefit plan over the next ten years. These payments have been estimated based on the same assumptions used to measure MIT's benefit obligations as of June 30, 2024.

TABLE 26. EXPECTED FUTURE BENEFIT PAYMENTS

<i>(in thousands of dollars)</i>	Pension Benefits		Retiree Welfare Benefits*	
2025	\$	215,974	\$	31,091
2026		240,933		36,815
2027		255,649		39,600
2028		268,989		42,259
2029		281,749		44,458
2030 - 2034		1,579,027		253,670

*Retiree Welfare Benefits reflect the total net benefits expected to be paid from the plans (e.g., gross benefit reimbursement offset by retiree contributions).

I. Retirement Benefits (continued)

Derivative Financial Instruments

For investment management, the defined benefit pension and the retiree welfare benefit plans use a variety of financial instruments with off-balance-sheet risk involving contractual or optional commitments for future settlement. They use these instruments primarily to manage or hedge exposure to extreme market events and fluctuations in asset classes or currencies. Instruments utilized include fixed income, currency and equity futures, options, and swaps. The risks of these instruments, to varying degrees, include the possibility for imperfect correlation between the change in the market value of assets being hedged and the prices of the derivative or hedge instruments, and interest, credit market, liquidity, and counterparty risk.

Derivatives held by limited partnerships and commingled investment vehicles pose no off-balance sheet risk to the plans due to the limited liability structure of these investments. The net fair value related to derivatives for the defined benefit pension plan for the years ended June 30, 2024, and 2023, were \$7.6 million and short \$0.4 million, respectively. Net losses for the defined benefit pension plan related to derivatives totaled \$5.1 million and \$14.4 million for the years ended June 30, 2024 and 2023, respectively. The average net notional related to derivatives for the defined benefit pension plan for the years ended June 30, 2024, and 2023, were short \$72.0 million and short \$88.5 million, respectively.

The net fair value for the retiree welfare benefit plan related to derivatives for the years ended June 30, 2024, and 2023, were \$1.3 million and short \$0.1 million, respectively. Net losses for the retiree welfare benefit plan related to derivatives totaled \$0.9 million and \$2.5 million for the years ended June 30, 2024 and 2023, respectively. The average net notional for the retiree welfare benefit plan related to derivatives for the years ended June 30, 2024, and 2023, were short \$12.2 million and short \$14.8 million, respectively.

J. Components of Net Assets and Endowment

Tables 27A and 27B present the composition of net assets as of June 30, 2024, and June 30, 2023, respectively. The amounts listed in the without donor restrictions category under the endowment funds sections are those gifts and other funds received over the years that MIT designated as funds functioning as endowment and invested with the

endowment funds. A large component of net assets with donor restrictions in other funds is pledges, the majority of which will be reclassified to net assets without donor restrictions when cash is received.

TABLE 27A. 2024 TOTAL NET ASSET COMPOSITION

<i>(in thousands of dollars)</i>	Without Donor Restrictions	With Donor Restrictions	Total
Endowment funds			
General purpose	\$ 2,108,647	\$ 2,531,129	\$ 4,639,776
Departments and research	1,189,900	3,626,231	4,816,131
Library	19,664	87,396	107,060
Salaries and wages	954,739	5,859,984	6,814,723
Graduate general	145,704	405,825	551,529
Graduate departments	429,446	1,455,528	1,884,974
Undergraduate	444,685	2,633,845	3,078,530
Prizes	15,358	91,467	106,825
Miscellaneous	1,899,274	673,894	2,573,168
Endowment funds before pledges	7,207,417	17,365,299	24,572,716
Pledges	-	142,314	142,314
Total endowment funds	7,207,417	17,507,613	24,715,030
Other Funds			
Student-related loan funds	16,744	23,718	40,462
Building funds	42,241	67,308	109,549
Designated purposes:			
Departments and research	578,762	-	578,762
Other purposes	374,501	17,665	392,166
Life income funds and donor-advised funds	130,273	259,518	389,791
Pledges	-	484,590	484,590
Other funds available for current expenses	4,467,622	397,561	4,865,183
Retirement benefits overfunded	865,549	-	865,549
Funds for educational plant	1,109,795	-	1,109,795
Total other funds	7,585,487	1,250,360	8,835,847
Total net assets	\$ 14,792,904	\$ 18,757,973	\$ 33,550,877

J. Components of Net Assets and Endowment (continued)

TABLE 27B. 2023 TOTAL NET ASSET COMPOSITION

<i>(in thousands of dollars)</i>	Without Donor Restrictions	With Donor Restrictions	Total
Endowment Funds			
General purpose	\$ 2,028,800	\$ 2,198,534	\$ 4,227,334
Departments and research	1,192,747	3,345,304	4,538,051
Library	18,983	84,256	103,239
Salaries and wages	918,914	5,626,221	6,545,135
Graduate general	140,658	390,732	531,390
Graduate departments	406,456	1,366,189	1,772,645
Undergraduate	390,026	2,556,294	2,946,320
Prizes	15,166	87,927	103,093
Miscellaneous	1,700,812	985,427	2,686,239
Endowment funds before pledges	6,812,562	16,640,884	23,453,446
Pledges	-	161,960	161,960
Total endowment funds	6,812,562	16,802,844	23,615,406
Other Funds			
Student-related loan funds	17,134	23,716	40,850
Building funds	89,988	5,001	94,989
Designated purposes:			
Departments and research	557,304	-	557,304
Other purposes	280,532	16,859	297,391
Life income funds and donor-advised funds	94,731	242,814	337,545
Pledges	-	449,227	449,227
Other funds available for current expenses	4,174,940	642,805	4,817,745
Retirement benefits overfunded	888,247	-	888,247
Funds for educational plant	1,084,267	-	1,084,267
Total other funds	7,187,143	1,380,422	8,567,565
Total net assets	\$ 13,999,705	\$ 18,183,266	\$ 32,182,971

MIT's endowment consists of approximately 4,800 individual funds established for a variety of purposes and includes both donor-restricted endowment funds and funds that function as endowments. As required by GAAP, net assets associated with endowment funds, including funds designated to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

The Executive Committee has interpreted the Massachusetts-enacted version of the Uniform Prudent Management of Institutional Funds Act (UPMIFA) as allowing MIT to appropriate for expenditure or accumulate so much of an endowment fund as MIT determines is prudent for the uses, benefits, purposes, and duration for which the endowment fund is established,

subject to the intent of the donor as expressed in the gift instrument. Unless stated otherwise in the gift instrument, the assets in an endowment fund shall be donor-restricted assets until appropriated for expenditure by the Executive Committee. In accordance with UPMIFA, the Executive Committee considers the following factors in deciding to appropriate or accumulate endowment funds:

- i. the duration and preservation of the fund;
- ii. the purposes of MIT and the endowment fund;
- iii. general economic conditions;
- iv. the possible effects of inflation and deflation;
- v. the expected total return from income and the appreciation of investments;
- vi. other resources of MIT; and
- vii. the investment policies of MIT.

J. Components of Net Assets and Endowment (continued)

Table 28 below reflects changes in endowment net assets without and with donor restrictions for fiscal 2024 and fiscal 2023, respectively.

TABLE 28. CHANGES IN ENDOWMENT NET ASSETS

<i>(in thousands of dollars)</i>	Without Donor Restriction	With Donor Restriction	Total
Fiscal Year 2024			
Endowment net assets, July 1, 2023	\$ 6,812,562	\$ 16,802,844	\$ 23,615,406
Investment return:			
Net Investment income	16,366	45,569	61,935
Realized and unrealized gains/(losses)	606,405	1,348,702	1,955,107
Total investment return	622,771	1,394,271	2,017,042
Contributions	-	182,723	182,723
Appropriation of endowment assets for expenditure	(349,302)	(817,295)	(1,166,597)
Net asset reclassifications and transfers	121,386	(54,930)	66,456
Endowment net assets, June 30, 2024	\$ 7,207,417	\$ 17,507,613	\$ 24,715,030
Fiscal Year 2023			
Endowment net assets, July 1, 2022	\$ 7,152,758	\$ 17,587,104	\$ 24,739,862
Investment return:			
Net Investment income	(1,262)	4,531	3,269
Realized and unrealized gains/(losses)	(79,123)	(186,683)	(265,806)
Total investment return	(80,385)	(182,152)	(262,537)
Contributions	-	129,034	129,034
Appropriation of endowment assets for expenditure	(325,542)	(767,739)	(1,093,281)
Net asset reclassifications and transfers	65,731	36,597	102,328
Endowment net assets, June 30, 2023	\$ 6,812,562	\$ 16,802,844	\$ 23,615,406

J. Components of Net Assets and Endowment (continued)

Endowment Investment and Spending Policies

MIT's investment policy is based on the primary goal of maximizing return relative to appropriate risk such that performance exceeds appropriate benchmark returns at the total pool, asset class, and individual manager levels. To achieve its long-term rate-of-return objectives, MIT relies on a total return strategy in which investment returns are realized through both capital appreciation (realized and unrealized gains) and current yield (interest and dividends). MIT targets a diversified asset allocation that places greater emphasis on equity-based investments to achieve its long-term objectives within prudent risk constraints.

The Institute's primary investment pool, Pool A, is principally for endowment and funds functioning as endowment. The effective spending rates on pooled investment funds were 5.0 percent, or 4.8 percent on a three-year-average basis, and 4.4 percent, or 4.9 percent on a three-year-average basis, for fiscal 2024 and fiscal 2023, respectively.

Pool A operates as a mutual fund with units purchased and redeemed based on the previous month's unit market value. Certain endowed assets are also maintained in separately invested funds.

MIT has adopted spending policies designed to provide a predictable stream of funding to programs supported by its investments while maintaining the purchasing power of assets. For pooled investments, the Executive Committee of the Corporation votes to distribute funds for operational support from general investments. In accordance with MIT's spending policy, these distributions are funded from both investment income and market appreciation. The distribution rates were \$124.63 and \$117.97 per Pool A unit as of fiscal 2024 and fiscal 2023, respectively. For separately invested endowment funds, only the annual investment income generated is distributed for spending. For any underwater endowment funds, the distribution of funds for operational support is at the discretion of the Executive Committee.

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SECTION II

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

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Massachusetts Institute of Technology
Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2024

Federal Grantor/ Pass Through Grantor/ Program Title	Assistance Listing Number	Total \$ Amount Expended	\$ Amount Passed to Subrecipients
Research and Development			
U.S. Department of Defense:	12		
Air Force		\$ 411,785,537	\$ 22,587,899
Army		118,779,269	8,821,833
Classified		300,413,760	16,426,274
Combatant Commands		37,876,070	2,242,979
Defense Advance Research Project Agency		11,902,425	2,747,796
Navy		112,035,278	13,518,688
Office of the Secretary of Defense		243,398,195	11,812,219
Other DOD		97,737,144	4,085,966
Passthrough		43,284,656	-
Total Department of Defense		\$ 1,377,212,334	\$ 82,243,654
U.S. Department of Commerce	11	\$ 11,866,924	\$ 1,328,875
U.S. Department of Commerce - Passthrough	11	1,785,718	-
U.S. Department of Energy	81	80,323,734	8,053,033
U.S. Department of Energy - Passthrough	81	24,388,918	599,670
U.S. Department of Health and Human Services	93	158,393,891	32,075,020
U.S. Department of Health and Human Services - Passthrough	93	31,880,630	-
U.S. Department of Homeland Security	97	18,657,246	195,501
U.S. Department of Homeland Security - Passthrough	97	174,048	-
U.S. Department of Transportation	20	26,160,073	280,226
U.S. Department of Transportation - Passthrough	20	296,003	-
Miscellaneous Federal Government	Various	5,272,364	281,687
Miscellaneous Federal Government - Passthrough	Various	1,498,757	160,858
National Aeronautics & Space Administration	43	43,141,388	5,420,429
National Aeronautics & Space Administration - Passthrough	43	14,318,343	302,211
U.S. Agency for International Development	98	4,993,082	1,882,403
U.S. Agency for International Development - Passthrough	98	433,744	-
National Science Foundation	47	100,153,554	7,921,291
National Science Foundation - Passthrough	47	20,529,186	1,986,146
Total Research and Development	Appendix A	\$ 1,921,479,937	\$ 142,731,004

The accompanying notes are an integral part of this schedule.

Massachusetts Institute of Technology
Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2024

Federal Grantor/ Pass Through Grantor/ Program Title	Assistance Listing Number	Total \$ Amount Expended	\$ Amount Passed to Subrecipients
Student Financial Assistance Cluster Expenditures			
U.S. Department of Education Cluster:			
Grants:			
Pell	84.063	\$ 5,125,223	
Federal Supplemental Educational Opportunity	84.007	1,875,059	
Federal Work Study	84.033	1,914,134	
Federal Perkins Loan:	84.038		
New Loans		-	
Balance Outstanding as of July 1, 2023		5,719,494	
Loan Administrative Cost Allowance		-	
William D. Ford Federal Direct Loan Program:	84.268		
Direct Subsidized and Unsubsidized Loans		6,745,380	
Direct Plus Loan for Parents and for Graduate or Professional Students		11,498,575	
Total Student Financial Assistance Cluster Expenditures		<u>\$ 32,877,865</u>	
Economic Development Cluster			
U.S. Department of Commerce - Passthrough	11.307	\$ 257,159	\$ -
Total Economic Development Cluster		<u>\$ 257,159</u>	<u>\$ -</u>
TRIO Cluster			
Total TRIO Cluster	84.047	\$ (21)	\$ -
Total TRIO Cluster		<u>\$ (21)</u>	<u>\$ -</u>
Other Federal Expenditures:			
U.S. Department of Commerce	Appendix B	\$ 5,000	\$ -
U.S. Department of Defense	Appendix B	935,104	-
U.S. Department of Defense - Passthrough	Appendix C	2,723,910	-
U.S. Department of Energy - Passthrough	Appendix C	166,636	-
U.S. Department of Homeland Security - Passthrough	Appendix C	37,903,532	-
U.S. Department of Transportation	Appendix B	6,797	-
Miscellaneous Federal Government	Appendix B	13,893	-
Miscellaneous Federal Government - Passthrough	Appendix C	243,567	-
National Aeronautics & Space Administration - Passthrough	Appendix C	198,912	-
U.S. Agency for International Development - Passthrough	Appendix C	44,941	16,440
Total Other Federal Expenditures		<u>\$ 42,242,292</u>	<u>\$ 16,440</u>
Total Federal Expenditures		<u><u>\$ 1,996,857,232</u></u>	<u><u>\$ 142,747,444</u></u>

The accompanying notes are an integral part of this schedule.

Massachusetts Institute of Technology

Notes to Schedule of Expenditures of Federal Awards

For the Year Ended June 30, 2024

1. Basis of Presentation

The accompanying schedule of expenditures of federal awards including appendices A, B and C (the "Schedule") summarize the expenditures of the Massachusetts Institute of Technology (the "Institute") under programs of the federal government for the year ended June 30, 2024.

Because the Schedule presents only a selected portion of the activities of the Institute, it is not intended to and does not present the financial position, changes in net assets and cash flows of the Institute. The accompanying appendices A, B, and C provide detail on the federal awards expended by the Institute.

For purposes of the Schedule, federal awards include all grants, contracts and similar agreements entered into directly between the Institute and agencies and departments of the federal government and all subawards to the Institute by nonfederal organizations pursuant to federal grants, contracts and similar agreements. The information in this Schedule is presented in accordance with the provisions of the Office of Management and Budget's *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* ("Uniform Guidance"). Therefore, certain amounts presented in the Schedule may differ from amounts presented in, or used in preparation of, the consolidated financial statements. Assistance Listing Numbers ("AL") and pass-through numbers are provided when available. Negative amounts represent adjustments to amounts reported in prior years in the normal course of business.

2. Summary of Significant Accounting Policies for Federal Expenditures

Expenditures for direct costs are recognized as incurred using the accrual method of accounting and the cost accounting principles in OMB's Uniform Guidance or Federal Acquisition Regulations. Moreover, expenditures include a portion of costs associated with general Institute activities (facilities and administrative costs) which are allocated to awards under negotiated formulas commonly referred to as facilities and administrative rates.

The Institute 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.

The Institute receives funding from federal government agencies for sponsored research under government grants and contracts. These grants and contracts provide for reimbursement of indirect costs based on rates negotiated with the Office of Naval Research ("ONR"), the Institute's cognizant federal agency. The Institute's indirect cost reimbursements are based on fixed rates with carryforward of under or over recoveries.

The Defense Contract Audit Agency ("DCAA") is responsible for auditing indirect charges to grants and contracts. The Institute has final audited rates through 2022 and negotiated fixed rates for indirect costs through the 2025 fiscal year.

Massachusetts Institute of Technology

Notes to Schedule of Expenditures of Federal Awards

For the Year Ended June 30, 2024

3. Federal Student Loan Programs

The Federal Perkins Loan Program (AL #84.038) is administered directly by the Institute and balances and transactions relating to this program are included in the Institute's consolidated financial statements. The balance of loans outstanding for this program at June 30, 2024 is \$3,911,296.

The William D. Ford Federal Direct Loan Programs (AL #84.268) are not administered by the Institute and balances and transactions relating to these programs are not included in the Institute's consolidated financial statements.

4. Lincoln Laboratory

Lincoln Laboratory ("the Laboratory"), designated as a Federally Funded Research and Development Center ("FFRDC"), is a mission oriented, multidisciplinary laboratory. The Director of Lincoln Laboratory reports to MIT's Vice President of Research. The Laboratory is directly integrated into the Institute as part of its research laboratory system and the Laboratory's reporting relationship with the Institute is like that of any other MIT research laboratory. The Laboratory is charged with responsibility for producing contractual research products and services. MIT establishes policy for, and provides guidance to, the Laboratory and performs administrative and service functions in support of the operations of the Laboratory.

5. Northeast Radio Observatory Corporation

Northeast Radio Observatory Corporation ("NEROC") is a nonprofit consortium of educational and research institutions. NEROC's mission is to further research, education, and scientific collaboration in the field of radio science. By agreement, NEROC finances are directly integrated into the Institute to support the organization's sponsored research; MIT establishes policy for and provides guidance to NEROC and performs administrative and service functions in support of the financial and grant-related operations of NEROC.

NEROC is consolidated within MIT's consolidated financial statements, and NEROC's federal expenditures are reported in MIT's Uniform Guidance report. NEROC's Employer Identification Number ("EIN") is 04-6156432, which is separate from MIT's EIN. Federal expenditures for both MIT's and NEROC's EINs are included in MIT's Uniform Guidance report.

6. Department of Homeland Security - Federal Emergency Management Agency Public Assistance

The Institute applied for reimbursement of certain expenses related to the COVID-19 pandemic under Assistance Listing 97.036, Federal Emergency Management Agency (FEMA) Public Assistance through the State of Massachusetts. Expenditures are reflected in the Schedules in the year in which a project application is obligated, and expenses associated with those funds have been incurred. The Schedules thus include \$37,903,532 of expenditures incurred in fiscal years 2020, 2021, or 2022, for projects which were obligated in fiscal year 2024.

Appendix A
Massachusetts Institute of Technology
Schedule of Expenditures of Federal Awards - Worksheet
Federal Research Support
FY 24 Expenditures

<u>Sponsor</u>	<u>Campus Direct</u> (Appendix A-1)	<u>Lincoln Direct</u> (Appendix A-2)	<u>Lincoln Passthrough</u> (Appendix A-2)	<u>Campus Passthrough</u> (Appendix A-3)	<u>Total</u>
<u>Department of Defense:</u>					
Air Force	\$ 33,621,854	\$ 378,163,683	\$ 4,643,204	\$ 13,365,979	\$ 429,794,720
Army	28,932,280	89,846,989	487,392	6,407,316	125,673,977
Classified	-	300,413,760	-	-	300,413,760
Combatant Commands	-	37,876,070	-	-	37,876,070
Defense Advanced Research Project Agency	11,902,425	-	-	6,172,022	18,074,447
Navy	19,503,089	92,532,189	455,698	7,869,708	120,360,684
Office of the Secretary of Defence	-	243,398,195	412,373	-	243,810,568
Other Department of Defense	3,498,911	94,238,233	60,159	3,410,805	101,208,108
Total Department of Defense	97,458,559	1,236,469,119	6,058,826	37,225,830	1,377,212,334
Department of Commerce	3,618,270	8,248,654	288,842	1,496,876	13,652,642
Department of Energy	69,273,782	11,049,952	766,434	23,622,484	104,712,652
Department of Health & Human Services	152,878,276	5,515,615	517,905	31,362,725	190,274,521
Department of Homeland Security	496,501	18,160,745	-	174,048	18,831,294
Department of Transportation	4,264,594	21,895,479	1,314	294,689	26,456,076
<u>Miscellaneous Federal Government:</u>					
Department of Agriculture	272,387	-	-	87,448	359,835
Department of Education	20,046	-	-	-	20,046
Department of Interior	880,474	-	-	896,243	1,776,717
Department of Justice	-	3,282,431	-	-	3,282,431
Department of State	-	3	-	-	3
Other	771,270	45,753	50,399	464,667	1,332,089
Total Miscellaneous Federal Government	1,944,177	3,328,187	50,399	1,448,358	6,771,121
Nat'l Aeronautics & Space Administration	26,731,890	16,409,498	3,531,209	10,787,134	57,459,731
U.S. Agency for International Development	3,839,036	1,154,046	-	433,744	5,426,826
National Science Foundation	100,153,554	-	780,879	19,748,307	120,682,740
Total Federal Sponsors	\$ 460,658,639	\$ 1,322,231,295	\$ 11,995,808	\$ 126,594,195	\$ 1,921,479,937

Note for Appendices A-1, A-3, B and C details:

- Contracts without Assistance Listing numbers were shown as ".RD" in the Assistance Listing # column for Research & Development and ".U00" for Non-R&D.
- Amounts less than 50 cents appear as zero due to rounding.

Appendix A1
Massachusetts Institute of Technology
Federal Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE					
Air Force					
Air Force	FA8750-19-2-1000	AI Accelerator	12.300	11,209,609	-
Air Force	FA8750-19-2-1000 _ RPP2022-14	AI Accelerator	12.300	995,201	-
Air Force	FA8750-20-2-1007	Integration of Strong Second-order Nonlinearities with Large-Scale Silicon Photonics	12.300	165,318	-
Air Force	W911NF2320121	ISN5 Cooperative Agreement	12.431	101,038	-
Air Force	FA2386-21-1-4058	Novel Topological and Qubit Materials Platforms Created by Engineered hBN Substrates	12.800	86,684	-
Air Force	FA9550-18-1-0436	(MURI) Empty State Electronics	12.800	421,148	252,611
Air Force	FA9550-19-1-0065	(YIP) On-Chip PHz Processing of Optical Fields using Nanostructured Electron Emitters	12.800	-8,834	-
Air Force	FA9550-19-1-0104	Electro-Active Polymers for Robust and Flexible Electrospray Propulsion	12.800	-4,224	-
Air Force	FA9550-19-1-0263	Building Attack Resilience into Complex Networks: Deterrence, Inspection, and Recovery	12.800	-4,028	-
Air Force	FA9550-19-1-0269	Learning to Learn Concepts as Programs: Hierarchical Bayes and Amortised Inference	12.800	-56,693	-
Air Force	FA9550-19-1-0319	Structured Assignment: Geometric Optimization Algorithms for Large-Scale Matching	12.800	186	-
Air Force	FA9550-20-1-0066	(PECASE) Unraveling phonons at the atomic scale: a new tool to explore the science of thermal transport	12.800	159,908	-
Air Force	FA9550-20-1-0105	Multiplexed Quantum Repeaters for High-Speed Quantum Networks	12.800	277,286	70,658
Air Force	FA9550-20-1-0115	Topological photonics for enabling high-power lasers	12.800	-25,269	-
Air Force	FA9550-20-1-0163	Short Range Order and Electronic Entropy: from Melts to Solids	12.800	17,461	-
Air Force	FA9550-20-1-0291	(PECASE) Guiding Thermal Catalytic Reactions with Interfacial Electric Fields	12.800	238,290	-
Air Force	FA9550-20-1-0402	Invisible Hardware Speculation: A Comprehensive and Efficient Defense Solution Against Speculative Side Channel Attacks	12.800	46,569	-
Air Force	FA9550-20-1-0429	Shock Propagation through Architected PrintCast Composites	12.800	124,892	-
Air Force	FA9550-21-1-0003	End-User Programming for Human-Machine Teaming	12.800	118,264	-
Air Force	FA9550-21-1-0014	The Marvin Minsky Institute for Society of Mind Theory	12.800	96,606	-
Air Force	FA9550-21-1-0058	(MURI) Prediction, Statistical Quantification and Mitigation of Extreme Events Caused by Exogenous Causes or Intrinsic Instabilities	12.800	232,760	142,577

Appendix A1
Massachusetts Institute of Technology
Federal Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Air Force	FA9550-21-1-0194	Ionic liquids as safe, energy-dense electrochemical fuels	12.800	796	845
Air Force	FA9550-21-1-0319	Topological Quantum Electronics and Optoelectronics in Moiré Superlattices	12.800	178,382	89,608
Air Force	FA9550-21-1-0454	Small Ultra-high-speed Gas Turbine Engine System for Research on Physics and Management of its Aerothermal-Mechanical interactions for Performance Enhancement	12.800	36,590	-
Air Force	FA9550-22-1-0024	Atomically precise exfoliation of single-crystalline oxide thin-films and its pyroelectric properties	12.800	181,358	67,184
Air Force	FA9550-22-1-0032	Ultrahigh Energy Electrochemical Power Systems Based on Safe Fluorinated Reactants	12.800	172,278	-
Air Force	FA9550-22-1-0051	New Electronic Topologies in Organic Electronic Materials	12.800	358,632	-
Air Force	FA9550-22-1-0066	Thermal transport in ultracold topological quantum matter	12.800	72,252	-
Air Force	FA9550-22-1-0166	Natural and Synthetic Non-Hermitian Quantum Materials	12.800	975,701	-
Air Force	FA9550-22-1-0207	Dissecting the physical principles that control the spatial organization of intracellular signaling	12.800	165,135	-
Air Force	FA9550-22-1-0249	Robust state estimation, information gathering, and behavior for autonomous systems in complex uncertain domains	12.800	345,206	-
Air Force	FA9550-22-1-0316	Rules of Composition in Synthetic Biology Across Scales of Complexity: Theory and Tools	12.800	1,402,204	375,403
Air Force	FA9550-22-1-0356	New Theory and New Computational Methods for Improving the Effectiveness of First-Order Methods in Optimization	12.800	228,067	-
Air Force	FA9550-22-1-0367	High Temperature III-Nitride Technology for RF and Pressure Sensors	12.800	222,634	-
Air Force	FA9550-22-1-0387	Learning to Learn Concepts as Programs: Hierarchical Bayes and Amortised Inference	12.800	223,279	-
Air Force	FA9550-22-1-0432	High Temperature, Scalable Flat Bands	12.800	1,501,996	158,688
Air Force	FA9550-22-1-0486	Dilution Refrigerator for Scalable Quantum Networks	12.800	135,552	-
Air Force	FA9550-22-1-0511	Systematic Analysis and Evaluation of Memory Corruption Attacks in the Spectre Era	12.800	262,378	-
Air Force	FA9550-22-1-0516	Tunable Mid-IR Laser Apparatus for 2D-Material-Based Mid-IR Spectral Imager Research	12.800	80,034	-
Air Force	FA9550-23-1-0004	Exotic superconducting behavior in layer engineered BCS superconductor	12.800	109,555	-
Air Force	FA9550-23-1-0055	Extreme limits of diatom-enabled two-phase thermal management	12.800	518,727	120,533
Air Force	FA9550-23-1-0099	High Coverage and Low Cost Automatic Testing for Intelligent Autonomous Systems	12.800	28,592	-
Air Force	FA9550-23-1-0157	Photoluminescence characterization for developing new semiconductors for visible and infrared optoelectronics	12.800	107,785	-
Air Force	FA9550-23-1-0182	Dynamic Resource Allocations without Monetary Transfers	12.800	208,173	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Air Force	FA9550-23-1-0190	Learning Algorithms for Autonomous Security in (Mixed-)Autonomous Networks	12.800	212,863	-
Air Force	FA9550-23-1-0194	Stability and optimal design of resilient ion electrospray thrusters	12.800	293,834	-
Air Force	FA9550-23-1-0210	DNA-Programmed Assembly of Hierarchical Mesoporous Materials	12.800	168,484	-
Air Force	FA9550-23-1-0225	High-Pressure Rig for Assessing Particle Impact Ignition in Extreme Environments	12.800	305,652	-
Air Force	FA9550-23-1-0284	Searching for what's new: the systematic development of dynamic x-ray microscopy	12.800	470,738	218,757
Air Force	FA9550-23-1-0399	Architectures for Cognitive Intelligence	12.800	683,123	-
Air Force	FA9550-23-1-0402	Fermionic Quantum Simulation and Computation	12.800	834,527	-
Air Force	FA9550-23-1-0474	Diagnostics of natural and manmade ionospheric disturbances over Ukraine	12.800	198,217	13,163
Air Force	FA9550-23-1-0517	The fear of missing out on information for reduced order modeling: A method for healthier data- and model- selection	12.800	9,974	-
Air Force	FA9550-23-1-0529	A synthetic biology programming language and foundational control theory with application to guided multicellular mammalian 3D shape shifters	12.800	357,197	246,609
Air Force	FA9550-23-1-0589	Multi-functional, survivable ELMs grown from programmable fungal-bacteria consortia	12.800	552,915	244,852
Air Force	FA9550-23-1-0695	Investigations of the tolerance of chalcogenide perovskite semiconductors for point defects	12.800	160,743	-
Air Force	FA9550-23-1-0698	Advanced molecular measurements for fundamental research on rules of composition in synthetic biology	12.800	35,474	-
Air Force	FA9550-23-1-0744	Educational Games and Debuggers for Machine Learning	12.800	15,309	-
Air Force	FA9550-23-1-0761	Physics-Based Lifting Analysis of Rotating Detonation Thrust Chambers	12.800	93,145	-
Air Force	FA9550-24-1-0052	Fluorescence microscope enabling time-lapse tracking of compact, multistable gene circuits for cellular regeneration	12.800	263,252	-
Air Force	FA9550-24-1-0067	Hierarchical Encoding of Material Geometry from the Angstrom to Millimeter Scale with Euclidean Neural Networks	12.800	8,370	-
Air Force	FA9550-24-1-0137	Quantum Computing – Robust Quantum Limited Isolation and Amplification with Traveling Wave Parametric Devices	12.800	7,140	-
Air Force	FA8650-20-2-2002	Enhanced Computational Aircraft Prototype Syntheses (EnCAPS)	12.910	473,830	247,002
Air Force	FA8650-21-2-7120	Ingestible Transceiver-Actuatable Resident Gastrointestinal bioElectronic Therapeutic for Travelers Diarrhea (iTARGET-TD)	12.910	6,177,308	834,090
Air Force	FA8650-22-2-7220	Engineering Microorganisms to Incorporate Rare-Earth Elements into Optically Active Inorganic Nanoparticles	12.910	592,281	-
Total for Air Force				33,621,854	3,082,580

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Army					
Army	W81XWH-18-1-0208	PR172205 Development of a lentiviral display system for highthroughput T cell ligand deorphanization and specificity-based reprogramming	12.420	-1,466	-
Army	W81XWH1810513	Modeling of lung adenocarcinoma tumorigenesis using recombinase-driven sequential gene mutations	12.420	-1,377	-
Army	W81XWH1810515	Investigating the Oligomerization of TorsinA as a Means to Develop DYT1 Dystonia Therapeutics	12.420	-20,852	-
Army	W81XWH-18-2-0010	Intravenous Hemostatic Nanoparticles to Stop Bleeding from Noncompressible and Unidentifiable Wounds	12.420	133,983	133,983
Army	W81XWH-19-1-0151	An Osseo-Neural Transtibial Prosthesis with Efferent-Afferent Neural Control	12.420	255,030	6,844
Army	W81XWH2010481	Cartilage Penetrating Nanocarrier-Drug Conjugate for Disease-Modifying Intervention in Post-Traumatic Osteoarthritis	12.420	789,701	-
Army	W81XWH2110235	Delivery of pro-angiogenesis anti-miRs from electrostatically-assembled bandages for diabetic ulcers	12.420	13,830	6,690
Army	W81XWH-21-1-0245	Metabolomics to Identify Targets in ALS	12.420	11,994	11,994
Army	W81XWH2110283	Interrogation of requisite niche factors for leukemia cell survival at single cell resolution	12.420	-2,099	-
Army	W81XWH2110439	Strain-Programmable Bioadhesive Patch for Accelerated Healing of Diabetic Ulcer	12.420	525,446	-
Army	W81XWH2110626	Rewiring suppressive tumor microenvironment signals for immune activation using T cells engineered with synthetic promoters	12.420	143,121	-
Army	W81XWH2110699	Elucidating the Mechanisms of Spotted Fever Group Rickettsia Pathogenesis	12.420	259,476	-
Army	W81XWH2110934	Partnering with patients to create a rare soft tissue sarcoma functional genomics platform as a community resource	12.420	247,423	-
Army	W81XWH2210300	PR212255: Highly multiplexed detection of immune responses to emerging infectious diseases via lentiviral surface display	12.420	375,610	-
Army	W911NF-13-D-0001, T.O. 8	ISN 3 FY'13 funding	12.431	-8,552	-
Army	W911NF-13-D-0001, T.O. 9	ISN 3 FY'13 funding	12.431	-38,402	-
Army	W911NF-16-1-0034	Coupled Synthesis, Transport, and Magnetization Studies to Detect New Topological Phases	12.431	200,106	-
Army	W911NF-18-1-0407	Towards a Theory of Large-Scale Human Interactions	12.431	-9,246	-
Army	W911NF1810411	High Performance Superconducting Qubit Technology Engineering Research (HiPSTER)	12.431	-38,987	-
Army	W911NF1810432	Ab-Initio Solid-State Quantum Materials: Design, Production, and Characterization at the Atomic Scale	12.431	1,163,739	994,105
Army	W911NF-18-2-0048	ISN 4 Collaborative Agreement Core 6.1 Funding	12.431	1,725,961	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Army	W911NF-19-1-0057	Higher-order geometry and topology of complex networks W911NF-17-S-0002	12.431	-10,497	-
Army	W911NF-19-1-0217	Foundations of Decision Making with Behavioral and Computational Constraints	12.431	1,101,257	500,624
Army	W911NF-19-1-0322	Computation and Statistics in High-dimensional Problems of Autonomy	12.431	-1,587	-
Army	W911NF1910517	Efficient light-matter interfaces for Rydberg arrays and entanglement in topological quantum networks	12.431	166,564	95,953
Army	W911NF1920034	Machine Learning for Discovery of Routes to Energetic Materials	12.431	-5,642	-
Army	W911NF1920041	Interface Exchange Coupling of TI Dirac Surface States in Proximity with Ferromagnetic Insulator: Towards Exchange Tunable Quantum Coherent Devices	12.431	-1,374	-
Army	W911NF1920098	Mechanics and Design of Triply Periodic Minimal Surfaces	12.431	41,768	-
Army	W911NF-20-1-0037	Metastable Qubits in Multi-Ion Systems	12.431	1,959,175	1,562,110
Army	W911NF-20-1-0074	Investigation of Interface Exchange Coupling Between Two Quantum Systems: Research Instrumentation for Physical Property Characterizations	12.431	27,372	-
Army	W911NF2010084	Ultrafast Spatial Light Modulation by Optical Control	12.431	117,770	-
Army	W911NF2010100	Precursors for Partially Observed Systems and Applications to Unsteady Flow Separation Events	12.431	77,772	-
Army	W911NF-20-1-0168	Geometric Approaches to Near-Optimization	12.431	929	-
Army	W911NF2020061	Investigation of Interface Exchange Coupling Between Two Quantum Systems	12.431	104,064	-
Army	W911NF2110054	YIP: Elucidating the Role of Flash Heating in Ultrasonic Powder Compaction	12.431	104,749	-
Army	W911NF-21-1-0124	Highly-anisotropic 1D van der Waals lattices: A new paradigm towards functional materials and energy conversion in low-dimensions	12.431	141,074	-
Army	W911NF2110293	The Geometry of Single-and MultiObjective Near-Optimization	12.431	209,714	-
Army	W911NF2110328	Rethinking Reinforcement Learning with Astrocyte-Neuron Computations	12.431	1,247,992	399,139
Army	W911NF2110332	The dynamic evolution of helicity and twist, and their role in vortex instabilities	12.431	139,725	-
Army	W911NF2120099	Photonics Circuits for Compact Room-temperature Nodes for Quantum Networks	12.431	38,758	-
Army	W911NF2120159	An integrated experimental, computational and statistical learning approach for highly reversible bulk polycrystalline shape memory ceramics	12.431	134,382	-
Army	W911NF2210023	Advanced van der Waals Qubits and Control	12.431	864,084	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Army	W911NF2210024	Laser systems for quantum simulations of many-body physics with ultracold atoms	12.431	137,906	-
Army	W911NF2210043	Cryogenics for a Quantum Network Testbed	12.431	143,015	-
Army	W911NF2210106	Characterizing Interspecies Interactions in Electron Transfer-Proficient Bacterial Consortia by Controlling Organization	12.431	405,776	-
Army	W911NF2210120	Molecular Triplet Qubits	12.431	222,145	86,099
Army	W911NF-22-1-0126	Biological Actuators: biologic sensing, processing, and control for soft robots	12.431	209,931	-
Army	W911NF2210185	Mucin-mimetic Interventions to Modulate the Gut-Brain Axis	12.431	917,126	531,043
Army	W911NF2210215	Brush Particle-Based Composites for Thermal Management Materials	12.431	140,967	-
Army	W911NF2220127	Highly Nonlinear Optical Cavities for Quantum Networks	12.431	104,880	-
Army	W911NF-22-2-0210	CHARMME: Center for Harnessing Microbiota from Military Environments	12.431	1,777,841	1,293,304
Army	W911NF-23-1-0034	Dynamic Decision-Problem Decomposition for Autonomous Systems in Complex Domains	12.431	363,467	-
Army	W911NF2310045	Extensible and Modular Advanced Qubits (EMAQs)	12.431	2,350,018	35,711
Army	W911NF2310089	Phase Separation for Bioinspired Novel Composites	12.431	209,918	-
Army	W911NF-23-1-0227	Predicting Natural Anchoring from Roots to Landscapes Through Laboratory Experiments and Reduced-order Modeling	12.431	234,745	-
Army	W911NF2310229	Low-Dimensional Metal-Organic Chalcogenolate Semiconductors	12.431	241,828	-
Army	W911NF-23-1-0277	A Framework for Universal Generalization via Memory Based Computation	12.431	472,574	49,736
Army	W911NF-23-1-0326	Quantum Simulator of Fermionic Atoms and Molecules	12.431	292,349	-
Army	W911NF-23-1-0331	Integrated Instrumentation to Advance Army Center for Synthetic Biology Workflows	12.431	567,107	-
Army	W911NF2310382	Quantum States and Dynamics of Rapidly Rotating Quantum Gases	12.431	130,170	-
Army	W911NF2320012	Bayesian Active Learning of Objects and Dynamics	12.431	171,647	-
Army	W911NF2320057	UWBG/Quantum Heterostructures	12.431	704,972	146,002
Army	W911NF-23-2-0101	Hierarchical Structure Control in Nanoparticle Assembly via Symmetry Breaking.	12.431	146,671	-
Army	W911NF2320121	ISN5 Cooperative Agreement	12.431	4,279,963	-
Army	W911NF23D0001/W911NF23F0021	ISN 5 IDIQ	12.431	767,050	-
Army	W911NF23D0001/W911NF23F0046	ISN 5 IDIQ	12.431	175,121	-
Army	W911NF2410027	Atomic testbed for photonic quantum control	12.431	74,805	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Army	W911NF-24-1-0056	Quantitative Compositional Analysis of Complex Nanocomposites for Novel Structural Materials	12.431	96,927	-
Army	W911NF-24-1-0106	Enabling real-time 4D monitoring of biological actuators	12.431	629,615	-
Army	W911NF-24-1-0143	Symposium on Geometry Processing	12.431	1,805	-
Army	W911NF-24-2-0069	Open-world, Interpretable, Multimodal Models for Intelligent Autonomy	12.431	143,791	-
Army	W911QY2220003	Electrochemical biosensors to detect waterborne contaminants	12.431	53,825	-
Army	W911NF1810436	Assessment of Nanoparticle Assemblies for Efficient Gene Therapy Vehicles	12.630	-847	-
Army	W911NF2120150	Semantic Scene Perception and Active Planning for Navigation through Complex Vegetation	12.630	252,569	-
Army	W911NF-18-2-0257	SBIML: Synthetic Biology Inspired Machine Learning	12.910	-6,225	-
Army	W911NF2120041	Super Headlights: Superconducting Nanowire Detectors for Passive Infrared Sensing	12.910	6,579	5,529
Army	W911NF-13-D-0001, T.O. 1	ISN 3 FY'13 funding	12.RD	-134,725	-
Army	W911NF-13-D-0001, T.O. 2	ISN 3 FY'13 funding	12.RD	302,502	-
Army	W911QY23C0065	Individual Water Desalination and Purification project: Portable Ion Concentration Polarization (ICP) Desalination Devices (PID) for Personal Hydration:Phase II	12.RD	161,984	-
Total for Army				28,932,280	5,858,866
DARPA					
DARPA	HR00111720029	Large-scale, Reconfigurable and Multifunctional 2.5-D Conformal Optics	12.910	-419	-
DARPA	HR00111920025	Rethinking molecular design: Deep integration of AI, physical chemistry, and HTE	12.910	890,720	-
DARPA	HR0011-20-2-0049	Oxidation of mixed plastic to dicarboxylic acids and subsequent conversion to high-value products with engineered microbes	12.910	403,530	-
DARPA	HR00112120001/PO HR0011365855	High-performance Portable Atmospheric Water Extractor for Extreme Climates	12.910	1,756,593	472,161
DARPA	HR00112120008	GRAND: Guessing Random Additive Noise Decoding	12.910	1,486,903	644,714
DARPA	HR00112210002	Biohydrodynamic Metamaterials	12.910	12,839	-
DARPA	HR00112220042 / PO HR0011260378-1	Data-Driven Methods for Latent Model Recovery and Maintenance	12.910	1,121,168	-
DARPA	HR00112220044 / PO HR0011259346	The role of 3D integration and fluxonium for Quantum Benchmarking	12.910	506,026	-
DARPA	HR00112320040 / PO HR0011366011	Metal-Free Mechanically Interlocked Junctions through Organic Dative Covalent Bonds	12.910	461,923	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DARPA	HR0011-24-2-0303	Generative AI Design of Multi-Material Rotors for High-Performance Propulsion Applications	12.910	835,507	4,636
DARPA	FA8750-20-C-0075	Performance-Driven Design Synthesis	12.RD	994,422	-
DARPA	HR0011-15-C-0084	The MIT-Broad Foundry: TA2	12.RD	0	-
DARPA	HR0011-18-3-0006	Revolutionizing Computing Systems through Dense and Fine-grained Monolithic 3D Integration	12.RD	369,950	369,950
DARPA	HR001120C0015	Guaranteed Robust Artificial Intelligence (GRAIL)	12.RD	1,359,565	136,117
DARPA	HR001120C0191	Cross-Scale Capability Runtime Monitoring and Reconfiguration	12.RD	1,495,993	1,120,218
DARPA	HR00112390143 / PO HR0011367237	Resonantly-bonded Visible-band Tunable Materials (ReVisiT)	12.RD	188,189	-
DARPA	HR00112490444	Quantifying and mitigating environmental stressors during MEDEVAC and CASEVAC (SafeEVAC)	12.RD	19,516	-
Total for DARPA				11,902,425	2,747,796
Navy					
Navy	N00014-16-1-3163	A New Paradigm for Analysis of Complex, Networked, Social and Engineering Systems	12.300	295,941	-
Navy	N00014-18-1-2122	Online Optimization and Learning in a Complex Environment	12.300	340	-
Navy	N00014-18-1-2436	Thermal Management Technologies for Low-Temperature Undersea Dive Persistence: a Novel Arctic Diving Suit	12.300	-636	-
Navy	N00014-18-1-2496	VAMPIRE 3: A Decentralized Platform for Acoustic Diagnostics	12.300	-16,176	-
Navy	N00014-18-1-2525	An Algorithmic Theory of Robustness	12.300	-9,472	-
Navy	N00014-18-1-2762	Uncovering Lagrangian transport structures associated with oceanic fronts, meanders, eddies and filaments	12.300	40,929	-
Navy	N00014-18-1-2765	Robust Causal Methodology for Planning and Learning from Interventions in the Face of Uncertainty	12.300	-2,786	-
Navy	N00014-18-1-2781	Four-Dimensional Lagrangian Analysis, Numerics, and Estimation Systems (4D-LANES)	12.300	203,049	-
Navy	N00014-18-1-2815	Robot grasp and manipulation of deformable linear objects with applications for cable following: Manipulation Planning through Shared Autonomy	12.300	308,454	-
Navy	N00014-18-1-2832	Technical Proposal: Task-Aware Non-Gaussian Perception and Planning for Distributed Marine Autonomy	12.300	-15,328	-
Navy	N00014-18-1-2847	Integration of Physical Domain Knowledge and Machine Learning	12.300	-37,549	-
Navy	N00014-18-1-2878	Complex Smart Colloids	12.300	246,595	-
Navy	N00014-18-1-2894	Data-Driven Non-Line-of-Sight Imaging	12.300	-6,090	-
Navy	N00014-19-1-2317	A de novo structural biopolymer library to predict, design and control the assembly of hierarchically mesostructured materials	12.300	164,213	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Navy	N00014-19-1-2375	Materials By Design: Rational Modeling, Optimization and Synthesis of Heterogeneous Materials	12.300	45,332	-
Navy	N00014-19-1-2584	Towards more biologically plausible learning in neural networks	12.300	36,301	-
Navy	N00014-19-1-2605	The Integrated Sea Ice Dynamic Experiment (SIDEx)	12.300	12,182	-
Navy	N00014-19-1-2631	Analog Quantum Computing with a Molecular Quantum Gas Microscope	12.300	541,549	-
Navy	N00014-19-1-2664	Dynamic Environmental Estimation, Prediction, and Acoustic Inference (DEEP-AI)	12.300	113,174	-
Navy	N00014-19-1-2665	Data Driven Methods for Structure Learning in Underwater Acoustic Modeling	12.300	-22,110	-
Navy	N00014-19-1-2693	Interdisciplinary Nonlinear Bayesian Data Assimilation	12.300	204,469	-
Navy	N00014-19-1-2724	Network Science for Time-Critical Missions: Inference, Control, Learning, and Decision Making	12.300	298,252	-
Navy	N00014-19-1-2741	Environmentally Adaptive Autonomy for Under-Ice Acoustic Navigation and Communication	12.300	-12,210	-
Navy	N00014-19-1-2753	Virtual Manufacturing Lab (VM-Lab):A Multimedia Design House for Digital Learning in Manufacturing-USA Workforce Education	12.300	98,176	19,503
Navy	N00014-20-1-2023	Machine Learning for Submesoscale Characterization, Ocean Prediction, and Exploration (ML-SCOPE)	12.300	1,464,116	749,758
Navy	N00014-20-1-2035	A Unified Approach to Passive and Active Ocean Acoustic Waveguide Remote Sensing	12.300	61,335	-
Navy	N00014-20-1-2059	Development of WakeLES: a two-phase large-eddy simulation capability for the turbulent free-surface air-entraining bubbly flow near wake of a surface ship	12.300	94,112	-
Navy	N00014-20-1-2119	Management and Control of Highly-Dynamic Tactical Networks in Disruptive Environments	12.300	126,972	-
Navy	N00014-20-1-2150	A database for functional transition metal complex discovery	12.300	167,116	-
Navy	N00014-20-1-2202	DURIP: Expansion of Combinatorial DNA Nanoparticle Libraries for Materials Research & Structural Biology	12.300	91,108	-
Navy	N00014-20-1-2280	Synthesis Genome for Inorganic Materials: Case Oriented Proposal	12.300	179,917	-
Navy	N00014-20-1-2300	Nano-Curing Embedded Heaters for Extreme Performance of Sea-based Airframe Structures	12.300	149,130	-
Navy	N00014-20-1-2336	Mathematical Foundations of Modern Learning Problems	12.300	71,474	-
Navy	N00014-20-1-2366	Physics-informed, machine learning methods for the quantification of extreme ocean events for naval vessels	12.300	79,023	-
Navy	N00014-20-1-2428	Optical-transition atomic clock beyond the standard quantum limit	12.300	-500	-
Navy	N00014-20-1-2531	Underwater Backscatter Networking	12.300	41,813	-

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Navy	N00014-20-1-2532	Lightweight representations for decentralized learning in data-rich environments	12.300	275,576	-
Navy	N00014-20-1-2589	Developing next generation AI vision systems by characterizing and exploiting untapped primate visual processing circuit motifs	12.300	407,322	-
Navy	N00014-20-1-2826	Information Flow on Networks	12.300	883,855	-
Navy	N00014-21-1-2170	Computational principles of belief system change	12.300	232,360	-
Navy	N00014-21-1-2195	Constrained Generative Modeling for Autonomous Molecular Discovery	12.300	63,419	-
Navy	N00014-21-1-2357	Bayesian Experimental Design with Active Learning Algorithms	12.300	82,272	-
Navy	N00014-21-1-2382	Integrated Modeling-Data-Simulation for Engineering Estimation: A Heat Transfer ParAnaLyst	12.300	137,926	-
Navy	N00014-21-1-2400	Self-damping structural materials	12.300	119,922	-
Navy	N00014-21-1-2402	Design of Environmentally Responsive Hierarchical Materials	12.300	171,531	-
Navy	N00014-21-1-2497	Furthering Technology for using Lithium Ion Batteries	12.300	138,798	-
Navy	N00014-21-1-2571	Transient Corona Discharges for Ignition and Flameholding in an Afterburner Environment	12.300	215,824	-
Navy	N00014-21-1-2573	Improving Group Decision-Making for Contentious Topics	12.300	202,698	-
Navy	N00014-21-1-2591	Natural Superlattice 2D Materials	12.300	-5,209	-
Navy	N00014-21-1-2666	Molecularly Precise Gas Separations Through Site-Specific Membrane Design	12.300	166,659	-
Navy	N00014-21-1-2776	Finding a Needle in a Haystack: Utilizing Structures and Predictive Information in Online Optimization	12.300	265,211	-
Navy	N00014-21-1-2807	Leveraging Causal Structure for Prediction Across Environments	12.300	65,517	-
Navy	N00014-21-1-2831	Compression and Assimilation for Resource-limited Operations	12.300	121,070	-
Navy	N00014-21-1-2841	Statistical Learning with large parameter spaces: Interpretable Nonparametrics, Conditional Computing and Beyond	12.300	64,220	-
Navy	N00014-21-1-2880	Laser system for quantum simulation and computation with array of collective Rydberg qubits	12.300	23,416	-
Navy	N00014-21-1-2960	A Scalable Architecture to Accelerate Event-Driven Simulation	12.300	187,823	-
Navy	N00014-21-1-4013	Hierarchical Nanoscale Materials Programmed using Structured DNA Nanoparticles	12.300	126,466	-
Navy	N00014-22-1-2036	Additive Manufacturing of Functionally Graded Oxide Dispersion-Strengthened Superalloys	12.300	99,816	-
Navy	N00014-22-1-2092	Dashboard MACE with Wireless Integration	12.300	125,045	-
Navy	N00014-22-1-2116	Representation Learning as a Tool for Causal Discovery	12.300	182,770	-
Navy	N00014-22-1-2148	Tailoring the Multiscale Organization of Self-Assembled Materials via a 'Systems-Level' Approach	12.300	182,320	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Navy	N00014-22-1-2203	Long Nanofiber Reinforcement of Bulk Ceramics for Extreme Toughness, Strength, and Multifunctionality for Naval Aviation Applications	12.300	174,015	-
Navy	N00014-22-1-2284	Observational Benchmarks for BSION Project	12.300	-4,880	-
Navy	N00014-22-1-2304	Laser system for a network of entangled atomic clocks	12.300	284,472	-
Navy	N00014-22-1-2317	Accelerating the Discovery of DNA Based Materials using High-Performance Computing and Structural Biology	12.300	417,000	-
Navy	N00014-22-1-2326	Instrumentation for Battery Research	12.300	-70,553	-
Navy	N00014-22-1-2339	Beyond Worst-Case Analysis in Reinforcement Learning	12.300	171,386	-
Navy	N00014-22-1-2419	Enabling Volumetric Ionospheric Imaging Using Vector Sensor Ionosondes	12.300	116,120	-
Navy	N00014-22-1-2453	Improving Target Tracking by Enhancing Neural Synchrony	12.300	491,095	176,452
Navy	N00014-22-1-2463	Software Integrated with Secure Hardware (SWISH)	12.300	303,171	303,171
Navy	N00014-22-1-2468	Optically-Controlled GaN Power Devices	12.300	192,879	-
Navy	N00014-22-1-2578	Interactive Large-scale Multi-agent Planning with Natural Language Inputs and Explainable AI	12.300	192,499	-
Navy	N00014-22-1-2630	Nanoengineered Multifunctional Structural Energy Storage	12.300	21,346	-
Navy	N00014-22-1-2665	Collaborative Proposal: Scaling up MINLPs via Branch-and-Bound and First Order Methods with applications to Structured Statistical Learning	12.300	172,843	-
Navy	N00014-22-1-2709	Design Optimization of 10Ni Naval Steels	12.300	157,278	-
Navy	N00014-22-1-2740	Intentional multi-modal self-learning to perceive and understand the real world	12.300	1,614,215	771,376
Navy	N00014-22-1-2756	Non-parametric methods in reinforcement learning: Instance-optimality, adaptivity and data-dependent bounds	12.300	220,180	-
Navy	N00014-23-1-2004	CyberSteels: Accelerating Genomic Design	12.300	483,498	-
Navy	N00014-23-1-2160	SABINE Models and Measurements. (alaSka Arctic Bottomside loNosphEre) SABINE	12.300	158,412	11,032
Navy	N00014-23-1-2164	Instrumentation to Support Diver-AUV Cooperative Autonomy	12.300	95,054	-
Navy	N00014-23-1-2299	Optimization-based Machine Learning for Dynamic Decision Problems	12.300	472,317	-
Navy	N00014-23-1-2355	Grounding Vision-Language Interactions in World Models by Integrating Large Neural Models with Probabilistic Programs	12.300	605,175	304,549
Navy	N00014-23-1-2499	Directed assembly of mesoscale architectures in additive manufacturing	12.300	489,051	196,400
Navy	N00014-23-1-2512	A Unified Approach to Passive and Active Ocean Acoustic Waveguide Remote Sensing	12.300	486,637	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Navy	N00014-23-1-2530	The Role of Cavity and Interface Interactions in Damage and Injury of Biological Materials for Protective Measures	12.300	111,121	-
Navy	N00014-23-1-2551	A Systems Approach to Controlling Destructive Behavior in the Navy	12.300	191,563	88,190
Navy	N00014-23-1-2573	Spatial and Temporal Multiscale Considerations in Heat Transfer Estimation Procedures	12.300	99,785	-
Navy	N00014-23-1-2577	Entangles Clock Networks beyond the Standard Quantum Limit	12.300	372,749	-
Navy	N00014-23-1-2584	Fairness on Online Platforms	12.300	87,662	-
Navy	N00014-23-1-2728	Nanocrystalline core materials and circuits for energy harvesting	12.300	95,389	-
Navy	N00014-23-1-2750	Joint US-Japan Ocean Acoustic Waveguide Remote Sensing Experiment	12.300	54,023	-
Navy	N00014-23-1-2803	Data-Driven Methods for Structure Learning in Underwater Acoustic Modeling	12.300	43,487	-
Navy	N00014-23-1-2838	Sonobuoy Backscatter: Long-Range, High-Resolution Underwater Object Detection & Imaging via Net-Zero-Power Backscatter Networks	12.300	409,499	-
Navy	N00014-23-1-2873	Quantum Science with Ultracold Atoms on a 50 nm Scale	12.300	133,884	-
Navy	N00014-23-1-2883	CONTACT: Collaborative Neural-agents providing Team Assistance in Cognitive Tasks	12.300	133,901	-
Navy	N00014-24-1-2055	An Experimental and Theoretical Study on Structural and Functional Plasticity in Cortical Neurons: Implications for Learning in Deep Neural Networks	12.300	204,533	26,300
Navy	N00014-24-1-2060	[YIP] Designing Adaptive Motor Control Circuitry for Swimming Biohybrid Robots	12.300	95,675	-
Navy	N00014-24-1-2076	Equilibrium and Non-Equilibrium Entraining Bubbly Flow Regimes around a Ship	12.300	92,974	-
Navy	N00014-24-1-2122	Longitudinal Ionospheric Variations in the bottomside Equatorial regions (LIVE)	12.300	70,488	-
Navy	N00014-24-1-2176	Nanoengineered Multifunctional Structural Power	12.300	35,658	-
Navy	N000142412254	Combinatorial nucleic acid nanoparticle libraries for materials research and molecular catalysis	12.300	62,469	-
Navy	N000142412350	Infrared-Enhanced Electron Emission from Nanoantennas (IREEN)	12.300	29,343	-
Navy	N00173-19-1-G003	STROBE-X Science Requirements and Wide Field Monitor Definition	12.300	-533	-
Navy	N0018922PZ243	Engineering Support for the Interagency Very-Long Baseline Interferometry (VLBI) Correlator	12.RD	-2,581	-
Navy	N0018923P0304	Engineering Support for the Interagency Very-Long Baseline Interferometry (VLBI) Correlator - Salary Only	12.RD	138,071	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Navy	N0018923P0744	KPGO 20 Meter USNO Broadband Upgrade	12.RD	280,402	-
Navy	N0018924P0241	Engineering Support for the Interagency Very-Long Baseline Interferometry (VLBI) Correlator	12.RD	25,592	-
Navy	N66001-13-C-4025	Integrated and Scalable Cyto-Technologies (INSCyT) for Flexible Microbial Manufacturing	12.RD	-54,117	-
Total for Navy				19,503,089	2,646,731
Other DOD					
Other DOD	HDTRA12110013	Robust AI-driven counter-measures: screening, guiding, combining	12.351	209,493	-
Other DOD	HDTRA12210010	Deep Learning-Guided Discovery and Structural Validation of Marine Toxin Inhibitors	12.351	494,561	-
Other DOD	HDTRA12210032	Unsupervised Machine Learning for Drug Repurposing and Medical Countermeasure (MCM) Identification	12.351	399,334	-
Other DOD	W911NF2120206	Development of AI Algorithms to Support Human-Robot Teams of Unmanned Marine Vehicles in Shallow Water Environments	12.431	140,920	-
Other DOD	W911NF2320102	Efficient extraction of damage-sensitive spatial vibration features for large structures	12.431	38,494	-
Other DOD	HM0 4762310 001	Broadening broadband VLBI to also observe GNSS signals	12.630	390,059	-
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.RD	278,344	-
Other DOD	N6600123C4506	Analogue genetic circuits for long-term reliable reporting by living sensors	12.RD	603,929	108,566
Other DOD	N6600123C4513	Fiber Computers & Fabric Networks (FCFN) for Garment - based Discreet Audio, Video, and Location Services	12.RD	667,997	213,651
Other DOD	W912HQ20C0015	Retrobiosynthetic design for renewable energetic materials	12.RD	275,780	-
Total for Other DOD				3,498,911	322,217
TOTAL for Department of Defense				97,458,559	14,658,190

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF COMMERCE					
DOC	NA18OAR4170105	2018 Omnibus: Sea Grant College Program	11.417	159,173	104,223
DOC	NA21OAR4170339	Special Projects Competition Addressing COVID-19 Impacts to Seafood Resources SPECIAL PROJECTS E	11.417	172,481	154,935
DOC	NA21OAR4170389	Coordinated Ocean Energy Expertise to Northeast Coastal Stakeholders: MIT Sea Grant	11.417	22,098	-
DOC	NA22OAR4170126	2022-2023 Sea Grant OMNIBUS	11.417	2,296,002	510,338
DOC	NA22OAR4170144	Special Projects C: Disaster Preparedness for Coastal Communities	11.417	66,248	-
DOC	NA22OAR4170552	Fiscal Year 2022 NMFS-Sea Grant Fellowship in Population and Ecosystem Dynamics and Marine Resource Economics_Karl Aspelund	11.417	52,842	-
DOC	NA23OAR4170012	FY2023 Knauss Fellowship - Claudia Mazur	11.417	27,708	-
DOC	NA23OAR4170070	2023 Knauss Fellowship - Sophia Troeh	11.417	45,770	-
DOC	NA23OAR4170072	2023 Knauss Fellowship - Lilian Elekwachi	11.417	45,066	-
DOC	NA23OAR4170168	Massachusetts Marine Debris from Source to Stellwagen A Comprehensive Suite of Tools for Environmental Educators	11.417	44,631	14,087
DOC	NA23OAR4170355	Extending and Integrating Aquaculture Workforce Development Between Communities	11.417	84,483	-
DOC	NA23OAR4170538	Greztlik_PED Applications of Ecosystem-Based Fishery Management using Multispecies Models	11.417	20,381	20,381
DOC	NA24OARX417C0108	2024 Knauss Fellowship_MIT Sea Grant_Borreggine	11.417	35,823	-
DOC	NA24OARX417C0148-T1-01	Sea Grant 2024-2027 OMNIBUS	11.417	300,444	-
DOC	NA19OAR4310180	Exploring the trend in inorganic aerosol deposition	11.431	32,705	-
DOC	NA21OAR4590170	Advancing Ensemble Subseasonal Forecasting with Machine Learning	11.459	50,457	-
DOC	70NANB20H014	Open Materials Metrology and Modeling (OM3)	11.609	-13,086	-
DOC	70NANB23H034	Computational Metrology	11.609	175,044	-
Total for Department of Commerce				3,618,270	803,964
TOTAL for Department of Commerce				3,618,270	803,964

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF ENERGY					
DOE	DE-FC02-93ER54186	Fusion Development and Technology - Parent	81.049	414,304	-
DOE	DE-FG02-02ER45977	Fundamental Studies on Heat Conduction in Polymers	81.049	35,593	-
DOE	DE-FG02-03ER46076	Strongly Correlated Electronic Systems: Local Moments and Conduction Electrons	81.049	194,665	-
DOE	DE-FG02-07ER46474	Bimolecular Interactions in Organic Semiconductors	81.049	596,324	-
DOE	DE-FG02-08ER46488	Materials Exhibiting Biomimetic Carbon Fixation and Self Repair: Methanotrophic Materials (renewal)	81.049	35,390	-
DOE	DE-FG02-08ER46488	Materials Exhibiting Biomimetic Carbon Fixation and Self Repair: Theory and Experiment (Renewal)	81.049	219,878	-
DOE	DE-FG02-08ER46514	Novel Temperature Limited Tunneling Spectroscopy of Quantum Hall Systems	81.049	159,746	-
DOE	DE-FG02-08ER46521	Ultrafast Electronic and Structural Dynamics in Quantum Materials	81.049	433,220	-
DOE	DE-FG02-91ER54109	Theoretical Research in Advanced Physics and Technology (Renewal of 6937946)	81.049	804,006	-
DOE	DE-FG02-94ER40818	Research in Nuclear Physics: Medium Energy Nuclear Physics	81.049	896,229	-
DOE	DE-FG02-94ER61937	Sectoral Interactions, Compounding Influences and Stressors, and Complex Systems: Understanding Tipping Points and Non-Linear Dynamics	81.049	921,107	-
DOE	DE-NA0004029	Development of New Advanced X-ray and γ-ray Diagnostics for Inertial-Confinement-Fusion and Discovery-Science Programs at OMEGA and the NIF	81.049	264,796	-
DOE	DE-NA0004129	Study of Magnetized, High-Energy-Density Hydrodynamics at OMEGA	81.049	167,747	-
DOE	DE-NE0009273	ATF Solutions to Light Water-Cooled SMRs	81.049	260,122	95,411
DOE	DE-SC0007106	Designing Novel Nanostructures Using Sequence-Defined Biopolymers	81.049	-11,823	-
DOE	DE-SC0007106	Encoding Material Structure Into the Primary Sequence of Polymers	81.049	213,107	-
DOE	DE-SC0008739	Unconventional Metals in Strongly Correlated Systems	81.049	172,720	-
DOE	DE-SC0010492	Fusion Pilot Plant and ITER Scenarios and Control	81.049	323,335	-
DOE	DE-SC0011088	MIT RELATIVISTIC HEAVY ION GROUP	81.049	1,956,763	-
DOE	DE-SC0011090	TASK R - THEORETICAL NUCLEAR PHYSICS	81.049	944,468	-
DOE	DE-SC0011091	Task W - Neutrino Physics	81.049	702,541	-
DOE	DE-SC0011755	ADV ACCT: Parent of AMS-02 Operations	81.049	1,402,882	-
DOE	DE-SC0011755	AMS Operations	81.049	2,194,048	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DOE	DE-SC0011848	ADV ACCT: Parent of AMS-02 Research	81.049	1,078,234	-
DOE	DE-SC0011848	AMS Research	81.049	1,034,211	-
DOE	DE-SC0011939	TASK A: PARTICLE PHYSICS COLLABORATION	81.049	64,699	-
DOE	DE-SC0011939	TASK A: PARTICLE PHYSICS COLLABORATION (PARENT)	81.049	912,448	-
DOE	DE-SC0012470	MDSPlus Development and Support	81.049	394,296	-
DOE	DE-SC0012567	Task C: Theoretical High Energy Physics	81.049	845,894	-
DOE	DE-SC0014229	Phase Contrast Imaging for Wendelstein 7-X	81.049	415,129	22,934
DOE	DE-SC0014251	Gas-Puff-Imaging for Diagnosis of Boundary and SOL Physics in W7-X	81.049	253,924	-
DOE	DE-SC0014264	MIT Plasma Science and Fusion Center Magnetic Confinement Fusion Experiment Research and Related Activities	81.049	7,306,053	-
DOE	DE-SC0014478	MIT Outreach for Plasma Science and Fusion	81.049	88,400	-
DOE	DE-SC0014901	Computer-Aided Construction of Chemical Kinetic Models	81.049	210	-
DOE	DE-SC0014901	Enabling Quantitative Predictions of Reacting Gas-Liquid Systems	81.049	260,269	-
DOE	DE-SC0015566	Novel Concepts for High Gradient Acceleration	81.049	399,640	-
DOE	DE-SC0016154	Measurement of Helicons and Parametric Decay Waves in DIII-D with Phase Contrast Imaging	81.049	501,217	-
DOE	DE-SC0016214	Tailored Lewis Acidiczeolite Environments for the Promotion Ofliquid- phase Transfer Hydrogenation Catalysis	81.049	162,301	-
DOE	DE-SC0018090	Center for Integrated Simulation of Fusion Relevant RF Actuators	81.049	656,087	363,255
DOE	DE-SC0018091	New Experimental Views on the Role of Temperature in Extreme Strain Rate Mechanics	81.049	224,246	-
DOE	DE-SC0018094	Nonequilibrium Properties of Driven Electrochemical Interfaces	81.049	119,717	-
DOE	DE-SC0018097	Spectroscopic studies of protein-protein association in model membranes	81.049	448,035	-
DOE	DE-SC0018229	MIT-Bates Research and Engineering Center	81.049	2,307,568	-
DOE	DE-SC0018947	Portable Parallel Algorithms and Frameworks for Exascale Graph Analytics	81.049	298,860	-
DOE	DE-SC0019087	Rational Sub-Nanometer Manipulation of Polymer Morphology for Efficient Chemical Separations	81.049	14,505	-
DOE	DE-SC0019112	The Center for Enhanced Nanofluidic Transport – Phase 2 (CENT2)	81.049	2,567,804	1,469,717
DOE	DE-SC0019126	Novel Terahertz-Induced Quantum States Probed with Ultrafast Coherent X-Rays	81.049	695,675	131,028
DOE	DE-SC0019345	Excitons In Low-Dimensional Perovskites	81.049	211,161	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DOE	DE-SC0019768	Search for a Non-Zero Value of the Electric Dipole Moment of the Neutron	81.049	181,590	-
DOE	DE-SC0019998	Controlling Exciton Dynamics with DNA Origami for Quantum Information Science	81.049	444,790	-
DOE	DE-SC0020042	Janus 2D Material Platform Enabled by Atomic-Layer Substitution	81.049	146,629	-
DOE	DE-SC0020148	Tracing the Topological Fingerprint of Weyl Semimetals Using Neutron Probes	81.049	130,599	-
DOE	DE-SC0020149	Creating and Probing Large Gap 2D Topological Insulators for Quantum Computing	81.049	98,052	-
DOE	DE-SC0020180	Towards High-Throughput Computation of Phase-and Defect Diagrams	81.049	19,434	-
DOE	DE-SC0020240	Short-Range Correlations in Nuclei and the EMC Effect	81.049	636,413	-
DOE	DE-SC0020264	Quantum algorithms for fusion-plasma dynamics	81.049	437,223	139,708
DOE	DE-SC0020265	Study of Short-Range Correlations in Nuclei Using Electro-induced Nucleon-knockout Reactions at High Momentum-Transfer	81.049	268,010	-
DOE	DE-SC0020327	Boundary, SOL, and Divertor Physics Studies on TCV	81.049	37,960	-
DOE	DE-SC0020973	Molecular Control of Heterogeneous Electrocatalysis	81.049	109,533	-
DOE	DE-SC0020974	Primary and Secondary Sphere Effects on the Valence Isomerism of Fe-S Clusters	81.049	54,045	-
DOE	DE-SC0020998	A multiresolution sharp-interface framework for tightly-coupled multiphysics simulations	81.049	297,810	-
DOE	DE-SC0021006	The QCD structure of nucleons and light nuclei	81.049	69,290	-
DOE	DE-SC0021025	Revealing the molecular origin of interactions between nanocrystals	81.049	13,537	-
DOE	DE-SC0021120	Study of High Harmonic Fast Wave Interaction with the Scrape-Off-Layer Plasmas in NSTX-U	81.049	110,063	-
DOE	DE-SC0021176	Shedding Light on Nuclear Properties at the Limits of Existence	81.049	512,211	-
DOE	DE-SC0021178	Liquid Metal surface properties and plasma material interactions for plasma-facing component development in NSTX-U	81.049	259,377	-
DOE	DE-SC0021179	Laser Spectroscopy of Exotic Atoms and Molecules Containing Octupole-Deformed Nuclei	81.049	182,523	-
DOE	DE-SC0021180	Josephson Traveling Wave Parametric Amplifiers to Enable Future Neutrino Mass Measurements	81.049	-136	-
DOE	DE-SC0021181	Exploring the Effects of Environmental Radiation on Superconducting Qubit Coherence	81.049	37,505	-
DOE	DE-SC0021202	Accelerating radio frequency modeling using machine learning	81.049	235,286	9,576
DOE	DE-SC0021225	FAIR Framework for Physics-Inspired Artificial Intelligence in High Energy Physics	81.049	82,327	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DOE	DE-SC0021226	Frameworks, Algorithms and Scalable Technologies for Mathematics (FASTMath) SciDAC Institute	81.049	63,870	-
DOE	DE-SC0021629	Role of neutrals versus transport in determining the pedestal density structure	81.049	111,393	-
DOE	DE-SC0021634	Carbonate Management to Enable Energy- and Carbon-Efficient CO2 Electrolysis	81.049	242,737	-
DOE	DE-SC0021637	Adapting transient grating spectroscopy for non-destructive in situ/operando, measurement of thermomechanical properties of fusion materials under plasma bombardment	81.049	130,742	-
DOE	DE-SC0021638	Computational Physics School for Fusion Research (CPS-FR) 2021-2023	81.049	33,097	-
DOE	DE-SC0021647	Unitary Qubit Lattice Algorithms for Plasma Physics	81.049	82,818	-
DOE	DE-SC0021650	Investigating Excitonic Properties through Photon Correlation in Quantum Optical Materials	81.049	279,393	-
DOE	DE-SC0021886	Spacetime Emergence from Quantum Gravity: Perturbative and Nonperturbative Aspects	81.049	267,403	-
DOE	DE-SC0021939	Resonant Coherent Diffractive Imaging of Quantum Solids	81.049	90,528	-
DOE	DE-SC0021940	Machine Learning Augmented Multimodal Neutron Scattering for Emergent Topological Materials	81.049	145,161	-
DOE	DE-SC0021943	Harnessing the Large Hadron Collider with New Insights in Real-Time Data Processing and Artificial Intelligence	81.049	182,905	-
DOE	DE-SC0022012	Collaborative Research: Enabling multi-scale studies of magnetic reconnection with interpretable data-driven models	81.049	156,402	-
DOE	DE-SC0022016	Improving bioprocess robustness by cellular noise engineering	81.049	645,781	189,224
DOE	DE-SC0022017	Exploring Past and Future Drivers of Biogenic SOA	81.049	368,675	-
DOE	DE-SC0022028	Incommensurate Interfaces in Intercalated Quantum Materials	81.049	177,120	-
DOE	DE-SC0022033	A Streamlined Open Source Neutronics Toolkit for Fusion Reactor Design	81.049	203,775	-
DOE	DE-SC0022054	Nanoscale Free-Electron Lasing	81.049	103,046	62,583
DOE	DE-SC0022340	Intelligent experiments through real-time AI: Fast Data Processing and Autonomous Detector Control for sPHENIX and future EIC detectors	81.049	216,112	-
DOE	DE-SC0022997	CRCNS22 A combined computational and experimental investigation of the cellular and network basis of visual recognition memory	81.049	102,519	-
DOE	DE-SC0022999	Machine learning assisted prediction of tungsten heavy alloy plasma facing component performance for fusion energy applications	81.049	12,146	-
DOE	DE-SC0023116	Fundamental nuclear physics at the exascale and beyond	81.049	622,384	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DOE	DE-SC0023187	M2dt: Multifaceted Mathematics for Predictive Digital Twins	81.049	370,755	-
DOE	DE-SC0023188	Randomized algorithms for optimal data acquisition in Bayesian inverse problems	81.049	449,341	135,842
DOE	DE-SC0023287	Inverse Design of Tungsten-based Low-Activation High Entropy Alloys for Plasma-Facing Materials via Machine-Learning Engineering of Vacancy Exchange Potentials	81.049	232,585	-
DOE	DE-SC0023288	Uncovering intrinsic transport and magnetic properties of two-dimensional electrically conducting metal-organic frameworks	81.049	251,018	-
DOE	DE-SC0023289	Opaqueness and aspect ratio impact on fueling and core-edge performance	81.049	178,480	-
DOE	DE-SC0023292	Permanent Magnets Featuring Heavy Main Group Elements for Magnetic Anisotropy	81.049	189,270	-
DOE	DE-SC0023684	Integrated Plasma-material Interaction Analysis Toward Long-Pulse Operation in a Fully-Tungsten Tokamak	81.049	130,721	-
DOE	DE-SC0024025	R&D of Very High-Field Solenoid Magnets for Uses in High-Energy Physics Experiments	81.049	109,423	-
DOE	DE-SC0024029	Ultrafast electronic and structural dynamics in Quantum materials	81.049	384,022	-
DOE	DE-SC0024112	Shining Light on Dark Matter: Using Stars as Tracers of Dark Matter	81.049	38,540	-
DOE	DE-SC0024113	Upgrade Proposal to Complete AMS	81.049	61,210	-
DOE	DE-SC0024138	Development of a Compact, High-Current Family of Cyclotrons for Neutrino Physics, Isotope Production, and Material Testing	81.049	55,929	-
DOE	DE-SC0024173	On-Chip Attosecond Metrology of Solid-State High-Harmonic Generation	81.049	190,740	-
DOE	DE-SC0024174	Multi-scale modeling for time-dependent phenomena in the condensed phase	81.049	59,806	-
DOE	DE-SC0024273	Intelligent experiments through real-time AI: Fast Data Processing and Autonomous Detector Control for sPHENIX and future EIC detectors	81.049	92,814	-
DOE	DE-SC0024306	Study of Non-Maxwellian ion-velocity distributions and their impact on Fusion Product Spectra in Inertial Confinement Fusion plasmas	81.049	156,988	-
DOE	DE-SC0024307	Rapid development of radiation-resistant advanced alloys for radio frequency actuators	81.049	229,376	-
DOE	DE-SC0024368	Open and FAIR Fusion for Machine Learning Applications	81.049	239,204	-
DOE	DE-SC0024369	Center for Advanced Simulation of RF - Plasma - Material Interactions	81.049	467,257	161,999
DOE	TBD	Adv Account: Theoretical Research in Advanced Physics and Technology	81.049	592,232	-
DOE	DE-EE0009096 09/01	Machine-learned processing pathways for solid state electrolytes	81.086	9,792	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DOE	DE-EE0009165	Multifunctional Optical Outcouplers for Efficient and Stable White OLEDs	81.086	54,769	-
DOE	DE-EE0009211	Transit-Centric Smart Mobility for High-Growth Urban Activity Centers: Improving Energy Efficiency through Machine Learning	81.086	415,976	209,740
DOE	DE-EE0009679	High Energy Density Hydrogel Thermo-Adsorptive Storage	81.086	556,280	91,772
DOE	DE-EE0008558	Low-cost, high-efficiency III-V photovoltaics enabled by remote epitaxy through graphene	81.087	15,095	-
DOE	DE-EE0008830	Micro-mechanically guided high-throughput alloy design exploration towards metastability-induced hydrogen embrittlement resistance	81.087	-15,650	-
DOE	DE-EE0009512	Next-generation perovskite photovoltaics: improving, stabilizing, and lead-sealing of record-setting laboratory solar cells toward commercialization	81.087	376,213	-
DOE	DE-EE0010503	SETO ADDEPT CENTER	81.087	1,208,590	442,975
DOE	DE-FE0032102	Improving Durability and Performance of Solid Oxide Electrolyzers by Controlling Surface Composition on Oxygen Electrodes	81.089	186,953	88,060
DOE	DE-FE0032334	Lower Cost, CO2 Free, H2 Production via CH4 Pyrolysis in Molten Tin	81.089	213,904	-
DOE	DE-NA0003868	Center for Advanced Nuclear Diagnostics and Platforms for ICF and HED Physics at Omega, NIF, and Z	81.113	2,212,239	349,558
DOE	DE-NE0000102	MIT Nuclear Energy University Fellowship Program	81.121	24,731	-
DOE	DE-NE0008728	University Reactor Upgrades Infrastructure Support for: Modular Hot Cells for Post-Irradiation Examination	81.121	62,716	-
DOE	DE-NE0008871	Simultaneous Corrosion/Irradiation Testing in Lead and Lead-Bismuth Eutectic: The Radiation Decelerated Corrosion Hypothesis	81.121	208,707	203,685
DOE	DE-NE0008967	Highly Compact Steam Generators for Improved Economics of Small Modular Reactors	81.121	222,911	-
DOE	DE-NE0008999	Molten Salt Reactor Test Bed with Neutron Irradiation	81.121	1,126,123	725,003
DOE	DE-NE0009049	Horizontal Compact High Temperature Gas Reactor	81.121	1,120,309	771,888
DOE	DE-NE0009063	IUP Scholarship and Fellowship Support	81.121	54,000	-
DOE	DE-NE0009155	Experimental investigation and development of models and correlations for cladding-to-coolant heat transfer phenomena in transient conditions in support of TREAT and the LWR fleet	81.121	179,353	89,604
DOE	DE-NE0009267	Integrated Marine Platform for Hydrogen and Ammonia Production	81.121	258,410	51,463
DOE	DE-NE0009312	Microscale PIE Tools for Expanding the Scientific Impact of the MIT Reactor.	81.121	156,163	-
DOE	DE-NE0009321	The application of advanced high resolution optical diagnostics to answer long standing questions and make new discoveries in boiling heat transfer in LWR conditions	81.121	165,463	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DOE	DE-NE0009324	Understanding of ATF Cladding Performance under Radiation using MITR	81.121	1,032,323	347,017
DOE	DE-NE0009364	University Research Reactor Upgrades Infrastructure Support for the MIT Research Reactor's Area Radiation Monitor System Upgrade	81.121	531,483	-
DOE	DE-NE0009365	High Temperature Thermal Diffusivity Equipment for Expanding the Scientific Impact of the MIT Reactor	81.121	138,349	-
DOE	DE-NE0009398	Embedded Monte Carlo	81.121	63,007	-
DOE	DE-NE0009401	CFD based Critical Heat Flux predictions for enhanced DNBR margin	81.121	69,012	-
DOE	DE-NE0009416	Unraveling how mixing vane spacers affect cladding-to-coolant heat transfer phenomena in light water reactors	81.121	3,075	-
DOE	DE-OE0000920	Efficient Ultra Endpoint IoT-enabled Coordinated Architecture (EUREICA)	81.122	534,692	262,534
DOE	DE-NA0003965	CESMIX: Center for the Exascale Simulation of Material Interfaces in Extreme Environments	81.124	1,931,094	-
DOE	DE-AR0001130	MULTISCALE POROUS HIGH-TEMPERATURE HEAT EXCHANGER USING CERAMIC COEXTRUSION	81.135	150,471	121,853
DOE	DE-AR0001133	CARBONHOUSE: A SCALABLE ALL-CARBON BUILDING LOGIC DERIVED FROM HYDROCARBON RESOURCES	81.135	415,014	257,824
DOE	DE-AR0001220	GLOBAL OPTIMIZATION OF MULTICOMPONENT OXIDE CATALYSTS FOR OER/ORR	81.135	40,515	-
DOE	DE-AR0001261	Radio Frequency tools for Breakthrough Fusion Concepts	81.135	170,161	54,299
DOE	DE-AR0001295	High Fidelity Digital Twins for BWRX-300 Critical	81.135	466,676	183,698
DOE	DE-AR0001298	Generation of Critical Irradiation Data to Enable Digital Twinning of Molten-Salt Reactors	81.135	170,062	-
DOE	DE-AR0001395	ELECTROCHEMICAL MINING OF MSWI ASH	81.135	708,910	172,314
DOE	DE-AR0001409	ELECTROCHEMICALLY MODULATED CO2 REMOVAL FROM OCEAN WATERS	81.135	115,737	-
DOE	DE-AR0001434	Additive Manufacturing of Oxygen-Resistant Gradient Refractory Composites	81.135	226,454	-
DOE	DE-AR0001511	ZERO-CARON BIOFUELS: AN OPTIMIZED TWO-STAGE SYSTEM FOR HIGH PRODUCTIVITY CONVERSION OF CO2 TO LIQUID FUELS	81.135	773,800	276,316
DOE	DE-AR0001527	Ventilation Air Methane Abatement via Catalytic Oxidation (VAMCO) with Machine-Learning Enhanced Sensing and Feedback Controls	81.135	1,053,465	122,257
DOE	DE-AR0001542	Liquid Immersion Blanket Rapid Assessment (LIBRA)	81.135	1,272,175	-
DOE	DE-AR0001569	Nitrogen Fertilizer: New Strategies for Low-energy, Low-emission Production and Use	81.135	638,942	33,510

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DOE	DE-AR0001591	8 GaN-on-Si Super Junction Devices for Next Generation Power Electronics	81.135	1,080,714	416,386
DOE	DE-AR0001649	Alternating Direction Decomposition with Strong Bounding and Convexification (ADD-SBC) for Solving Security Constrained AC Unit Commitment Problems	81.135	134,998	-
DOE	DE-AR0001738	Neutron emission from laser-stimulated metal hydrides	81.135	474,580	-
DOE	684843	Real-Time Data Reduction Codesign at the Extreme Edge for Science	81.RD	115,415	-
DOE	699092	Accelerating offline computing with the Fast Machine Learning Lab	81.RD	47,369	-
DOE	708959	Accelerating offline computing with the Fast Machine Learning Lab	81.RD	505	-
DOE	SC-19-487	Center for the Advancement of Topological Semimetals (CATS)	81.RD	-27,502	-
DOE	SUB NO. SC-23-577	Center for the Advancement of Topological Semimetals	81.RD	304,788	-
DOE	SUBCONTRACT NO. SC-23-577	Center for the Advancement of Topological Semimetals	81.RD	180,911	-
Total for Department of Energy				69,273,782	8,053,033
TOTAL for Department of Energy				69,273,782	8,053,033

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF HEALTH & HUMAN SERVICES					
Other HHS					
HHS	1-R01-FD007480-01	Continuous Production of Viral -Vectors using membraneless Perfusion Culture of Host Cells	93.103	202,159	112,382
HHS	5 U01 FD006755-03	Integrated Continuous Processing Facility for Small Molecule and Biologic Lyophilized Final Dosage Forms	93.103	143,845	-
HHS	5-R01-FD007226-03	Flexible Platform for End-to-end Manufacturing of Gene Therapies to Advance Development of Treatments for Ultrarare Diseases	93.103	150,831	-
HHS	5-R01-FD007458-02	COVID-19: A modular platform for rapid VLP vaccine development and manufacturing for SARS-CoV-2 pandemic response	93.103	33,921	-
HHS	5-R01-FD007458-03	COVID-19: A modular platform for rapid VLP vaccine development and manufacturing for SARS-CoV-2 pandemic response	93.103	434,839	-
HHS	5-R01-FD007480-02	Continuous Production of Viral -Vectors using membraneless Perfusion Culture of Host Cells	93.103	456,720	142,941
HHS	5-U01-FD006751-03	Novel Process Analytic Technology for Continuous Bioprocesses	93.103	107,613	-
HHS	D24AC00040-00	Revolutionizing the oral route: delivery of electroceuticals and mRNA therapeutics for transforming health	93.384	1,871,213	-
HHS	D24AC00040-01	Revolutionizing the oral route: delivery of electroceuticals and mRNA therapeutics for transforming health	93.384	2,671	-
HHS	75F40121C00090	COVID-19: Application of Smart Data Analytics to Biomanufacturing	93.RD	1,805,209	-
HHS	75F40121C00111	Controlled Protein Capture via Continuous Crystallization and Precipitation for Monoclonal Antibody Manufacturing	93.RD	1,776,027	1,190,914
HHS	75F40121C00111	COVID-19: Controlled Protein Capture via Continuous Crystallization and Precipitation for Monoclonal Antibody Manufacturing	93.RD	452,390	209,917
HHS	75F40121C00131	Technologies to Enable Continuous Production of rAAV from Sf9/baculovirus Culture	93.RD	1,077,309	173,572
HHS	75F40122C00200	COVID-19: Development of an Integrated Continuous cGMP Facility for mRNA Manufacturing	93.RD	16,224,730	11,024,556
Total for Other HHS				24,739,477	12,854,282
NIH					
NIH	1-R25-ES034600-01	Short Courses for Teaching Gene-Environment Interactions with a focus on Environmental Justice Communities	93.113	121,258	117,774
NIH	5P30ES002109-40	MIT Center for Environmental Health Sciences (YR 36-40)	93.113	-7	-
NIH	5P30ES002109-40 REVISED	MIT Center for Environmental Health Sciences (YR 36-40)	93.113	1	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5R25ES034600-03	Short Courses for Teaching Gene-Environment Interactions with a focus on Environmental Justice Communities	93.113	115,134	-
NIH	5-R35-ES028303-07	Mechanism of Eukaryotic Environmental Mutagenesis	93.113	465,400	-
NIH	5-R35-ES028303-08	Mechanism of Eukaryotic Environmental Mutagenesis	93.113	15,838	-
NIH	5-R35-ES028374-06	Protein Kinase Signaling in the Genotoxic Stress Response	93.113	95,552	-
NIH	5R35ES028374-07	Protein Kinase Signaling in the Genotoxic Stress Response	93.113	443,872	-
NIH	5-T32-ES007020-48	Training Grant in Environmental Toxicology	93.113	48,282	-
NIH	5-T32-ES007020-49	Training Grant in Environmental Toxicology	93.113	788,650	-
NIH	5-F32-DE032551-02	Elucidating the regulation and spread of an integrative and conjugative element from Streptococcus mutans in the oral microbiome	93.121	5,057	-
NIH	7-R01-DE029342-02 REVISED	Identification and Validation of a Novel Central Analgesia Circuit	93.121	967,322	95,410
NIH	2-P42-ES027707-06	The MIT Superfund Research Program: A Systems Approach for the Protection of Human Health from Hazardous Chemicals	93.143	92,484	-
NIH	5-P42-ES027707-07	The MIT Superfund Research Program: A Systems Approach for the Protection of Human Health from Hazardous Chemicals	93.143	2,252,353	-
NIH	1-F99-HG013039-01	Leveraging natural and engineered genetic barcodes from single cell RNA sequencing to investigate cellular evolution, clonal expansion, and associations between cellular genotypes and phenotypes	93.172	41,857	-
NIH	5F31HG013052-02	Developing an ultra-high throughput droplet microfluidic workflow for genetic circuit characterization	93.172	50,800	-
NIH	5-F32-HG012307-03	Connecting perturbations of RNA binding proteins to their consequences	93.172	67,283	-
NIH	5-R01-HG002439-20	Regulation and Function of Alternative mRNA Isoform Expression in Mammals	93.172	582,513	-
NIH	5-R01-HG010959-04	Privacy-preserving genomic medicine at scale	93.172	388,526	62,822
NIH	3-R01-DC016607-01A1S1	The neural architecture of pragmatic processing	93.173	-4,000	-
NIH	3-R01-DC016607-04S1 REVISED	The neural architecture of pragmatic processing	93.173	-3,138	-
NIH	5-R01-DC000238-38	Experimental Theoretical Studies of Cochlear Mechanisms	93.173	298,110	-
NIH	5-R01-DC016607-05	The neural architecture of pragmatic processing	93.173	56,240	-
NIH	5-R01DC017970-05	Computational Cognitive Neuroscience of Human Auditory Cortex	93.173	386,899	-
NIH	5-R01-DC020484-02 REVISED	Neural Mechanisms that Underlie Flexible Sensory Control of Behavioral States in C. elegans	93.173	550,128	-
NIH	1-DP1-AT011991-01	Fusion of nanomagnetic and viral tools to interrogate brain-body circuits	93.213	1,266,126	-
NIH	1-R01-AT011460-01	Noninvasive sensory stimulation to promote glymphatic-lymphatic clearance for the treatment of Alzheimer's Disease	93.213	120,570	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5R01AT011460-04	Noninvasive sensory stimulation to promote glymphatic-lymphatic clearance for the treatment of Alzheimer's Disease	93.213	516,378	-
NIH	1-R01-MH129046-01	CRCNS: Computational principles of mental simulation in the entorhinal and parietal cortex	93.242	74,148	-
NIH	1R01MH133066-01	Neuron-astrocyte mechanisms of norepinephrine in goal-directed learning	93.242	101,058	-
NIH	1-RF1-MH120017-01	Re-engineering Rabies Virus	93.242	-11,906	-
NIH	1-RF1-MH121270-01 REVISED	Highly specific, renewable, and cost-effective antibody toolbox for 3D proteomic phenotyping of the brain	93.242	54,688	44,714
NIH	1-RF1-MH121885-01REVISED	Nobrainier: A robust and validated neural network tool suite for imagers	93.242	557,591	327,047
NIH	1-RF1-MH124606-01	Multiplexed Nanoscale Protein Mapping Through Expansion Microscopy and Immuno-SABER	93.242	550,286	550,286
NIH	1RF1MH124606-01 REVISED	Multiplexed Nanoscale Protein Mapping Through Expansion Microscopy and Immuno-SABER	93.242	402,475	-
NIH	1RF1MH132596-01	Highly multiplexed circuit mapping using barcoded rabies viruses and in situ sequencing	93.242	750,945	230,216
NIH	1RF1MH132747-01	Psych-DS: A FAIR data standard for behavioral datasets	93.242	329,895	-
NIH	1-UG3-MH126868-01	Hemogenetic imaging technology for circuit-specific analysis of primate brain function	93.242	-11,938	-
NIH	2R24MH117295-06	DANDI: Distributed Archives for Neurophysiology Data Integration	93.242	133,387	-
NIH	5-F31-MH124393-03	Exploring the role of genetic structural variation in neuropsychiatric diseases	93.242	-17,402	-
NIH	5-F31-MH129112-02	Spatiotemporal dynamics of locus coeruleus norepinephrine release in a learned behavior	93.242	19,874	-
NIH	5F31MH133329-02	A brain-wide atlas of astrocyte molecular diversity across developmental stages and model species	93.242	36,376	-
NIH	5-F32-MH122995-04	Markerless Tracking of 3D Posture to Reveal the Sensory Origins of Body Schema - PDF: K. Severson	93.242	-3,508	-
NIH	5R01MH060379-23	Functional and anatomical characterization of the striosomal system	93.242	357,161	-
NIH	5R01MH085802-14	Early developmental mechanisms of Rett Syndrome	93.242	375,119	-
NIH	5-R01-MH104536-10	Imaging Synaptic Transmission of Individual Active Zones	93.242	-26,683	-
NIH	5-R01-MH112694-05 REVISED	Simultaneous multiplexed in situ fluorescence imaging of neuronal proteins and messenger RNAs	93.242	54,507	-
NIH	5-R01-MH115592-05	Thalamocortical Dynamics and Consciousness	93.242	296	-
NIH	5R01MH121802-05	Mutant Shank3 macaque monkeys for neurobiological studies of ASD	93.242	319,590	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5-R01-MH122025-05	CRCNS US-French Research Proposal : Principles of Inference through Neural Dynamics	93.242	404,220	-
NIH	5R01MH122270-05	Characterization of amygdalar circuits mediating suppression of innate social behaviors	93.242	384,516	-
NIH	5-R01-MH126351-04	Spatiotemporal dynamics of locus coeruleus circuits during learned behavior	93.242	447,619	-
NIH	5R01MH129046-04	CRCNS: Computational principles of mental simulation in the entorhinal and parietal cortex	93.242	175,523	-
NIH	5R01MH131715-02	Layer-specific manipulations to test feedforward/feedback cortical circuitry	93.242	306,012	-
NIH	5R01MH132172-02	CRCNS: Circuit mechanisms of priors and learning during decision making	93.242	439,409	23,495
NIH	5-R01-MH133066-02	Neuron-astrocyte mechanisms of norepinephrine in goal-directed learning	93.242	272,212	-
NIH	5R21MH130067-02	Structured light temporal focusing depth-resolved wide-field FLIM-FRET for in vivo synaptic imaging	93.242	129,801	98,991
NIH	5R21MH130624-02	Investigation of the Synaptic Molecular Network using Multiplexed Imaging	93.242	120,999	-
NIH	5R24MH117295-05	DANDI: Distributed Archives for Neurophysiology Data Integration	93.242	1,935,533	753,677
NIH	5-U01-MH117072-05	Towards integrated 3D reconstruction of whole human brains at subcellular resolution	93.242	137,833	142,359
NIH	5UG3MH126868-03	Hemogenetic imaging technology for circuit-specific analysis of primate brain function	93.242	497,329	-
NIH	5-UG3-MH126869-02	Developing cell type-specific enhancers and connectivity mapping pipelines for marmosets	93.242	264,679	167,755
NIH	5-UG3-MH126869-03	Developing cell type-specific enhancers and connectivity mapping pipelines for marmosets	93.242	1,237,577	595,832
NIH	1-R01-DA054584-01	Single-Cell Dissection of Ensembles and Cell Types Mediating Opioid Action in the Rodent Brain	93.279	381,654	-
NIH	1-RF1-DA049005-01	Novel tools for spatiotemporal modulation of astrocytes in neuronal circuits	93.279	22,001	-
NIH	1UE5DA056914-01	Entrepreneurship and Innovation for Biomedical Product Development (EI4BPD)	93.279	9,064	8,452
NIH	5-R01-DA029639-12	Novel Platforms for Systematic Optical Control of Complex Neural Circuits In Vivo	93.279	225,724	108,036
NIH	5-R01-DA054584-03	Single-Cell Dissection of Ensembles and Cell Types Mediating Opioid Action in the Rodent Brain	93.279	363,933	-
NIH	5-U01-DA054181-02	A Genetic Engineering Toolbox for Marmosets (GETMarm): Development and optimization of genome editing and assisted reproduction techniques for marmoset models	93.279	202	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5-U01-DA054181-03	A Genetic Engineering Toolbox for Marmosets (GETMarm): Development and optimization of genome editing and assisted reproduction techniques for marmoset models	93.279	1,372,538	-
NIH	5-U01-DA054181-04	A Genetic Engineering Toolbox for Marmosets (GETMarm): Development and optimization of genome editing and assisted reproduction techniques for marmoset models	93.279	55,365	-
NIH	5UE5DA056914-02	Entrepreneurship and Innovation for Biomedical Product Development (EI4BPD)	93.279	433,240	22,654
NIH	1-R01-EB027717-01A1	Micro-invasive biochemical sampling of brain interstitial fluid for investigating neural pathology	93.286	218,102	-
NIH	1-R01-EB030946-01	Synthetic gene sensors and effectors to redirect organoid development	93.286	302,060	302,060
NIH	1-R01-EB031082-01A1	Localized immunotherapy using alum-binding therapeutics	93.286	249,121	-
NIH	1-R01-EB031813-01A1	NMR-Based Rapid Fluid Assessment: Device Design and Signal Processing	93.286	456,738	455,902
NIH	1-R01-EB031992-01A1	SMART BIOELECTRONIC IMPLANTS FOR CONTROLLED DELIVERY OF THERAPEUTIC PROTEINS IN VIVO AND ITS APPLICATION IN LONG-TERM TREATMENT OF HEMOPHILIA A	93.286	318,876	-
NIH	1-R01-EB035127-01	An integrated toolkit for real-time analysis of coupled nascent transcription	93.286	6,203	-
NIH	1-R21-EB033019-01	Compact Helium-Free Fast-Switching MRI Magnet for Ratiometric Molecular Imaging and Novel Contrast Exploration	93.286	34,984	-
NIH	2-P41-EB015871-31	MIT Laser Biomedical Research Center	93.286	3,111	5,576
NIH	2-R01-EB004866-13	Innovative Instrumentation for High Magnetic Field DNP NMR	93.286	13,355	-
NIH	2-R01-EB017755-05	Mucin Glycans in the Regulation of Microbial Virulence	93.286	81,614	81,614
NIH	2R56EB017205-08A1	Critical Care R56 Bridge Funding	93.286	412,036	-
NIH	2T32EB019940-06A1	Neurobiological Engineering Training Program	93.286	128,251	-
NIH	3-R01-EB017205-06S1	Critical Care Informatics	93.286	70,175	2,308
NIH	3R01EB022062-04S1 REVISED	Tabletop liquid-helium-free, persistent-mode 1.5-T/70-mm osteoporosis MRI magnet	93.286	96,500	-
NIH	3-R01-EB026344-03S1 REVISED	Multivalent Nano-conjugates for Targeted Penetration of and Delivery to Dense Extracellular Matrices	93.286	2,139	-
NIH	5K99EB032427-02	Development of bio-integrated devices to enhance transplant survival for subcutaneous encapsulated cell therapies	93.286	85,196	-
NIH	5-P41-EB015871-35	MIT Laser Biomedical Research Center	93.286	-2,061	-
NIH	5-R01-EB000244-41	A new high-throughput gastrointestinal tract explant platform for drug formulation discovery and metabolic disease modulation	93.286	16,892	16,892
NIH	5-R01EB004866-16 REVISED	Innovative Instrumentation for High Magnetic Field DNP NMR	93.286	778,159	-

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NIH	5-R01-EB017205-07 REVISED	Critical Care Informatics	93.286	-71,232	-
NIH	5-R01-EB017755-08 REVISED	Mucin Glycans in the Regulation of Microbial Virulence	93.286	3,481	-
NIH	5-R01-EB022062-04 REVISED	Tabletop liquid-helium-free, persistent-mode 1.5-T/70-mm osteoporosis MRI magnet	93.286	-96,825	-
NIH	5-R01-EB024261-07	Expansion Microscopy	93.286	673,502	-
NIH	5-R01-EB024591-04	Synthetic Genetic Controller Circuits to Reprogram Cell Fate	93.286	-1,215	-
NIH	5-R01-EB027717-04 REVISED	Micro-invasive biochemical sampling of brain interstitial fluid for investigating neural pathology	93.286	-6,841	-
NIH	5R01EB030946-04	Synthetic gene sensors and effectors to redirect organoid development	93.286	382,513	-
NIH	5-R01-EB031082-03	Localized immunotherapy using alum-binding therapeutics	93.286	226,354	-
NIH	5-R01-EB031813-03 REVISED	NMR-Based Rapid Fluid Assessment: Device Design and Signal Processing	93.286	313,393	-
NIH	5-R01-EB031957-03	Programmable gene integration and cell engineering with CRISPR-directed integrases	93.286	635,952	-
NIH	5-R01-EB031992-02	SMART BIOELECTRONIC IMPLANTS FOR CONTROLLED DELIVERY OF THERAPEUTIC PROTEINS IN VIVO AND ITS APPLICATION IN LONG-TERM TREATMENT OF HEMOPHILIA A	93.286	138,017	124,242
NIH	5-R01-EB031992-03 REVISED	SMART BIOELECTRONIC IMPLANTS FOR CONTROLLED DELIVERY OF THERAPEUTIC PROTEINS IN VIVO AND ITS APPLICATION IN LONG-TERM TREATMENT OF HEMOPHILIA A	93.286	355,808	-
NIH	5-R21-EB032607-02	Microfluidics-enabled directed affinity reagent engineering for fast, sensitive diagnostics	93.286	251,939	-
NIH	5R21EB033019-02	Compact Helium-Free Fast-Switching MRI Magnet for Ratiometric Molecular Imaging and Novel Contrast Exploration	93.286	180,733	-
NIH	5-T32-EB001680-18	Neuroimaging Training Program	93.286	183,261	-
NIH	5-U01-EB029132-02	Microvascular Permeability, Inflammation, and Lesion Physiology in Endometriosis: A Microphysiological Systems Approach	93.286	524,601	-
NIH	5-U01-EB029132-03	Microvascular Permeability, Inflammation, and Lesion Physiology in Endometriosis: A Microphysiological Systems Approach	93.286	-24,311	-
NIH	5-U01-EB031641-02	Toward functional molecular neuroimaging using vasoactive probes in human subjects	93.286	35,850	-
NIH	5-U01-EB031641-03	Toward functional molecular neuroimaging using vasoactive probes in human subjects	93.286	554,312	-
NIH	1-DP1-NS137188-01	Unraveling the Neural Bases of Body Schema	93.310	1,158,345	-
NIH	1-DP2-GM140938-01	DYNAMIC BOTTOM-UP DISSECTION OF CHROMATIN LOOPING AND GENE REGULATION	93.310	295,538	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	1-DP2-GM146248-01	Late Stage Stereochemical Editing to Transform the Synthesis of Bioactive Molecules	93.310	405,435	-
NIH	1-DP2-GM146254-01	Towards fully reconstituting mammalian transcription in a test tube	93.310	456,788	-
NIH	1-DP2-HL168072-01	Circulatronics: A New Paradigm for Biomedical Implants	93.310	214,862	-
NIH	1-R01-ES031576-01	Epigenetics of the human gut microbiome	93.310	124,206	-
NIH	3-DP2-HL168072-01S1	Circulatronics: A New Paradigm for Biomedical Implants	93.310	607,412	-
NIH	3-R01-ES031576-05S1	Epigenetics of the human gut microbiome	93.310	88,813	-
NIH	5DP5OD026369-05	Dissecting and engineering reversible cell cycle states	93.310	268,984	-
NIH	5-R01-ES031576-05	Epigenetics of the human gut microbiome	93.310	190,960	-
NIH	5-U24-OD026638-04	Knockin marmoset reporters for non-invasive measuring of genome-editing efficiency	93.310	279,454	-
NIH	5-U18-TR004149-02	Informatics and Machine Learning Modules for Research Planning, Scheduling, Simulation, and Optimization in the ASPIRE Autonomous Laboratory	93.350	785,605	-
NIH	1R24OD035444-01	Expanding access to Genomics Methods through Modern Focused Ultrasonication	93.351	128,817	-
NIH	1-S10-OD028706-01A1	Q-band Upgrade to an X-band Pulsed EPR spectrometer	93.351	23,756	-
NIH	5-U01-CA250554-02	Developing high-throughput genetic perturbation strategies for single cells in cancer organoids	93.353	367,839	-
NIH	1-F99-CA264404-01	Toward safe, systemic immunotherapies for treatment of metastatic disease: Developing dendritic cell-biased immunomodulators with precise control over magnitude and timing of immune stimulation	93.393	8,291	-
NIH	1-R21-CA256081-01	Innovative Droplet Lenses for NextGen Light Sensors of Biomarkers of Inflammation	93.393	48,174	-
NIH	4K00CA264312-03	Cellular engineering to improve the efficacy and specificity of targeted immunotherapy	93.393	15,266	-
NIH	5-K00-CA245813-05	Protein Phosphatase PP2A and DNA damage in cell fate decisions of acute myeloid leukemic cells	93.393	51,897	-
NIH	5-K00-CA253687-04	Dissecting the molecular mechanisms of PRC2 dysregulation in cancer	93.393	88,549	-
NIH	5-K00-CA253767-05	Evaluating evolutionary dynamics in pancreatic adenocarcinoma	93.393	97,021	-
NIH	5-R01-CA080024-27	Intra and Extra-Chromosomal Probes for Mutagenesis by Carcinogens	93.393	427,614	-
NIH	5-R21-CA256081-03	Innovative Droplet Lenses for NextGen Light Sensors of Biomarkers of Inflammation	93.393	-9,192	8,610
NIH	1-R01-CA252216-01	Omniview tethered capsule follow cost , non-endoscopic Barretts esophagus screenings in unsedated patients	93.394	-670	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	1-R21-CA259840-01	High-efficiency microfluidic cell fusion for dendritic cell/tumor cell vaccine production	93.394	68,473	70,814
NIH	5-R01-CA218094-06	Deep learning based antibody design using high-throughput affinity testing of synthetic sequences	93.394	519,659	-
NIH	5-R01-CA220468-05	Organic nanoparticles for dual MRI-guided therapeutic selection and ovarian cancer drug delivery	93.394	-15,379	-
NIH	5-R01-CA220468-07	Bottlebrush polymer prodrugs for targeted delivery of combination therapies and in vivo imaging of pharmacological response	93.394	683,063	179,619
NIH	5-R01-CA235740-05	Microengineered Technologies for Quantitative, Multiplexed and Spatially Resolved Measurement of miRNA in Tissue Sections	93.394	295,653	78,546
NIH	5-R01-CA249151-04	Increasing nerve-sparing radical prostatectomy rates using intraoperative nonlinear microscopy	93.394	469,630	249,183
NIH	5-R01-CA252216-03	Omniview tethered capsule follow cost , non-endoscopic Barretts esophagus screenings in unsedated patients	93.394	215,833	11,906
NIH	1-R01-CA226898-01A1	RNA-Binding Proteins as Molecular Integrators that Control the Response of HGSOE to Ant-Cancer Therapies	93.395	411,747	-
NIH	1-R01-CA235375-01A1	Delivery of cytokines for cancer immunotherapy using nanolayer-controlled trafficking of liposomal nanoparticles	93.395	92,324	-
NIH	1-R01-CA247632-01	Enhancing CAR-T cell activity against solid tumors by vaccine boosting through the chimeric receptor	93.395	18,841	18,841
NIH	1-R01-CA271243-01	Intratumoral Cytokine Immunotherapy Studies in Companion Canine Cancer Models	93.395	194,214	194,214
NIH	1-U01-CA265706-01	Immunotherapy via engineered therapeutic programs in tumors using RNA	93.395	232,793	113,101
NIH	5-R01-CA073808-27	Human Ribonuclease as a Cytotoxin	93.395	329,139	-
NIH	5-R01-CA235375-05	Delivery of cytokines for cancer immunotherapy using nanolayer-controlled trafficking of liposomal nanoparticles	93.395	204,866	-
NIH	5-R01-CA247632-05	Enhancing CAR-T cell activity against solid tumors by vaccine boosting through the chimeric receptor	93.395	274,830	-
NIH	5-R01-CA271243-03	Intratumoral Cytokine Immunotherapy Studies in Companion Canine Cancer Models	93.395	231,304	-
NIH	5-U01-CA265706-03	Immunotherapy via engineered therapeutic programs in tumors using RNA	93.395	521,180	-
NIH	1-R01-CA245314-01A1	Impact of fasting on intestinal stem cells and cancer	93.396	50,996	-
NIH	1-R21-CA257980-01A1	A cell-cycle induced genetic recorder for simultaneous recovery of cell divisions and lineage	93.396	51,672	51,672
NIH	1R35CA274464-01	Studying factors controlling cancer progression and immune recognition in mouse models	93.396	448,594	-
NIH	1-UG3-CA275687-01	Single-cell label-free identification of senescence by Raman microscopy and spatial genomics	93.396	197,845	106,788

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	3-U01-CA238720-04S1	Identification of adaptive response mechanisms in breast cancer by information theory and proteomics	93.396	1,192	-
NIH	3-U01-CA238720-05	Identification of adaptive response mechanisms in breast cancer by information theory and proteomics	93.396	309,336	49,439
NIH	5R01CA233477-05	Identifying and targeting evolutionary trajectories in cancer	93.396	274,037	-
NIH	5R01CA245314-05	Impact of fasting on intestinal stem cells and cancer	93.396	324,828	-
NIH	5R01CA248280-05 REVISED	Rapid ex vivo biosensor cultures to assess dependencies in gastroesophageal cancer	93.396	510,282	-
NIH	5-R21-CA257980-02	A cell-cycle induced genetic recorder for simultaneous recovery of cell divisions and lineage	93.396	211,084	-
NIH	5-R33-CA257878-02-REVISED	Super-resolution microscopy for dynamic analysis of focal enhancer amplifications in cancer	93.396	241,586	-
NIH	5-R35-CA242379-03	Understanding the role of metabolism in cancer	93.396	818,468	-
NIH	5-R35-CA242379-04	Understanding the role of metabolism in cancer	93.396	56,444	-
NIH	5R35CA274464-02	Studying factors controlling cancer progression and immune recognition in mouse models	93.396	824,742	-
NIH	5-R37CA273819-02	Understanding the induction of T cell dysfunction in the context of lung cancer.	93.396	518,476	-
NIH	5-U01-CA238720-04	Identification of adaptive response mechanisms in breast cancer by information theory and proteomics	93.396	111,080	111,080
NIH	5-U01-CA253547-02	Identifying therapeutic pathways targeting medulloblastoma-immune cell interactions	93.396	60,644	60,644
NIH	5-U01-CA253547-03	Identifying therapeutic pathways targeting medulloblastoma-immune cell interactions	93.396	378,764	207,652
NIH	5-U01-CA253547-04	Identifying therapeutic pathways targeting medulloblastoma-immune cell interactions	93.396	52,724	-
NIH	5UG3CA275687-02	Single-cell label-free identification of senescence by Raman microscopy and spatial genomics	93.396	260,601	-
NIH	7-R01-CA248280-03	Rapid ex vivo biosensor cultures to assess dependencies in gastroesophageal cancer	93.396	51,829	7,735
NIH	1U54CA261694-02	Mechanical determinants of organ-selective metastatic colonization, dormancy and outgrowth	93.397	973,979	845,232
NIH	1U54CA261694-03	Mechanical determinants of organ-selective metastatic colonization, dormancy and outgrowth	93.397	648,359	330,603
NIH	1U54CA261694-03S1	Mechanical determinants of organ-selective metastatic colonization, dormancy and outgrowth	93.397	84,992	52,076
NIH	1-U54-CA283114-01	Quantitative systems biology of glioblastoma cells and their interactions with the neuronal and immunological milieu	93.397	733,897	193,629
NIH	5-P30-CA014051-51	Cancer Center Support (CCSG) Grant	93.397	126	-

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NIH	5-P30-CA014051-52	Cancer Center Support (CCSG) Grant	93.397	3,397,216	-
NIH	5-P30-CA014051-53	Cancer Center Support (CCSG) Grant	93.397	585,604	-
NIH	5-U54-CA217377-05	Quantitative and functional characterization of therapeutic resistance in cancer (PARENT)	93.397	12,447	-
NIH	1-F99-CA284280-01	Mapping p53 dynamics to cell-fate outcomes in reprogramming and oncogenesis	93.398	38,746	-
NIH	1K99CA287057-01	Dietary Control of the Pro-Metastatic Niche in Colorectal Cancer	93.398	69,824	-
NIH	4-K00CA284262-02	Controlled Antigen Delivery for Prophylactic Cancer Vaccination	93.398	11,038	-
NIH	5-F31-CA232355-04 REVISED	Defining the mechanism of starvation-induced ribophagy	93.398	-97	-
NIH	5-F31-CA254162-04	Understanding Compartmentalized Leucine Metabolism Downstream of mTORC1 Signaling	93.398	46,381	-
NIH	5-F31-CA271787-02	Exploiting metabolic vulnerabilities of breast cancer brain metastases for therapy	93.398	34,366	-
NIH	5-F31-CA275339-02	Interrogation of retroelement-derived proteins for functional gene transfer	93.398	43,845	-
NIH	5-F32-CA247259-03	Molecular probes for allele-specific interdiction of K-Ras G12D signaling	93.398	9,964	-
NIH	5F32CA265042-03	Elucidating the molecular mechanisms of PRMT5i response and resistance in LUAD and PDAC	93.398	79,619	-
NIH	5F99CA274651-02	Engineering Next-Generation Nanoparticles One Layer at a Time	93.398	44,809	-
NIH	1-F31-HL170537-01	Optimization of Right and Left Ventricular Coupling During Mechanical Circulatory Support	93.837	36,358	-
NIH	1R56HL166813-01A1	Modulation of pressure overload in chronic animal and in vitro models to elucidate associated effects on hemodynamics and left ventricular plasticity	93.837	330,991	-
NIH	5-R01-HL140471-04	Investigating the role of H2A.Z dynamics in regulating cardiac lineage commitment	93.837	37,508	-
NIH	5R01HL153857-05	Stretchable Hydrogel Bioinks-Enabled Microfluidic Bioprinting of Functional Small-Diameter Blood Vessels	93.837	503,793	419,523
NIH	5-R01-HL161069-03	Personalized lesion modification optimizes atherosclerosis intervention	93.837	834,567	113,470
NIH	5R01HL167947-02	Atraumatic Non-fibrotic Epicardial Pacing with E-Bioadhesive Devices	93.837	365,724	26,904
NIH	5-F32-HL162428-02	The Role of Macrophages in Pulmonary Regeneration using a Bioengineered Whole Lung Tissue Model	93.838	64,864	-
NIH	5-R01-HL162564-03	Nonviral delivery techniques for in vivo prime editing	93.838	504,294	-
NIH	1-R01-HL158102-01	Single-cell measurement of cyclic stress on sickle blood cells by imaging-microfluidics	93.839	222,988	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5-F30-HL156404-03 REVISED	Molecular determinants of fetal hemoglobin induction by hydroxyurea to treat sickle cell disease	93.839	5,441	-
NIH	5-R01-HL158102-04	Single-cell measurement of cyclic stress on sickle blood cells by imaging-microfluidics	93.839	604,481	191,921
NIH	1-R56-AR082995-01	Collagen Proteostasis in Heath and Disease	93.846	257,624	-
NIH	5-F31-AR079263-03	Chondronoids for Studying Collagen-II Homeostasis and Diseases	93.846	42,958	-
NIH	5R01AR080392-02	Developing an Objective and Quantifiable Measure of Itch Using Artificial Intelligence and Radio Signals	93.846	192,943	65,607
NIH	5-F32-DK126233-03	Engineered nanoparticles to rescue complement dysfunction and vascular disease during diabetes	93.847	17,804	-
NIH	5-R01-DK115558-05	Macromolecular interactions controlling the ALA synthases, keystone enzymes that initiate heme biosynthesis	93.847	-18,072	-
NIH	1-R01-NS115576-01 REVISED	Wireless Magnetomechanical Neuromodulation of Targeted Circuits	93.853	249,905	-
NIH	1-R01-NS120592-01	Nanosensors for sensitive brain-wide neurochemical imaging	93.853	491,126	-
NIH	1R01NS121073-01A1	Analysis of integrated brain functions using hemogenetic imaging	93.853	137,580	137,580
NIH	1-R01-NS123120-02	Non-Human Primate Model for Developing Closed-Loop Anesthesia Delivery Systems	93.853	421,358	-
NIH	1-R21-NS120088-01A1	A high-throughput open-well system for engineering neurovascular units	93.853	137,963	-
NIH	1-R21-NS123499-01A1	Pathophysiology and treatment of fragile X and related disorders	93.853	105,491	-
NIH	1-R21-NS125396-01A1	Developing a strategy for 4-color in vivo two-photon imaging	93.853	168,247	-
NIH	1-RF1-NS129032-01	Single-cell multi-region transcriptional and epigenomic dissection of VCID	93.853	1,662,709	20,584
NIH	1-UM1NS132173-01	Comprehensive regional projection map of Marmoset with single axon and cell type resolution	93.853	964,530	44,311
NIH	3-R01-NS113245-04S1	Functional dissection of thalamocortical interactions through genetically-defined TRN subnetworks	93.853	138,513	-
NIH	3-R01-NS113245-05S1	Functional dissection of thalamocortical interactions through genetically-defined TRN subnetworks	93.853	955,244	449,295
NIH	4K00NS118740-03	Investigating the neural mechanisms underlying music event prediction	93.853	67,037	-
NIH	5-F31-NS113464-02	The Role of Neuronal DNA Double Strand Breaks in Neuroinflammation	93.853	-1,744	-
NIH	5-F31-NS127458-02	Profiling Axonal Specializations in Dopamine Neurons and Their Alterations in Parkinson's Disease Models	93.853	58,351	-
NIH	5-F32-NS128067-02	Single Cell Dissection of Cerebrovascular Dysfunction in Parkinson's Disease and Amyotrophic Lateral Sclerosis	93.853	74,310	-
NIH	5-K00-NS113459-05	The development of subnetworks of the TRN	93.853	79,241	-

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NIH	5-R00-NS119749-04	A new animal model to examine nervous system function, development, and regeneration	93.853	248,000	-
NIH	5R01NS040296-23	Characterization of the Drosophila Synaptotagmin Family	93.853	374,806	-
NIH	5-R01-NS077986-11	Pre-motor Neural Circuits for Exploratory Movement	93.853	64,085	-
NIH	5R01NS089076-10	Epigenetic pathology and therapy in Huntington's disease	93.853	374,223	-
NIH	5-R01NS102730-05	Mechanisms underlying DNA double strand break response in Alzheimer's disease and frontal temporal dementia	93.853	-2	-
NIH	5-R01-NS104892-05	Neuromodulatory control of collective circuit dynamics in C. elegans	93.853	12,591	-
NIH	5-R01-NS106031-05	A dendritic mechanism for cholinergic neuromodulation of cortical function	93.853	-7,604	-
NIH	5-R01-NS109947-06	Cortical Signature and Modulation of Pain	93.853	77,111	59,288
NIH	5-R01-NS113079-05	Dendritic Computation and Representation of Head Direction in Retrosplenial Cortex	93.853	296,023	-
NIH	5-R01-NS117588-04	Molecular and Cellular Mechanisms Mediating Structural and Functional Active Zone Maturation	93.853	585,891	-
NIH	5R01NS119519-04	Sensorimotor learning through adjustments of cortical dynamics	93.853	405,209	-
NIH	5-R01-NS121073-03	Analysis of integrated brain functions using hemogenetic imaging	93.853	600,532	-
NIH	5-R01-NS121078-02	Human 3D Neuro-Vascular Interaction and Meningeal Lymphatic Models with Application to Alzheimer's Disease	93.853	432,141	432,141
NIH	5-R01-NS121078-04	Human 3D Neuro-Vascular Interaction and Meningeal Lymphatic Models with Application to Alzheimer's Disease	93.853	95,086	-
NIH	5-R01-NS130361-02	Astrocyte-neuron circuits underlying cortical mechanisms of learned behavior	93.853	509,479	-
NIH	5R01NS131457-02	Brain-wide representations of behavior during aversive internal states in C. elegans	93.853	549,075	-
NIH	5-R35-NS127327-03	Molecular Mechanisms Underlying Cell Type-Specific Vulnerability in Huntington's Disease	93.853	454,409	-
NIH	5-R37NS051874-27	The Cdk5/35 Kinase	93.853	-19,977	-
NIH	5-T32-NS105587-04	Computationally Enabled Integrative Neuroscience	93.853	220,904	-
NIH	5-U01-NS121471-02	Computational neuroscience of language processing in the human brain	93.853	-45,844	-
NIH	5-U01-NS121471-03	Computational neuroscience of language processing in the human brain	93.853	522,077	316,758
NIH	5U01NS121471-04	Computational neuroscience of language processing in the human brain	93.853	3,133	-
NIH	5UH3NS115064-03	Year 2: Construction of an integrated immune - vascular brain - chip as a platform for the study, drug screening, and treatments of Alzheimer's disease	93.853	299,724	299,255

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NIH	5UH3NS115064-04	Year 2: Construction of an integrated immune - vascular brain - chip as a platform for the study, drug screening, and treatments of Alzheimer's disease	93.853	1,067,966	352,490
NIH	1-DP2-AI158126-01	Repertoire-scale T cell antigen identification via peptide-MHC lentivirus display	93.855	345,452	-
NIH	1-R01-AI168166-01A1	Defining the Interplay Between Viral Adaptation and Host Proteostasis	93.855	152,955	141,890
NIH	1R01AI175489-01	"Extended dosing" immunization to enhance humoral immunity to next-generation vaccines	93.855	140,636	-
NIH	1-R21-AI167289-01	Identifying mucin O-glycans in the regulation of Staphylococcus aureus pathogenesis	93.855	88,131	88,131
NIH	1-R21-AI181878-01	Systematic identification of novel anti-phage defense mechanisms in the E. coli pangenome	93.855	48,619	-
NIH	1-R61-AI161297-01	Immune engineering of optimized sequential immunization strategies for HIV vaccines	93.855	556,835	556,835
NIH	1-R61-AI161805-01	Combinatorial and computational design of bnAb mRNA vaccines for HIV	93.855	-8,971	-
NIH	2-R01-AI055258-16	Synthetic Ligands for Directing Immune Responses	93.855	80,011	-
NIH	2-R01-AI126592-07A1	Chemical Probes of Mycobacteria	93.855	80,186	-
NIH	3-R01-AI152209-02S1	Heritable immunization of the white-footed mouse reservoir of Lyme disease	93.855	49,998	-
NIH	4-R33-AI161297-04	Immune engineering of optimized sequential immunization strategies for HIV vaccines	93.855	68,829	-
NIH	5F32AI161868-03	Engineering chimeric gene therapy vectors with enhanced packaging capacity - PDF: V. Madigan	93.855	67,013	-
NIH	5-F32-AI164829-03	Controlling Vaccine Kinetics with Small Molecule Drugs	93.855	73,761	-
NIH	5F32AI172121-02	Investigating genes of unknown function required for Rickettsia parkeri infection	93.855	60,433	-
NIH	5-R01-AI016892-43	AAA+ proteolytic machines	93.855	214,999	-
NIH	5-R01-AI055258-20	Synthetic Ligands for Directing Immune Responses	93.855	436,061	-
NIH	5-R01-AI126592-09	Chemical Probes of Mycobacteria	93.855	804,201	-
NIH	5-R01-AI141543-04	Target-specific antimalarial compound identification using phenotypic assays	93.855	165,899	-
NIH	5-R01-AI152209-03	Heritable immunization of the white-footed mouse reservoir of Lyme disease	93.855	1,414,895	666,730
NIH	5R01AI155489-04	Mechanisms of SFG Rickettsia-Host Interactions	93.855	620,096	-
NIH	5-R01-AI162307-03	Investigation of Synthetic DNA-based Viral Particles for Spatially Controlled Antigen Presentation	93.855	204,041	-

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NIH	5-R01-AI162307-04	Investigation of Synthetic DNA-based Viral Particles for Spatially Controlled Antigen Presentation	93.855	205,880	-
NIH	5-R01-AI168166-03	Defining the Interplay Between Viral Adaptation and Host Proteostasis	93.855	739,621	-
NIH	5-R01-AI175489-02	"Extended dosing" immunization to enhance humoral immunity to next-generation vaccines	93.855	397,837	-
NIH	5-R01-AI178713-02	Unlocking serology's secrets: harnessing novel immune biomarkers to predict Lyme disease progression and recovery	93.855	569,538	-
NIH	5R21AI167289-02	Identifying mucin O-glycans in the regulation of Staphylococcus aureus pathogenesis	93.855	80,575	-
NIH	5-R21-AI171663-02	Biochemical Strategy to Avert Microbial Drug Resistance	93.855	244,307	-
NIH	5-R21-AI179432-02	Mechanism of nuclear pore passage of the HIV-1 capsid	93.855	182,821	-
NIH	5-R61-AI161297-03	Immune engineering of optimized sequential immunization strategies for HIV vaccines	93.855	288,427	-
NIH	5-R61-AI161805-02	Combinatorial and computational design of bnAb mRNA vaccines for HIV	93.855	249	265
NIH	5-R61-AI161805-03	Combinatorial and computational design of bnAb mRNA vaccines for HIV	93.855	396,713	-
NIH	5-U19-AI131135-05	3D Models of Engineered Human iPS Cells to Investigate Neurotropic Virus Infections	93.855	8,530	-
NIH	5-U19-AI131135-05 REVISED	3D Models of Engineered Human iPS Cells to Investigate Neurotropic Virus Infections	93.855	157,806	-
NIH	1-DP2-GM140922-01	An Evolutionary Framework For Identifying Determinants Of Colonization In Human Microbiomes	93.859	762,935	-
NIH	1-DP2-GM149549-01	New insights into the molecular regulation of mechanotransduction	93.859	421,166	-
NIH	1-DP2-GM154015-01	Protecting microbes so they can protect us	93.859	197,120	-
NIH	1F32GM147937-01A1	Selective C(sp3)–H Functionalization Enabled by Metal-Organic Framework Catalysis	93.859	9,180	-
NIH	1F32GM153091-01	Developing Selective P-catalysts for Dehydrative Transformations	93.859	27,464	-
NIH	1F32GM153117-01 REVISED	Stereochemical Editing of Quaternary Stereocenters Enabled by Enantioselective Recombination of C–C Bonds	93.859	31,216	-
NIH	1F32GM154448-01	Investigating mechanisms of coordinating actin structure across multiple levels of order	93.859	5,196	-
NIH	1K99GM149815-01	Dissecting enhancer-promoter looping and gene induction dynamics in differentiation	93.859	104,232	-
NIH	1-K99-GM152834-01	Regulation of oxidative stress signaling by tyrosine phosphorylation of antioxidant enzymes	93.859	93,368	-
NIH	1-R01-GM137138-01	A high-resolution 1.3-GHz LTS/HTS NMR magnet (1.3G)	93.859	188,830	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	1-R01-GM147794-01	A Benchtop Cryogen-Free 23.5-T/25-mm-RT-Bore Magnet for 1-GHz microcoil NMR Spectroscopy	93.859	54,024	-
NIH	1R01GM150901-01	Measuring single-cell water content non invasively and with high precision	93.859	165,708	-
NIH	1-R21-GM141616-01	Accelerated discovery of synthetic polymers for ribonucleoprotein delivery through the integration of active learning, machine learning, and polymer science	93.859	22,902	-
NIH	1-R35-GM148287-01	Revealing transmembrane conformational signaling through single-molecule FRET	93.859	272,879	-
NIH	2-R01-GM126376-05	Metallobiochemistry of innate immunity and bacterial physiology	93.859	171,420	171,420
NIH	2-R01-GM132997-35	High Field DNP and EPR in Biological Systems	93.859	392,234	-
NIH	2-R35-GM133580-06	Probing and Perturbing Transcriptional Condensates with Multiscale Modeling and Deep Learning	93.859	67,044	-
NIH	3-K99-GM140212-02S1	Evolutionary adaptation and spatial organization of signaling in the Mitotic Exit Network	93.859	95,888	-
NIH	3-P41-GM132079-03S1	MIT Harvard Center for Magnetic Resonance-Year 1	93.859	29,841	-
NIH	3-R01-GM114547-10S1	Synthetic Methods based on Biphilic Phosphorus Catalysts	93.859	212,088	-
NIH	3-R01-GM135413-04S1	Dissecting the functional organization of the serotonergic system in C. elegans	93.859	-3,024	-
NIH	3-R01-GM145787-02S1	Chemical Approaches to Studying the Mechanisms and Biophysical Properties of Complex Metallocofactors	93.859	43,582	-
NIH	3-R35-GM136354-05S1	Leveraging Next-Generation Directed Evolution Platforms and Chemical Control of Proteostasis to Deliver Robust Biotechnologies and Illuminate Roles of Chaperone Networks in Protein Evolution	93.859	108,067	-
NIH	3-R35-GM141963-03S1	Development of New Strategies for Chemical Synthesis and Study of Complex Natural Products	93.859	58,297	-
NIH	4R00GM126277-03	Non-cleaved Electro-Mechanical Expansion (NEME) technology for super-resolution imaging of biological samples with conventional optical microscopes	93.859	112,519	-
NIH	5 R01 GM131627-05	Structure and function of the monotopic phosphoglycosyl transferase superfamily: Initiators of biosynthesis of complex bacterial glycoconjugates	93.859	416,793	257,822
NIH	5F31GM146448-02	Biochemical and Biophysical Studies of Human Ribonucleotide Reductase	93.859	42,703	-
NIH	5F31GM148042-02	Anti-CRISPR-mediated Acylation and Bioreversible Esterification for Precision Genome Editing	93.859	5,372	-
NIH	5-F31-GM148069-02	Enzymatic Mechanism of Polysaccharide Length Control by GltT2	93.859	43,496	-
NIH	5F32GM136023-03 REVISED	Design and synthesis of nucleoside-based small molecules to inhibit phosphoglycosyl transferases	93.859	4,705	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5-F32-GM139304-03	The Structures of hVDAC-1 and hVDAC-2 by High Frequency Magic Angle Spinning Nuclear Magnetic Resonance Spectroscopy	93.859	4,636	-
NIH	5F32GM140548-03	Mechanistic dissection of dynamics of transcriptional regulation by chromatin looping	93.859	74,445	-
NIH	5F32GM142152-03	Investigating mechanisms regulating cytoskeletal dynamics and alignment during epithelial tissue folding	93.859	50,048	-
NIH	5-F32-GM143840-03	Structural Determination and Design of Drug Interactions with Ribonucleotide Reductase	93.859	71,032	-
NIH	5-F32-GM143865-03	Development of Nontrigonal Phosphorus Catalysts for Redox-Mediated Cross-Coupling Transformations	93.859	9,751	-
NIH	5-F32-GM143898-03	Determinants of elongation rate differences between B. subtilis and E. coli RNA polymerases	93.859	64,533	-
NIH	5-F32-GM145072-03	Structure function investigations of radical transfer and disulfide exchange in a class Ia ribonucleotide reductase	93.859	75,391	-
NIH	5-F32-GM146391-03 REVISED	Enantioselective Thioetherification of Olefins Guided by CuH Catalysis	93.859	64,530	-
NIH	5F32GM147996-03	Development of Novel Biphilic Phosphorus Catalysts via Computational Modeling and Multidimensional Analysis	93.859	64,274	-
NIH	5F32GM150211-02	Peptide-Conjugated Palladium Oxidative Addition Complexes for Site-Selective Arylation Chemistry	93.859	55,405	-
NIH	5-K99-GM145910-02	Investigation and application of hydrocarbon-degrading enzymes using cryo-electron microscopy and directed evolution	93.859	15,240	-
NIH	5-K99-GM148718-02	Cytotoxicity and function of incomplete proteins	93.859	141,099	-
NIH	5-P41-GM132079-03	MIT Harvard Center for Magnetic Resonance-Year 1	93.859	9,080	-
NIH	5R00GM126277-05	Non-cleaved Electro-Mechanical Expansion (NEME) technology for super-resolution imaging of biological samples with conventional optical microscopes	93.859	10,662	-
NIH	5-R00-GM130896-04	Molecular Mechanisms regulating chromatin looping in time and space	93.859	82,748	-
NIH	5-R00-GM140265-04	Understanding mechanisms of transcriptional regulation by chromatin adaptor proteins	93.859	197,020	-
NIH	5-R01-GM024663-46	Genetic Analysis of Nematode Egg Laying and Co-regulated Behavioral Systems	93.859	373,714	-
NIH	5-R01-GM031030-38 REVISED	Molecular Genetics of Rhizobium Nodulation Plasmids	93.859	133	-
NIH	5R01GM039334-35	Deciphering the Principles of Membrane-Associated Glycan Assembly for Glycoconjugate Biosynthesis	93.859	401,133	138,164
NIH	5-R01-GM044783-29	Protein Chemistry	93.859	-12,263	-
NIH	5-R01-GM085319-15	Function of Sequence-specific RNA Binding Proteins	93.859	300,529	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5R01GM088204-14	Structures and Dynamics of Proton- and Cation-Dependent Channels and Transporters	93.859	366,940	-
NIH	5-R01-GM114190-09	Polymer models of mitotic and interphase chromosomes	93.859	243,106	-
NIH	5-R01-GM118695-06	Bioinorganic Explorations of Host-defense Proteins	93.859	156,700	-
NIH	5-R01-GM126376-07	Metallobiochemistry of innate immunity and bacterial physiology	93.859	210,279	-
NIH	5-R01-GM129007-04	Mapping, modeling and manipulating the interactions of protein domains that bind short linear motifs	93.859	53,563	-
NIH	5R01GM130936-04	Reagents for Chemical Oligophosphorylation, Synthesis of Oligophosphate-Organic Molecule Conjugates, and Biochemical Studies	93.859	253,326	-
NIH	5-R01-GM132997-34	High Field DNP and EPR in Biological Systems	93.859	6,724	-
NIH	5-R01-GM135413-04	Dissecting the functional organization of the serotonergic system in <i>C. elegans</i>	93.859	222,347	-
NIH	5-R01-GM136882-05	Modeling the Organometallic Chemistry of Radical S-adenosylmethionine Enzymes	93.859	220,439	-
NIH	5-R01-GM137138-02	A high-resolution 1.3-GHz LTS/HTS NMR magnet (1.3G)	93.859	105,008	-
NIH	5-R01-GM137138-04	A high-resolution 1.3-GHz LTS/HTS NMR magnet (1.3G)	93.859	198,040	-
NIH	5-R01-GM139055-03	Diamond Rotors	93.859	223,867	-
NIH	5-R01-GM140108-03 REVISED	Mechanobiology of Vimentin Intermediate Filaments in 3D Collective Cell Migration	93.859	23,238	-
NIH	5-R01-GM140108-04	Mechanobiology of Vimentin Intermediate Filaments in 3D Collective Cell Migration	93.859	272,788	178,450
NIH	5R01GM141025-03	Microbial Control of Host Intercellular Communication	93.859	389,613	-
NIH	5-R01-GM141275-02S1	Selective Catalytic Strategies for Carbohydrate Synthesis	93.859	670,686	-
NIH	5R01GM144542-03	Tools to determine and analyze the structures of molecular machines in motion	93.859	518,564	-
NIH	5R01GM145787-03	Chemical Approaches to Studying the Mechanisms and Biophysical Properties of Complex Metallocofactors	93.859	336,068	-
NIH	5-R01-GM147794-02	A Benchtop Cryogen-Free 23.5-T/25-mm-RT-Bore Magnet for 1-GHz microcoil NMR Spectroscopy	93.859	215,217	-
NIH	5-R01-GM147960-03	Mechanisms of replication origin licensing studied by real-time single-molecule fluorescence	93.859	509,144	379,072
NIH	5-R21-GM141616-02	Accelerated discovery of synthetic polymers for ribonucleoprotein delivery through the integration of active learning, machine learning, and polymer science	93.859	144,907	-
NIH	5-R35 -GM142634-04	Mechanisms regulating ribosome assembly and function in stem cells and vertebrate development.	93.859	417,704	-
NIH	5-R35-GM122483-08	Metal-Catalyzed Methods for Organic Synthesis	93.859	1,081,371	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5R35GM122488-09	Studies on cell polarity, chemotropism, and cell cycle control	93.859	838,698	-
NIH	5R35GM124732-07	Evolution and Regulation of Bacterial Proteome Composition	93.859	561,353	-
NIH	5-R35-GM126982-05 REVISED	Metalloenzyme structure, function and assembly	93.859	2,773	-
NIH	5-R35GM126982-07	Metalloenzyme structure, function and assembly	93.859	356,186	-
NIH	5-R35-GM133580-05	From epigenome to genome and back: disentangling the relationship between epigenetic modifications and chromatin organization	93.859	271,276	-
NIH	5-R35-GM136354-5	Leveraging Next-Generation Directed Evolution Platforms and Chemical Control of Proteostasis to Deliver Robust Biotechnologies and Illuminate Roles of Chaperone Networks in Protein Evolution	93.859	568,710	-
NIH	5R35GM141517-04	Structure and function of ClpXP	93.859	586,273	-
NIH	5-R35-GM141834-03	Structure-Function of Nucleo-Cytoplasmic Communication	93.859	393,362	-
NIH	5R35GM141861-03	Manifold representations and active learning for 21 st century biology	93.859	236,009	-
NIH	5-R35-GM141963-04	Development of New Strategies for Chemical Synthesis and Study of Complex Natural Products	93.859	697,821	-
NIH	5-R35-GM143033-03	Multiscale tools and approaches for understanding and engineering cell-fate transitions	93.859	450,344	-
NIH	5R35GM144115-03 REVISED	Tissue morphogenesis: From signals to forces	93.859	598,290	-
NIH	5-R35GM148220-02S1	Protein Chemistry	93.859	764,329	-
NIH	5-R35-GM148343-02	Mechanisms and regulation of replication, the cell cycle, gene expression, and horizontal gene transfer in prokaryotes, focusing on Bacillus subtilis	93.859	950,731	-
NIH	5-R35GM149227-02	Computational and Experimental Investigation and Design of Protein Interaction Specificity	93.859	290,973	-
NIH	5-RM1-GM135102-05	A universal pipeline for functional characterization of the human microbiota at a massive scale	93.859	1,707,906	1,306,829
NIH	5-T32 GM136540-02 REVISED	Pre-doctoral Training in Fundamental Approaches to Biochemistry and Cell and Molecular Biology	93.859	1,448,159	-
NIH	5-T32-GM007287-45	Pre-Doctoral Training in Biological Sciences	93.859	-117	-
NIH	5-T32-GM087237-14 REVISED	Graduate Training in Computational and Systems Biology	93.859	11,922	-
NIH	5-T32-GM087237-15	Graduate Training in Computational and Systems Biology	93.859	472,511	-
NIH	1-R01-HD105947-01	Genetically Programmed Pancreatic Organoids with Self-Adaptive Multi-Lineage Population Control	93.865	421,523	188,771
NIH	5-DP1-HD091947-05	How Does the Functional Organization of the Human Brain Arise in Development?	93.865	72,722	-
NIH	5-F32-HD103363-03 REVISED	Neural foundations of learning, reasoning, and surprise in human infants [PDF: S. Liu]	93.865	-559	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5-F32-HD108930-03	Metabolic Regulation of Pancreatic Epithelium Development	93.865	71,802	-
NIH	5-F32-HD110967-02	Neurocognitive Foundations of Morphological Processing in Children with Dyslexia	93.865	61,003	-
NIH	5-R01-HD097135-05	Agonist-Antagonist Myoneural Interface for Functional Limb Restoration after Transtibial Amputation	93.865	412,391	-
NIH	5R01HD103847-03	How do Cortical regions selective for visual scenes develop in human infants?	93.865	573,610	-
NIH	5R01HD105947-03	Genetically Programmed Pancreatic Organoids with Self-Adaptive Multi-Lineage Population Control	93.865	346,420	-
NIH	5R01HD110335-03	Parsing the Interplay Between Biophysical and Biochemical Microenvironment Cues On Endometriosis Lesion Phenotypes Using Microphysiological Systems	93.865	400,637	-
NIH	5-R01-HD114214-02	Integrating tissue engineering and microfluidics to model the spatial niches of the human endometrium in vitro with guidance from in vivo multiomics data	93.865	187,694	-
NIH	1-R01-AG062335-01	Elucidating the Molecular Mechanisms of Neuropsychiatric Symptoms in Alzheimer's Disease	93.866	-23,748	-
NIH	1-R01-AG070831-01	Mechanisms of pathology and neuronal hyperactivity in a memory circuit in Alzheimer's disease	93.866	426,920	-
NIH	1-R01-AG074003-01	Single-cell epigenomic and transcriptional dissection of sex-specific differences in Alzheimer's Disease	93.866	658,368	-
NIH	1-R01-AG087374-01	Lipid imaging expansion microscopy to study Alzheimer's disease	93.866	34,319	-
NIH	1-R56-AG069192-01	The infectious etiology of Alzheimer's disease revealed at nanoscale precision	93.866	-5,026	-
NIH	1-R56-AG081376-01	Investigating cell-type specific convergence of APOE and ABCA7 lipid dysregulation in Alzheimer's disease	93.866	715,196	-
NIH	1-RF1-AG062377-01 REVISED	Dissection of endosomal trafficking mechanisms in Alzheimers Disease	93.866	-4,593	-
NIH	1-RF1-AG075901-01A1	The effects of Alzheimer's disease risk genes on metabolism and signaling across cell types	93.866	1,483,536	519,777
NIH	1-U01-AG077227-01	Mapping the vulnerable locus coeruleus pathways in aging and AD	93.866	490,166	328,264
NIH	2-R56-AG049897-06A1	Health care hotspotting: inside the Camden Coalition's superutilizer program	93.866	347,610	-
NIH	3-RF1-AG059661-01S1	Molecular structures of tau aggregates studied by solid-state NMR	93.866	-13,814	-
NIH	4K00AG073558-03	Plasticity of cortical circuits in health, aging, and Alzheimer's disease	93.866	6,195	-
NIH	5 P30 AG064190-02	MIT Roybal Center for Translational Research to Improve Healthcare for the Aging	93.866	19,517	19,517

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	5 P30 AG064190-03	MIT Roybal Center for Translational Research to Improve Healthcare for the Aging	93.866	216,494	37,627
NIH	5K01AG083734-02	Engineering Immuno-Glial-Neurovascular 3D-Brain-Chips with a Perfusable BBB for Accelerating Alzheimer's Disease Drug Discovery and Translation	93.866	95,353	-
NIH	5-K99-AG073466-02	Impact of DNA double-strand breaks on 3D genome organization and genome stability in Alzheimer's disease	93.866	35,195	-
NIH	5K99AG076987-02	Understanding the role of the stromal cell niche in intestinal stem cell aging	93.866	139,160	-
NIH	5R01AG058504-04	Solid State NMR Studies of Amyloid Proteins	93.866	766,191	-
NIH	5-R01-AG059661-03	Structure and dynamics of tau in Alzheimer's disease	93.866	458,556	-
NIH	5-R01-AG062335-05	Elucidating the Molecular Mechanisms of Neuropsychiatric Symptoms in Alzheimer's Disease	93.866	107,581	36,361
NIH	5-R01-AG067151-04	Single-Cell Transcriptional and Epigenomic Dissection to Identify Therapeutic Targets for ALS and FTD	93.866	45,053	45,053
NIH	5-R01-AG067151-04 REVISED	Single-Cell Transcriptional and Epigenomic Dissection to Identify Therapeutic Targets for ALS and FTD	93.866	560,790	211,633
NIH	5-R01-AG069232-03	Manipulating Neural Oscillations with Non-Invasive Sensory Stimulation for Alzheimer's Disease Intervention	93.866	620,420	-
NIH	5R01AG070135-05	Sleep-dependent modulation of cerebrospinal fluid flow in aging	93.866	377,112	-
NIH	5-R01-AG070831-03	Mechanisms of pathology and neuronal hyperactivity in a memory circuit in Alzheimer's disease	93.866	321,595	-
NIH	5-R01-AG074003-04	Single-cell epigenomic and transcriptional dissection of sex-specific differences in Alzheimer's Disease	93.866	700,479	-
NIH	5-R01-AG074932-02	Discovery and manipulation of transcription factors to restore long term stem cell repopulation in aged bone-marrow	93.866	501,993	-
NIH	5R01AG081017-02 REVISED	Single-cell multi-region dissection of AD-pathogen interactions for HSV-1 and CMV	93.866	1,023,707	245,466
NIH	5R01AG082871-02	Disparities in the Quality of Nursing Home Care	93.866	311,385	-
NIH	5-R37-AG032449-15	Determinants of Elderly Health: The Role of Place-Based Factors	93.866	552,248	280,796
NIH	5-U01-AG066757-03	Development of PU.1 Inhibitory Modulators as Novel Therapeutics for Alzheimer's Disease	93.866	141,070	105,956
NIH	5-U01-AG066757-04	Development of PU.1 Inhibitory Modulators as Novel Therapeutics for Alzheimer's Disease	93.866	1,586,613	907,406
NIH	5-U01-AG066757-05	Development of PU.1 Inhibitory Modulators as Novel Therapeutics for Alzheimer's Disease	93.866	74,452	-
NIH	5-U01-AG077227-02	Mapping the vulnerable locus coeruleus pathways in aging and AD	93.866	2,474,313	422,212

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NIH	1-R01-EY033843-01	Computational Models of the Ventral Visual Pathway in Humans: What, How, and Why?	93.867	327,478	-
NIH	1-R01-EY034080-01A1	Novel ultrahigh speed swept source OCT angiography methods in diabetic retinopathy	93.867	152,164	-
NIH	1-R01-EY034419-01	Characterizing excitatory synapse in vivo structural dynamics	93.867	52,293	-
NIH	1-R21-EY034283-01	A Novel Wireless and Subcellular Device for Neuromodulation	93.867	158,421	-
NIH	2R01EY011289-34	Novel Optical Diagnostics with Optical Coherence Tomography	93.867	118,459	118,453
NIH	2-R01-EY025437-06A1	in vivo imaging of circuit remodeling in mouse visual cortex	93.867	11,582	-
NIH	2R01EY029666-06	Neural Mechanisms for Feature-Based Attention	93.867	210,013	-
NIH	5-F31-EY033649-02 REVISED	Alignment of visual features in binocular cortical circuits through experience dependent synaptic plasticity	93.867	41,994	-
NIH	5-F31-EY033996-03 REVISED	Elucidating the Role of Dorsal Lateral Geniculate Nucleus Burst-Mode Firing in Retinal Inactivation Induced Recovery from Monocular Deprivation	93.867	46,699	-
NIH	5-F32-EY032756-03 REVISED	Visual cortex circuits mediating arousal and visual discrimination	93.867	72,464	-
NIH	5K99EY032603-02	Towards a computationally precise characterization of the human ventral visual pathway	93.867	59,849	-
NIH	5-P30-EY002621-44	Core-Vision Processes	93.867	261	-
NIH	5-P30-EY002621-45	Core-Vision Processes	93.867	17,052	-
NIH	5-R01-EY011289-38	Novel Optical Diagnostics with Optical Coherence Tomography	93.867	273,572	-
NIH	5-R01-EY020517-11	Project Prakash: Development of Object Perception After Late Sight Onset	93.867	466,723	-
NIH	5R01EY023037-11	Behavioral Consequences and cellular substrates of plasticity in visual cortex	93.867	743,769	-
NIH	5-R01-EY029666-05	Neural Mechanisms for Feature-Based Attention	93.867	-10,116	-
NIH	5-R01-EY033430-02	Interhemispheric coordination and transfer of visual information	93.867	427,526	-
NIH	5-R01-EY033638-03	CRCNS: Resolving human face perception with novel MEG source localization methods	93.867	230,287	-
NIH	5R01EY034419-02	Characterizing excitatory synapse in vivo structural dynamics	93.867	531,344	-
NIH	5-R21-EY032369-02	Multimodal probes for multiscale calcium imaging	93.867	-3,180	-
NIH	5-R21-EY034283-02	A Novel Wireless and Subcellular Device for Neuromodulation	93.867	28,902	-
NIH	1U19AI167899-01	Maternal Omics to Maximize Immunity	93.RD	7,483	2,340
NIH	5U19AI167899-02	Maternal Omics to Maximize Immunity	93.RD	1,882,291	1,638,974
NIH	5U19AI167899-03	Maternal Omics to Maximize Immunity	93.RD	37,433	-
NIH	75N97020C00013	COVID-19: A Federated COVID-Rich ICU Database	93.RD	69,859	18,957
Total for NIH				128,138,799	19,221,796

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TOTAL for Department of Health & Human Services				152,878,276	32,076,078

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DEPARTMENT OF HOMELAND SECURITY					
DHS	22CWDARI00046-01-00	Novel Low Cost, Robust and High Sensitivity Polycrystalline Radiation Detectors	97.077	487,344	124,341
DHS	AGMT EFF 9/6/22	A Framework for Prioritizing Equitable Access to Retail Supply Chain Nodes after Disasters	97.RD	9,157	-
Total for Department of Homeland Security				496,501	124,341
TOTAL for Department of Homeland Security				496,501	124,341

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DEPARTMENT OF TRANSPORTATION					
DOT	692M151940009	FAA Joint University Program for Air Transportation	20.108	2,875	-
DOT	692M152140015	Pilot Response to System Malfunctions	20.108	28,624	-
DOT	692M152440001	MIT Joint University Program - Safety Considerations for Hydrogen Aircraft	20.108	47,559	-
DOT	13-C-AJFE-046	Center of Excellence for Alternative Jet Fuels and Environment	20.109	133,986	-
DOT	13-C-AJFE-048	Center of Excellence for Alternative Jet Fuels and Environment	20.109	445,171	98,651
DOT	13-C-AJFE-MIT	Center of Excellence for Alternative Jet Fuels and Environment	20.109	1,374,889	149,774
DOT	13-C-AJFE-MIT-01	Center of Excellence for Alternative Jet Fuels and Environment	20.109	283,625	1,780
DOT	13-C-AJFE-MIT-050	Center of Excellence for Alternative Jet Fuels and Environment	20.109	256,832	30,021
DOT	13-C-AJFE-MIT-052	Center of Excellence for Alternative Jet Fuels and Environment	20.109	173,387	-
DOT	13-C-AJFE-MIT-075	Center of Excellence for Alternative Jet Fuels and Environment	20.109	27,106	-
DOT	13-C-AJFE-MIT-086	Center of Excellence for Alternative Jet Fuels and Environment	20.109	608,538	-
DOT	13-C-AJFE-MIT-091	Center of Excellence for Alternative Jet Fuels and Environment	20.109	226,672	-
DOT	13-C-AJFE-MIT-095	Center of Excellence for Alternative Jet Fuels and Environment	20.109	343,058	-
DOT	13-C-AJFE-MIT-103	Center of Excellence for Alternative Jet Fuels and Environment	20.109	312,272	-
Total for Department of Transportation				4,264,594	280,226
TOTAL for Department of Transportation				4,264,594	280,226

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
MISCELLANEOUS FEDERAL GOVT					
Department of Interior					
DOI	D18AP00039	Adaptive-focus topological features for machine-learning-driven discovery of 2D coordination polymers	12.910	-15,080	-
DOI	D18AP00065	Adversarial Machine Learning through the Cryptographic Lens	12.910	-3,817	-
DOI	D19AP00037	Dislocation-free heteroepitaxy or IR devices by remote epitaxy	12.910	501,812	-
DOI	D22AP0015000001-0277	Mechanical Neuromorphic Metamaterials for Multifunctional Nanosystems	12.910	254,244	-
DOI	R22AC00183-00	Multi- market pilot of low-cost, time-variant electrodialysis reversal desalination systems with optimized brine management	15.506	98,337	52,848
DOI	G22AP00198-00	Induced seismicity and aseismic slip on rough faults	15.807	13,508	-
DOI	G22AP00307-00	Interseismic deformation in the Northern San Francisco Bay and Sacramento-San Joaquin Delta Regions from survey GNSS observations: Collaborative Research with MIT and UC Riverside	15.807	19,780	-
DOI	G24AP00211-00	Single-station array detection and location of tectonic tremor	15.807	11,690	-
Total for Department of Interior				880,474	52,848
Department of Education					
ED	P022A230052	The Social Determinants of Arsenic Exposure in Rural India	84.022A	20,046	-
Total for Department of Education				20,046	-
Department of Agriculture					
USDA	2021-67021-33999	Nanosensors for Measuring and Decoding Immune Signaling Waveforms In Planta	10.310	70,382	-
USDA	2023-67021-38831	Upgrading Dairy Industry Waste through Microbial Engineering	10.310	202,005	-
Total for Department of Agriculture				272,387	-
Other Agencies					
Misc.	LG-250130-OLS-21	Community Tracking Indicators for Open and Inclusive Scholarship	45.312	95,840	-
Misc.	84000501-0	Leveraging comprehensive organic oxidation experiments for the development of improved atmospheric chemical mechanisms	66.509	159,598	-
Misc.	95332422T0007	Generating Evidence to Improve Productivity Growth and Transportation Logistics of MSMEs in Indonesia	85.002	298,392	162,167
Misc.	95332423T0001	Economy-Wide Impacts of Environmental Changes and Responses	85.002	217,440	67,019
Total for Other Agencies				771,270	229,186

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
TOTAL for Miscellaneous Federal Govt				1,944,177	282,034

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION					
NASA	80NSSC18K0553	Solar System Planetary Geodesy Research	43.001	3,396	-
NASA	80NSSC18K0682	The Design, Analysis and Research with Retro-reflector Arrays	43.001	72,456	-
NASA	80NSSC18K1057	ASPECT: Active Shoreline Processes and Evolution of Coasts on Titan	43.001	2,579	2,586
NASA	80NSSC18K1677	Auroral Emissions Radio Observer (AERO)	43.001	44,597	510
NASA	80NSSC19K0078	Ionospheric Response to Super Storms and Its Role in Geospace Coupling	43.001	21,467	-
NASA	80NSSC19K0205	Designing applications to foster the health of terrestrial and wetland ecosystems in the coastal zone of West Africa	43.001	93,016	32,520
NASA	80NSSC19K0617	Vector Interferometry Space Technology using AERO (VISTA)	43.001	-18,137	-
NASA	80NSSC19K0834	Can gravity wave generation in the mesospheric polar vortex drive traveling ionospheric disturbances?	43.001	9,371	9,371
NASA	80NSSC19K1277	Swath Mapping Lidar Science and Requirements	43.001	77,320	-
NASA	80NSSC19K1287	NICER (Continuation) - Detector Team Support and Legacy Science	43.001	679,304	25,219
NASA	80NSSC20K0234	Guiding the search for signals of biological and prebiotic processes by the NASA Mars 2020 Rover mission	43.001	66,063	-
NASA	80NSSC20K0238	Enabling Magnetic Studies of Returned Samples with the Mars 2020 Rover	43.001	101,013	-
NASA	80NSSC20K0382	The Impact of Titan's Impacts	43.001	121,443	96,479
NASA	80NSSC20K0400	Demonstration of Pointing Stability to Enable Astrophysics with Rotating Synthetic Aperture Telescopes	43.001	36,187	-
NASA	80NSSC20K0401	Toward Fast, Low-Noise, Radiation-Tolerant X-ray Imaging Arrays for Lynx: Raising Technology Readiness Further	43.001	5,371	-
NASA	80NSSC20K0484	Delta T: Dynamics and Detectability of Deltas on Titan	43.001	17,235	7,992
NASA	80NSSC20K0499	Confronting Lyman-alpha radiation pressure in galaxy formation simulations	43.001	40,859	-
NASA	80NSSC20K0713	Apophis T-9 Years: Knowledge Opportunities for the Science of Planetary Defense Workshop	43.001	13,380	-
NASA	80NSSC20K0733	XARM observations of black hole accretion flows	43.001	113,920	-
NASA	80NSSC20K0737	MIT Participation in Calibration and Ground Software Development for XRISM	43.001	244,877	-
NASA	80NSSC20K0907	Development of sub-arcsecond x-ray telescope optics	43.001	591,407	61,444
NASA	80NSSC20K1012	Continuing Development of Bragg Reflector Optics and Gratings for Polarimetry	43.001	38,295	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NASA	80NSSC20K1092	Bubble-based Ocean-worlds Organics Sample Trap (BOOST)	43.001	70,976	113,042
NASA	80NSSC20K1157	Assessing the Impact of Glacial Melt on the Coupled Climate	43.001	87,168	-
NASA	80NSSC20K1366	Determining the Structure of a Primitive Achondrite Parent Body Using Paleomagnetism	43.001	8,986	-
NASA	80NSSC20K1417	Material Mixing on the Moon from Impacts	43.001	24,815	-
NASA	80NSSC20K1785	Model-Data Exploration of Hemispherical Asymmetries in the Magnetosphere/Ionosphere System	43.001	252,772	144,856
NASA	80NSSC20K1846	Lunar Orbiter Laser Altimeter Investigation and Associated Science	43.001	199,640	-
NASA	80NSSC20M0071	RESOURCE: Resource Exploration and Science of OUR Cosmic Environment	43.001	169,896	-
NASA	80NSSC21K0154	Investigating the Intensity of the Early Lunar Dynamo	43.001	40,457	-
NASA	80NSSC21K0550	Gravitational-Wave Instrumentation Subject Matter Expert for the NASA LISA Study Office	43.001	5,445	-
NASA	80NSSC21K0557	Response of the seasonal ice zone in the Southern Ocean to changes in the wind	43.001	88,405	-
NASA	80NSSC21K0849	T-Rex: Time-resolved Radiation Environment of planet forming disks with XMM-Newton (XMM 86504)	43.001	6,787	-
NASA	80NSSC21K0874	The interplay between slow slip, fault coupling, and crustal earthquakes	43.001	105,124	8,903
NASA	80NSSC21K1304	MIT-GISS collaborations in Oceans and Climate	43.001	362,803	-
NASA	80NSSC21K1310	The Influence of Traveling Ionospheric Disturbances on Ionospheric Irregularities	43.001	133,336	-
NASA	80NSSC21K1369	Advanced Global Atmospheric Gases Experiment (AGAGE) Collaborative Project: MIT Component	43.001	1,159,774	425,580
NASA	80NSSC21K1619	Inferring sub-ice-shelf melt rates using ICESat-2 altimetry and simple physical models	43.001	77,825	-
NASA	80NSSC21K1775	2021 Antarctic Solar Eclipse: Ionospheric response in the southern and northern hemispheres	43.001	30,605	-
NASA	80NSSC21K1802	Tidal Evolution of the Satellite Systems of the Outer Planets	43.001	234,339	51,314
NASA	80NSSC21K1842	Evolution of the AGN Feedback Cycle in Galaxy Clusters	43.001	12,232	-
NASA	80NSSC21K1903	THE POWER OF SPACE: SIMULTANEOUS X-RAY AND UV MONITORING OF ACCRETING LOW-MASS STARS (NICER 3144)	43.001	2,974	-
NASA	80NSSC21M0012	MIT Media Lab: Supporting NASA's SciAct Portfolio	43.001	383,768	-
NASA	80NSSC22K0001	ACCRETION AND EJECTION IN NGC 1365 WITH NUSTAR AND CHANDRA/HETG (NuSTAR 7263)	43.001	41,305	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NASA	80NSSC22K0090	TRACKING THE LONG-TERM EVOLUTION OF QUASI-PERIODIC ERUPTIONS FROM A NEWLY DISCOVERED EROSITA AGN USING XRT AND UVOT (SWIFT 1720147)	43.001	13,570	-
NASA	80NSSC22K0105	Testing whether impact plasmas and a core dynamo magnetized the Moon and Mercury	43.001	97,115	24,800
NASA	80NSSC22K0119	A Systematic Study Of Tess Orbital Phase Curves (TESS 4096)	43.001	14,595	-
NASA	80NSSC22K0153	Using the ECCO-Darwin data-assimilative global-ocean biogeochemistry model to quantify the drivers and uncertainty of ocean carbon sources and sinks	43.001	91,117	-
NASA	80NSSC22K0171	GOLD-ICON Guest Investigator: Understanding the day-to-day variability of plasma bubbles utilizing GOLD-ICON data - drivers from above and below	43.001	127,749	-
NASA	80NSSC22K0459	Teasing out the hidden complexities of slow slip from the geodetic record in Cascadia	43.001	179,790	-
NASA	80NSSC22K0570	MAPPING GAS FLOWS IN THE AGN MRK 817 WITH XMM-NEWTON AND HST (XMM 88234)	43.001	44,384	-
NASA	80NSSC22K0788	Curved Detectors for Future X-ray Astrophysics Missions	43.001	45,273	-
NASA	80NSSC22K0836	Spatio-temporal Paleoclimate Constraints from Coupled Lake Systems on Mars	43.001	155,129	-
NASA	80NSSC22K0848	Removing Stellar Activity from Radial Velocity Observations using Machine Learning (20-EPRV)	43.001	88,313	-
NASA	80NSSC22K0959	RELATIVISTIC REFLECTION AND REVERBERATION MAPPING IN A BLACK HOLE BINARY (NICER 4118)	43.001	17,373	-
NASA	80NSSC22K0962	TOO Monitoring of a Future Stellar Tidal Disruption Event (NICER 4078)	43.001	7	-
NASA	80NSSC22K1013	Midlatitude topside ionospheric variations associated with plasmaspheric erosion and refilling	43.001	81,164	-
NASA	80NSSC22K1067	Disintegrating Rocky Bodies Transiting White Dwarfs: The Key To Understanding Exoplanet Compositions (TESS Cycle 3 G03207)	43.001	15,795	-
NASA	80NSSC22K1074	Imprint of stratospheric QBO on the thermosphere and ionosphere	43.001	330,239	136,999
NASA	80NSSC22K1120	Bridging the gap between X-ray and UV/optical disk reverberation mapping in Active Galactic Nuclei	43.001	220,000	-
NASA	80NSSC22K1136	Supporting Drought Management in Angola using Integrated Modeling of the Environment, Vulnerability, Decision Making and Technology (EVDI)	43.001	247,171	22,174
NASA	80NSSC22K1262	Disintegrating Rocky Bodies Transiting White Dwarfs: The Key To Understanding Exoplanet Compositions (TESS Cycle 4 G04200)	43.001	35,363	27,009
NASA	80NSSC22K1307	Relativistic Reflection and Reverberation Mapping in a Black Hole Binary (NICER 5118)	43.001	24,335	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NASA	80NSSC22K1350	Time-Resolved Spectroscopic and Polarimetric Studies of 4U 1626-67 with NICER And IXPE (NICER 5161)	43.001	-29	-
NASA	80NSSC22K1351	TOO Monitoring of a Future Stellar Tidal Disruption Event (NICER 5070)	43.001	8,249	-
NASA	80NSSC22K1408	Completing Kepler's Census: Using Deep Neural Networks to Measure the Frequency of Earth Analogs	43.001	103,673	-
NASA	80NSSC22K1412	High-order Wavefront Control for High-contrast Imaging on Space-rated Processors	43.001	348,737	61,635
NASA	80NSSC22K1596	Towards precision measurements of accreting black holes: revolutionizing X-ray reverberation mapping	43.001	47,049	-
NASA	80NSSC22K1673	Applying the EVDT Integrated Modeling Framework for Environmental Justice Applications	43.001	196,981	-
NASA	80NSSC22K1697	EIS cloud development and showcase on generalized regression to ECCO state estimates.	43.001	18,984	-
NASA	80NSSC22K1738	Supporting Dedalus, an open-source CFD framework with modern spectral methods	43.001	268,969	22,162
NASA	80NSSC22K1808	ZWCL 1856.8: CAPTURING A DOUBLE RADIO RELIC IN THE NUSTAR FIELD OF VIEW (NuSTAR 8232)	43.001	59,859	-
NASA	80NSSC22K1904	Technology maturation for a high-sensitivity and high-resolving power x-ray spectrometer	43.001	1,141,078	473,924
NASA	80NSSC23K0034	Testbed for scientific CMOS Study and Development	43.001	34,202	-
NASA	80NSSC23K0067	Studying Minute Timescale Variability Of White Dwarfs In The Cycle 5 Tess Full Frame Images (TESS GO 5104)	43.001	45,342	-
NASA	80NSSC23K0211	Extremely Low-noise, High Frame-rate X-ray Image Sensors for Strategic Astrophysics Missions	43.001	469,250	225,483
NASA	80NSSC23K0218	Effect of methane clathrate on crater size and implications for the age of Titan's surface	43.001	84,367	37,776
NASA	80NSSC23K0295	CAPTURING QUASI-PERIODIC OUTFLOWS FROM A FUTURE AGN OUTBURST USING XRT AND UVOT MONITORING (SWIFT 1821191)	43.001	10,067	-
NASA	80NSSC23K0350	Adaptive High-order Wavefront Control Algorithms for High-contrast Imaging on the Decadal Survey Testbed	43.001	349,987	72,260
NASA	80NSSC23K0355	Oceanic Pathways Of Earth Energy Imbalance	43.001	50,972	-
NASA	80NSSC23K0359	Capturing Quasi-Periodic Outflows from a Future AGN Outburst (NICER 5091)	43.001	15,838	-
NASA	80NSSC23K0389	Assessing Accuracy of Greenhouse Gas Emission Inventories in a Multi-Municipality Metropolitan Area	43.001	86,388	-
NASA	80NSSC23K0644	The Rocket Experiment Demonstration of a Soft X-ray Polarimeter	43.001	762,697	-
NASA	80NSSC23K0671	Space Weather Impact on Planetary Emissions (SWIPE)	43.001	81,603	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NASA	80NSSC23K0675	Disintegrating Rocky Bodies Transiting White Dwarfs: The Key To Understanding Exoplanet Compositions (TESS Cycle 1 G011294)	43.001	23,227	-
NASA	80NSSC23K0742	Analysis of Multi-GNSS Signal and Noise	43.001	139,654	-
NASA	80NSSC23K0768	Disintegrating Rocky Bodies Transiting White Dwarfs: The Key To Understanding Exoplanet Compositions (TESS 5084)	43.001	70,305	44,055
NASA	80NSSC23K0770	Sharp-crack modeling of asteroid fragmentation: alternative scaling laws of fragment strength as a function of size	43.001	109,105	-
NASA	80NSSC23K0907	ADROIT (Adaptive Deformable mirrors to enable deployable diffractive optics)	43.001	112,682	-
NASA	80NSSC23K0919	TRACKING THE LONG-TERM EVOLUTION OF QUASI-PERIODIC ERUPTIONS FROM THE NUCLEUS OF A PASSIVE GALAXY USING XRT MONITORING (SWIFT 1821153)	43.001	31,296	-
NASA	80NSSC23K0925	Identifying fingerprints of changing anthropogenic sources and natural variability on observed regional and seasonal trends in tropospheric ozone and precursors	43.001	114,750	-
NASA	80NSSC23K1083	Detecting Millisecond X-ray Pulsations and Confirming the Ultracompact Nature of the Low Mass X-ray Binary 4U 1850-087 (NICER 6117)	43.001	20,273	-
NASA	80NSSC23K1086	1ES 1927+654: CONSTRAINING THE POST-OUTBURST STATE OF AN EXTREME NUCLEAR TRANSIENT (NICER 6223)	43.001	42,934	-
NASA	80NSSC23K1242	Gravitational-Wave Instrumentation Subject Matter Expert contributions for the NASA LISA Study Office	43.001	132,241	-
NASA	80NSSC23K1267	Magnetic Investigation of an Asteroid from Submillimeter to Kilometer Scales	43.001	56,885	-
NASA	80NSSC23K1361	Cyanobacterial aromatic carotenoids: biosynthesis, chemical structures, isotopic ordering, taphonomy and detection in the geological record	43.001	9,566	-
NASA	80NSSC23K1363	Testing the impact plasma hypothesis for magnetization on the Moon and asteroids	43.001	31,420	-
NASA	80NSSC23K1452	Continued NICER+SWIFT Monitoring of Repeating Stellar Tidal Disruption Events: Building a Legacy Dataset (NICER 6108)	43.001	16,666	-
NASA	80NSSC23K1535	Implementing the Yurok Natural Resources Portal as a decision support system to inform tribal forest management	43.001	30,309	-
NASA	80NSSC23K1589	Impact Assessment for Applying Satellite Earth Observation Data to SDG15 Monitoring in Ghana	43.001	46,508	-
NASA	80NSSC23K1658	A SEARCH FOR X-RAY COUNTERPARTS FROM REPEATING FAST RADIO BURST SOURCES IN THE LOCAL UNIVERSE (NICER 6240)	43.001	9,374	-
NASA	80NSSC24K0197	The Pandora SmallSat: Multiwavelength Characterization of Exoplanets and their Host Stars	43.001	52,778	-
NASA	80NSSC24K0223	AGN & TDE Variability in the ULTRASAT Era	43.001	3,006	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NASA	80NSSC24K0228	Galactic Evolution Via The Asteroseismology Of The Northern Continuous Viewing Zone (TESS GO 6100)	43.001	6,768	-
NASA	80NSSC24K0230	Interstellar dust chemistry with XRISM	43.001	10,103	-
NASA	80NSSC24K0366	Development of diffraction-limited Wolter x-ray telescope optics	43.001	10,734	-
NASA	80NSSC24K0424	Effects of Methane Clathrate on the Depth of Titan's Craters	43.001	15,279	-
NASA	80NSSC24K0425	Climate change on Titan due to Saturn's billion-year obliquity evolution	43.001	77,350	-
NASA	80NSSC24K0432	Mapping the evolving gas flows in the AGN Mrk 817 with XMM-Newton and HST (XMM 92410)	43.001	38,304	-
NASA	80NSSC24K0678	Continuation of MIT's Participation in Calibration and Ground Software Development for XRISM	43.001	148,769	-
NASA	80NSSC20M0080	Modeling and Analysis of Safety in New Human-Automation Teaming	43.002	211,025	-
NASA	80NSSC21M0108	Combined Experimental and First Principles Tool Development of Interface Analysis in An All Solid-State Battery	43.002	254,321	-
NASA	80NSSC22K0193	Investigation of Higher-order Adaptive Methods for Sonic Boom Propagation	43.002	78,712	-
NASA	80NSSC22K0794	Service Provider Dynamics in Federated Architectures for Advanced Air Mobility Systems	43.002	25,072	-
NASA	80NSSC23M0220	Competition, Cooperation, and Coordination: Managing the Collective Behavior of Advanced Air Mobility Systems	43.002	58,515	-
NASA	80NSSC20M0048	Massachusetts Space Grant Proposed Opportunities in NASA STEM 2020-2024, Year 1 Augmentation	43.008	1,063,030	46,690
NASA	80NSSC18K1579	CLICK mission	43.012	938,780	175,252
NASA	80NSSC19K1154	Calcium-based Battery Development for Space Technology Applications	43.012	34,352	-
NASA	80NSSC19K1173	Controlling and imaging electronic fluids for radiation-resistant high-speed logic in graphene (Student: Sarah Muschinske)	43.012	9,027	-
NASA	80NSSC20K1178	Development and Optimization of a Bimodal Ion-Chemical Thruster System Using Novel Ionic Liquid Monopropellants	43.012	71,583	-
NASA	80NSSC20K1180	Bayesian Uncertainty Propagation Using Multi-Fidelity Subsystem Models in Design of Precision-Pointed Space Telescopes	43.012	75,819	-
NASA	80NSSC20K1201	A diamond nanophotonics platform for quantum communication with multiplexed qubit repeaters	43.012	57,532	-
NASA	80NSSC21K0219	Advanced Space Technology Roadmapping Architecture (ASTRA)	43.012	121,689	-
NASA	80NSSC21K0221	Development of New Technologies for Modified Collins Cycle Expanders	43.012	161,340	5,571

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NASA	80NSSC21K0345	REDUCED GRAVITY EXPERIMENTS TO ADVANCE CFD BOILING MODELS FOR CRYOGENIC FLUID MANAGEMENT SYSTEMS	43.012	-129,504	-
NASA	80NSSC21K0541	A Suborbital Evaluation of Paraffin and Beeswax Formation in Microgravity for Low-Earth-Orbit Propulsion Applications	43.012	57,994	-
NASA	80NSSC21K1254	Applying a Model-Based Systems Engineering Approach to Simulation and Testing for Ground and Space Applications	43.012	4,260	-
NASA	80NSSC21K1277	Reconfigurable Single Photon Detecting System for Small Satellites	43.012	84,282	-
NASA	80NSSC21K1301	Computationally-Efficient Large Divert Guidance	43.012	92,696	-
NASA	80NSSC21K1303	Distributed Collaboration and Coordination for Planetary Exploration Mission Support	43.012	6,137	-
NASA	80NSSC22K1222	Architectural Design Framework for Providing Passive Behavioral Health Countermeasures	43.012	77,652	-
NASA	80NSSC22M0298	STEP-1: Staged Electrospray Pathfinder 1 CubeSat	43.012	179,792	-
NASA	80NSSC23K0051	Adaptive Space Governance and Decision-Support using Source-Sink Evolutionary Environmental Models	43.012	49,234	-
NASA	80NSSC23K0585	Great Observatory for Long Wavelengths (GO-LoW)	43.012	76,220	-
NASA	80NSSC23K0586	Bend-Forming of Large Electrostatically Actuated Space Structures	43.012	159,545	-
NASA	80NSSC23K0964	Silent, Solid-State Propulsion for Advanced Air Mobility Vehicles	43.012	310,111	-
NASA	80NSSC23K1174	Pixels in Electrospray Thrusters for Ultra-Reliable, Flat-Panel Electric Propulsion	43.012	64,185	-
NASA	80NSSC23K1193	Nanoengineered High-temperature Ceramics for High Strength and Toughness Multifunctional Composites for Space Applications	43.012	68,078	-
NASA	80NSSC23K1194	Developing a Verification and Validation Optimization Methodology with Uncertainty Quantification	43.012	76,023	-
NASA	80NSSC23K1195	Modeling the In-Space Manufacturing of Large, Lightweight Structures with Robotic Deformation Processing	43.012	65,569	-
NASA	80NSSC23K1207	Design, Control, and Human-Robot Coordination of Space Suits Integrated with Supernumerary Robotic Limbs	43.012	71,358	-
NASA	80NSSC23K1222	Physics-Informed Machine Learning for the Optimization of Hybrid Rocket Motors	43.012	99,522	-
NASA	80NSSC23K1498	Machine-learning building-block-flow model for large-eddy simulation of high-speed flows with strong heat transfer and wall roughness	43.012	62,060	-
NASA	80NSSC24K0277	Radiation hardness study of superconducting detectors and electronics	43.012	34,421	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NASA	80NSSC24K0820	Exploring the Impact of Surface Properties on Cryogenic Boiling and Quenching at Reduced Gravity through High-Fidelity Measurements	43.012	7,050	-
NASA	80GSFC20C0078	Advancing VGOS from a Budding Concept to a High-Accuracy Global Geodetic Observatory	43.RD	2,723,802	-
NASA	80GSFC22CA057	Small Satellite Operations Support for Wallops Flight Facility	43.RD	9,442	-
NASA	80GSFC23CA045	Survey and Time-domain Astrophysical Research Explorer (STAR-X) Mission	43.RD	50,278	-
NASA	80MSFC17C0012	Imaging X-ray Polarimetry Explorer - Main Project (Phase B - D)	43.RD	220,360	-
NASA	NNG14FC03C	Transiting Exoplanet Survey Satellite	43.RD	5,802,644	1,095,524
Total for National Aeronautics and Space Administration				26,731,890	3,451,130
TOTAL for National Aeronautics and Space Administration				26,731,890	3,451,130

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
US AGENCY FOR INTERNATIONAL DEVELOPMENT					
USAID	7200AA21CA00009	Strengthening Development Research and Inclusive Innovation in Latin America through the Center for Innovation and Technology Network	98.012	2,805,347	1,558,687
USAID	AID-OAA-A-16-00058	Ultra-Low Energy Drip Irrigation for MENA Countries	98.RD	1,033,689	323,716
Total for US Agency for International Development				3,839,036	1,882,403
TOTAL for US Agency for International Development				3,839,036	1,882,403

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION					
NSF	CBET-1653758	CAREER: Tuning passive prosthetic leg dynamics to create low-cost, robust devices that can replicate physiological gait in multiple activities of daily living	47.041	-3,384	-
NSF	CBET-1751925	CAREER: Holistic Assessment of the Potential of Byproduct-Derived Alkali-Activated Materials	47.041	71,373	-
NSF	CBET-1846426	CAREER: Revealing spin-state-dependent reactivity in open-shell single atom catalysts with systematically-improvable computational tools	47.041	75,254	-
NSF	CBET-1847541	CAREER: Hybrid Biorobotic Matrices to Simulate Diaphragmatic and Myocardial Biomechanics	47.041	11,765	-
NSF	CBET-1936696	Single Molecule Studies of Topologically Complex Polymers	47.041	32,254	-
NSF	CBET-2001231	Flexible Optoelectronic Systems for Chronic Bi-Directional Neural Interfacing	47.041	-16,065	-
NSF	CBET-2019245	Collaborative Research: Scale-free continuum percolation of bubbles as a universal mechanism of the boiling crisis	47.041	1,312	-
NSF	CBET-2027870	Collaborative Research: Unraveling the Spatiotemporal Dynamics of Inertio-Elastic Turbulence using Measurements and Data-Infused Simulations	47.041	11,135	-
NSF	CBET-2034742	Collaborative Research: Crossing the percolation threshold for selective gas transport using interconnected crystals of metal-organic frameworks in polymer-based hybrid membranes	47.041	104,431	-
NSF	CBET-2034902	Collaborative Research: Creep-enabled 3D solid-state lithium metal batteries	47.041	10,734	-
NSF	CBET-2045868	CAREER: Elucidation and Development of Electrolyte and Interface Mechanisms Governing Calcium Redox in Nonaqueous Environments	47.041	173,656	-
NSF	CBET-2124194	Developing Nanosensor Chemical Cytometry (NCC) to Support the Development of Cellular Therapeutics	47.041	39,868	-
NSF	CBET-2139277	Collaborative proposal: Advancing turbidity currents: moving sources, polydispersity and aggregation	47.041	84,592	-
NSF	CBET-2140775	Career: Information-Theoretic Approach to Turbulence: Causality, Modeling & Control	47.041	93,721	-
NSF	CBET-2143625	CAREER: Efficient Uncertainty Quantification in Turbulent Combustion Simulations: Theory, Algorithms, and Computations	47.041	213,077	-
NSF	CBET-2146422	CAREER: Systematic Design of Polymers to Reveal the Anomalous Role of Fluorine on Membrane-based Separations	47.041	138,264	-
NSF	CBET-2149281	Thermal Transport Cafe - A Virtual Gathering for the Thermal Transport Community	47.041	20,467	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	CBET-2226053	Modeling Coriolis and stability effects on wake dynamics for wind farm flow control	47.041	132,846	-
NSF	CBET-2243914	GOALI: Data-driven design of recycling tolerant aluminum alloys incorporating future material flows	47.041	84,004	69,254
NSF	CBET-2317254	Building-Block-Flow Model for Large-Eddy Simulation	47.041	148,831	-
NSF	CBET-2339338	CAREER: Deep-tissue metabolic and structural mapping via multiplex label-free nonlinear microscopy	47.041	31,162	-
NSF	CBET-2426169	NT24 (Nanotech 2024)	47.041	8,918	-
NSF	CMMI-1729304	DMREF:GOALI: Discovery and Design of Additives for Novel Polymer Morphology and Performance	47.041	1,913	-
NSF	CMMI-1752172	CAREER: Directed Epitaxial Assembly of Structural Biopolymers in Hierarchical Mesosstructures for Enhanced Mechanical Behavior, Mass Transport and Heat Transfer.	47.041	139,647	-
NSF	CMMI-1854833	Hybrid Intelligence for Design: Bridging Human and Machine Intelligences for Collaborative Design of Engineering Systems and Infrastructure	47.041	29,388	-
NSF	CMMI-1922206	DMREF: Collaborative Research: Fundamentals of short-range order-assisted alloy design: Thermodynamics, kinetics, mechanics	47.041	217,578	-
NSF	CMMI-1942016	Career: Shear Shock Propagation and Damage in Soft Materials	47.041	139,838	-
NSF	CMMI-2021625	NSF CMMI: Dual Faceted Linearization and Its Application to Nonlinear MPC	47.041	108,235	-
NSF	CMMI-2039771	D-ISN: TRACK 1: Supply Chain Analysis to Thwart Illegal Logging: Machine Learning-based Monitoring and Strategic Network Inspection	47.041	149,833	-
NSF	CMMI-2045417	CAREER: Integrated Design and Digital Fabrication using Topology Optimization and Material Extrusion 3D Printing	47.041	158,999	-
NSF	CMMI-2114343	Collaborative Research: Interfacial Photopolymerization (IPP): A Method For High-Resolution Digital Printing of Thermoplastics	47.041	135,096	-
NSF	CMMI-2142460	COVID-19: CAREER: Performance through Curvature-Mechanics of 3D Self-Architected Materials	47.041	143,992	-
NSF	CMMI-2154151	Hydrodynamic quantum analogs	47.041	159,976	-
NSF	CMMI-2231254	Collaborative Research: Leveraging Crowd-AI Teams for scalable novelty ratings of heterogeneous design representations	47.041	29,251	-
NSF	CMMI-2236708	CAREER: Achieving insect-like flight capabilities in a novel soft-actuated micro-aerial-robot	47.041	133,322	-
NSF	CMMI-2238715	CAREER: Mechanics of biological motor control: assembly, maturation, and repair at the neuromuscular interface	47.041	164,775	-
NSF	CMMI-2239824	Career: Advancing Equity in Selection Problems Through Bias-Aware Optimization	47.041	40,458	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	CMMI-2240309	EAGER: Quantum Manufacturing: Bottom-up Molecular Qubit Arrays using DNA Origami	47.041	88,663	-
NSF	ECCS-1824360	Tag-of-Everything: Secured Wireless Powering and Communication Using THz Spectrum for Ultra-Small, Package-Less ID Chips	47.041	15,778	-
NSF	ECCS-2000743	Collaborative Research: Kinetic Inductance in Superconducting Nanowire Microwave Devices	47.041	523	-
NSF	ECCS-2012258	Development of Room Temperature Terahertz Quantum Cascade Lasers	47.041	40,160	42,718
NSF	ECCS-2023468	Collaborative Research: Scaling Distributed AI Systems based on Universal Optical I/O	47.041	1,692	-
NSF	ECCS-2023987	Collaborative Research: Tellurene mid-infrared integrated photonics	47.041	-2,057	-
NSF	ECCS-2026344	Conformable systems for spatiotemporal decoding of facial strains	47.041	52,207	-
NSF	ECCS-2028199	PIC: CMOS-compatible, monolithic, and high-performance optical isolators on silicon	47.041	-17,292	-
NSF	ECCS-2028824	EAGER SARE: Physical-Layer Security of THz Communication Using Orbital Angular Momentum and Rapid Frequency Hopping	47.041	43,173	-
NSF	ECCS-2029670	SWIFT: LARGE: Adaptive Radio Frequency Interference Cancellation for Radio Science Observatories	47.041	325,723	-
NSF	ECCS-2044688	CAREER: Conformable Piezoelectrics for Soft Tissue Imaging	47.041	191,436	-
NSF	ECCS-2128555	2128555 - Collaborative Research: SWIFT:Facilitating Spectrum Access by Noise Guessing	47.041	50,664	-
NSF	ECCS-2132929	ASCENT: PROWESS: Phase-change Reconfigurable Optical WavEfront Synthesis System	47.041	247,122	204,539
NSF	ECCS-2152528	ECCS-EPSRC: Collaborative: Acoustically induced Ferromagnetic Resonance (FMR) assisted Energy Efficient Spin Torque memory devices	47.041	130,251	-
NSF	ECCS-2232830	Development of a Ferrimagnetic Terahertz Oscillator	47.041	158,658	-
NSF	ECCS-2238575	CAREER: Optical-frequency electronics for measuring the fields of light guided on chips	47.041	145,817	-
NSF	ECCS-2239525	CAREER: Integrated Visible-Light Optical-Phased-Array-Based Devices, Systems, and Applications	47.041	47,118	-
NSF	ECCS-2309838	A Spin Torque Oscillator Maser Device Enabled by Spin-Microwave Photon Coupling	47.041	2,220	-
NSF	ECCS-2316675	CAREER: DATA-DRIVEN DYNAMIC ADAPTIVE OPTIMIZATION FOR NEXT GENERATION	47.041	189,508	-
NSF	EFMA-1830901	EFRI C3 SoRo: Soft, Strong, and Safe Configurable Robots for Diverse Manipulation Tasks	47.041	56,984	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	EFMA-1935291	EFRI C3 SoRo: Functional-Domain Soft Robots (FunDo SoRo) Precisely Controlled by Quantitative Dynamic Models and Data	47.041	364,984	234,003
NSF	IIP-1735671	Type II: MIT Innovation Corps Site	47.041	122,241	-
NSF	IIP-1832931	I-Corps New England Regional Innovation Node (NERIN)	47.041	725,478	37,687
NSF	IIP-2028103	I-Corps Teams: ARISE: Autonomous Distributed Systems	47.041	659	-
NSF	IIP-2044424	Partnerships for Innovation-Research Partnerships (PFI-TT): The TACO Sparse Tensor Algebra Compiler	47.041	-3	-
NSF	IIP-2044711	PFI-TT: Bridging the Information Gap in Supply Chain using Internet of Things (IoT)	47.041	5,306	-
NSF	IIP-2122581	PFI-RP: A high-performance, low-cost chip-scale platform for medical imaging	47.041	127,434	-
NSF	IIP-2133778	I-Corps Teams: Digital twin technology via synthetic data generation	47.041	8,037	-
NSF	IIP-2137197	I-Corps: Application of deep generative models for simulating biological systems	47.041	1,222	-
NSF	SMA-2022413	Innovation Dynamics of Emerging Co-Creation Practices: What are the impacts on Inclusion?	47.041	61,388	-
NSF	TI-2044711	PFI-TT: Bridging the Information Gap in Supply Chain using Internet of Things (IoT)	47.041	70,860	-
NSF	TI-2141118	Programmable lithography mask for accelerated innovation and advanced manufacturing of microchips	47.041	18,862	-
NSF	AST-1716251	Establishing the properties of the first stars and supernovae and the origins of the heaviest elements with stellar archaeology	47.049	24	-
NSF	AST-1751096	CAREER: Tracing the Birth and Growth of Galaxy Clusters with the South Pole Telescope 3rd Generation Survey	47.049	48,892	-
NSF	AST-1814259	Simulating galaxy formation with cosmic dust	47.049	16,957	-
NSF	AST-1828470	MRI [WINTER]: Development of a Wide-Field Infrared Camera for Robotic Surveys of the Dynamic Astronomical Sky	47.049	-3,212	-
NSF	AST-1836002	LLAMAS: A Facility Integral Field Spectrograph for the Magellan Telescopes	47.049	381,847	-
NSF	AST-1909097	Exploring the LEGO Legacy Survey: Relating Galaxies observed by ALMA to the Milky Way	47.049	-132	-
NSF	AST-1909307	Collaborative Research: EDGES-3: Validating and Refining Global 21cm Measurements of Cosmic Dawn	47.049	-53,878	-
NSF	AST-1909831	Collaborative Research: The impacts of massive BH formation and evolution pathways on GW sources	47.049	11,919	-
NSF	AST-1950348	REU/RET Site: Radio Science in Astronomy, Geodesy, and Geospace Science at MIT Haystack Observatory	47.049	119,968	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	AST-2007355	Collaborative Research: Discriminating Between Galactic Feedback Models with Next Generation Observations	47.049	102,698	-
NSF	AST-2008031	Collaborative Research: Cosmology with CHIME	47.049	33,549	-
NSF	AST-2107681	Imaging the Dynamic Atmospheres of Evolved Stars at Radio Wavelengths	47.049	83,373	-
NSF	AST-2107724	Collaborative Research: Constraining Fuzzy Dark Matter with Cosmological Simulations	47.049	207,816	-
NSF	AST-2205126	The GOTHAM Project: A New Window on Our Aromatic Universe	47.049	180,471	-
NSF	AST-2206731	Collaborative Research: WoU-MMA: Opening the Infrared Window into Multi-Messenger Astrophysics	47.049	173,893	-
NSF	AST-2306391	Origin and Evolution of the Polar Planets	47.049	38,493	-
NSF	AST-2307436	Reconstructing the Formation of the Milky Way with Metal-Poor Stars	47.049	75,754	-
NSF	AST-2307699	Collaborative Research: A Comprehensive Theoretical Study of Cosmological Magnetic Fields and Turbulence: from the Early to Late Time Universe	47.049	34,575	-
NSF	AST-2307788	Collaborative Research: CDS&E: Systematic Predictions for Dynamical Signatures of New Dark Matter Physics in Galaxies	47.049	52,606	-
NSF	AST-2309536	POLSTAR Survey: Magnetic Fields in Star Forming Filaments	47.049	79,457	-
NSF	AST-2309542	CoCoA: Cold Cores with the Atacama Large Millimeter/submillimeter Array (ALMA)	47.049	73,184	-
NSF	AST-2332009	Radio Stars in the Era of New Observatories	47.049	27,379	-
NSF	CCF-2022448	Collaborative Research: National Institute for Foundations of Data Science	47.049	67,107	-
NSF	CHE-1654415	CAREER: Characterizing Water's Response to Hydrophilic Surfaces	47.049	11,425	-
NSF	CHE-1800301	Stochastic Path Integral Formalism and Applications to Coherent Energy Transfer	47.049	18,246	-
NSF	CHE-1836913	EAGER: Analog Quantum Simulation of Dissipative Quantum Dynamics in Condensed-Phase Chemical Systems	47.049	561	-
NSF	CHE-1839155	RAISE- TAQS: Room-Temperature Quantum Sensing and Computation using DNA-based Excitonic Circuits	47.049	26,630	-
NSF	CHE-1845464	CAREER: Reprogramming Transcriptional Regulation by Chemical Stabilization of Repressive Homodimers	47.049	76,416	-
NSF	CHE-1900109	Exploration of Non-Equilibrium Interfacial Phenomena in Spin Forbidden Oxidation	47.049	-479	-
NSF	CHE-1955612	Synthesis of d- and p-Block Element Molecules, Reagents, and Precursors	47.049	-19,579	-
NSF	CHE-2102669	Electrosynthesis via Electrochemical Hydrogen Permeation	47.049	2,913	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	CHE-2108357	Designing Bright and Fast Fluorophores with Large Stokes' Shifts Based on Superradiant Molecular J-Aggregates	47.049	63,163	-
NSF	CHE-2108811	Reactivity of organic radicals in the atmospheric aqueous phase	47.049	90,907	-
NSF	CHE-2144153	CAREER: Development of Novel Domain-Tailored Machine Learning Tools for Organic Reaction Development and Discovery	47.049	112,263	-
NSF	CHE-2154938	Bootstrap Embedding for Molecules, Materials and Electrocatalysis	47.049	31,151	-
NSF	CHE-2203951	Analysis and Optimization of Polymer Networks for Emerging Applications	47.049	308,071	-
NSF	CHE-2247252	Synthesis of d- and p-Block Element Molecules, Reagents, and Precursors	47.049	298,060	-
NSF	CHE-2247685	Nonspectator Phosphorus Ligands for Catalysis	47.049	268,747	-
NSF	CHE-2247770	New Cycloaddition and Annulation Strategies for Organic Synthesis	47.049	60,746	-
NSF	CHE-2324300	Collaborative Research: DMREF: Designing Coherence and Entanglement in Perovskite Quantum Dot Assemblies	47.049	120,467	-
NSF	CHE-2330305	CAREER: Boracycles with Unusual Bonding as Creative Strategies for Main-Group Functional Materials	47.049	169,970	-
NSF	CHE-2404354	ABR: Engineering J-aggregate Hybrid Nanostructures as Fast and Bright Building Block Emitters	47.049	55,812	-
NSF	DMR-1743059	Convergence QL: NSF/DOE Quantum Science Summer School	47.049	28,179	-
NSF	DMR-1751736	CAREER: Fundamentals of complex chalcogenide electronic materials	47.049	3,805	-
NSF	DMR-1751739	CAREER: FRACTAL ELECTRONIC TEXTURES IN QUANTUM CRITICAL SOLIDS	47.049	4,323	-
NSF	DMR-1809802	Tuning the Electronic and Topological Properties of Twisted van der Waals Heterostructures	47.049	343,983	-
NSF	DMR-1847861	CAREER: Strongly correlated systems through the lens of topological phases	47.049	42,414	-
NSF	DMR-1911792	Epitaxial Ceramic Nanocomposites by Design	47.049	-11,500	-
NSF	DMR-1922311	DMREF: Collaborative Research: The Synthesis Genome: Data Mining for Synthesis of New Materials	47.049	63,422	-
NSF	DMR-2002860	Entropy and Phase Transformations in Stable Nanocrystalline Alloys	47.049	-6,278	-
NSF	DMR-2004556	Collaborative Research: Improving contact fatigue and wear properties using graded nanostructured surfaces in metallic materials	47.049	113,942	-
NSF	DMR-2004913	GOALI: Frictional Ignition of Metals in High-Pressure Oxygen Environments	47.049	82,795	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	DMR-2022428	Entanglement and emergence in quantum states of matter	47.049	188,648	-
NSF	DMR-2104912	Interactions between spin wave and magnetic domain structures	47.049	211,693	-
NSF	DMR-2104964	NSF-BSF: Development and Study of Lattice-Derived Flat Band States	47.049	149,748	-
NSF	DMR-2105495	Singlet Fission, Triplet Upconversion, and Thermally-Activated Delayed Fluorescence: Controlling Exciton Dynamics with Metal-Organic Frameworks	47.049	205,122	-
NSF	DMR-2118448	Collaborative Research: DMREF: Symmetry-Guided Machine Learning for the Discovery of Topological Phononic Materials	47.049	160,910	-
NSF	DMR-2118678	Collaborative Research: DMREF: Designer Mesoscale Materials Synthesized in the Self-Assembly Foundry	47.049	383,009	-
NSF	DMR-2119076	Collaborative Research: DMREF: Developing Damage Resistant Materials for Hydrogen Storage and Large-scale Transport.	47.049	16,576	-
NSF	DMR-2132623	Ferroelectricity emerging from antisite defects in complex oxides	47.049	112,960	-
NSF	DMR-2132647	EAGER: SUPER: Electrochemical Protonation to Achieve Superconducting Matter	47.049	125,181	-
NSF	DMR-2144136	CAREER: Designer Halide Perovskite Nanocrystals with Controlled Light-Matter Interactions for On-Demand Quantum Light Sources	47.049	107,920	-
NSF	DMR-2144136	COVID-19: CAREER: Designer Halide Perovskite Nanocrystals with Controlled Light-Matter Interactions for On-Demand Quantum Light Sources	47.049	27,872	-
NSF	DMR-2204222	Brush Particle-Based Building Blocks for High Refractive Index Composites	47.049	164,783	-
NSF	DMR-2204638	Collaborative Research: Martensitic Transformations in Paraelectric Shape Memory Ceramics Activated by an Electric Field	47.049	12,414	-
NSF	DMR-2206305	Novel Phases of Electronic Insulators and Quantum Hall Systems	47.049	57,889	-
NSF	DMR-2207299	Carbon-based nanocomposites for sensing and catalysis	47.049	287,008	-
NSF	DMR-2214021	Collaborative Research: DMREF: Foundations of programmable living materials through synthetic biofilm engineering and quantitative computational modeling	47.049	121,472	-
NSF	DMR-2218550	Correlated Quantum Phenomena at Superconductor/Magnetic Interfaces	47.049	153,349	-
NSF	DMR-2218849	NSF-BSF: Fluctuation phenomena out of equilibrium	47.049	111,067	-
NSF	DMR-2224948	Collaborative Research: Developing metal-organic molecular beam epitaxy (MOMBE) for chalcogenide semiconductor thin film synthesis	47.049	145,539	-
NSF	DMR-2225925	Optical Study of Electron Correlation in Graphene-Based Moire Superlattices	47.049	261,821	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	DMR-2225968	Collaborative Research:Combinatorial solution processing of optical phase change materials	47.049	235,464	-
NSF	DMR-2226519	Time Resolved Probing of Unconventional Orders in Novel Kagome Metals	47.049	251,110	-
NSF	DMR-2237244	CAREER: Probing Quantum Matter using Programmable Quantum Simulators	47.049	107,536	-
NSF	DMR-2240994	Collaborative Research: Remote epitaxy on van der Waals materials: unveiling adatom interaction, growing single-crystal membranes, and producing unconventional heterostructures	47.049	243,472	-
NSF	DMR-2245163	Division of Materials Research (DMR) - Flow-Induced Structures in Lyotropic Chromonic Liquid Crystals	47.049	27,080	-
NSF	DMR-2316265	CALPHAD 50 - 50th anniversary of CALPHAD meeting	47.049	27,000	-
NSF	DMR-2323132	Magnetic garnet thin films: novel properties through interface and site occupancy engineering	47.049	296,357	-
NSF	DMR-2339379	CAREER: Protecting Microbes to Protect Plants	47.049	8,592	-
NSF	DMR-2411155	Discovery of Self-Assembled Network Phases And Metallic Nanostructures Driven by Confinement	47.049	2,952	-
NSF	DMS-1651995	CAREER: Gaussian Graphical Models: Theory, Computation, and Applications	47.049	-4	-
NSF	DMS-1749858	CAREER: Classical and quantum chaos	47.049	93,859	-
NSF	DMS-1845034	CAREER: Higher enumerative geometry via representation theory and mathematical physics	47.049	191,069	-
NSF	DMS-1853981	Colored Stochastic Vertex Models	47.049	75,465	-
NSF	DMS-1901642-001	Algebraic cycles and L-values	47.049	128,556	-
NSF	DMS-1906072	Classical methods in motivic homotopy theory	47.049	-26,295	-
NSF	DMS-1940092	CAREER: Phase Transitions in Randomized Combinatorial Search and Optimization Problems	47.049	24,366	-
NSF	DMS-1944952	CAREER: Differential Equations, Algebraic Geometry and String Theory	47.049	35,988	-
NSF	DMS-1952706	Collaborative Research: Optimal-complexity spectral methods for complex fluids	47.049	-3,101	-
NSF	DMS-1953181	Interpolation Methods in Statistics and Machine Learning	47.049	179,980	-
NSF	DMS-1953945	Probabilistic and analytic aspects of the Loewner energy	47.049	-10,842	-
NSF	DMS-1953947	2020 - 2022 Talbot Workshops	47.049	28,182	-
NSF	DMS-1954455	Soliton dynamics for nonlinear wave equations	47.049	10,419	-
NSF	DMS-2001318	Tensor categories and representations of quantized algebras	47.049	136,895	-
NSF	DMS-2004589	Nonlinear Analysis of Three-Dimensional Water-Wave Patterns via Exponential Asymptotics	47.049	62,694	-

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NSF	DMS-2005345	Dynamics and singularities of geometric flows	47.049	169,583	-
NSF	DMS-2015517	Inference in High-Dimensional Statistical Models. Algorithmic Tractability and Computational Barriers	47.049	52,213	-
NSF	DMS-2022448	Collaborative Research: National Institute for Foundations of Data Science	47.049	1,012,486	99,453
NSF	DMS-2044606	CAREER: Analytic and Spectral Methods in Combinatorics	47.049	70,071	-
NSF	DMS-2052651	FRG Collaborative: New challenges in the derivation and dynamics of quantum systems	47.049	94,075	-
NSF	DMS-2054129	Combinatorics and its Applications	47.049	77,709	-
NSF	DMS-2100157	Algebraic and Probabilistic Methods in Extremal Combinatorics	47.049	2,659	-
NSF	DMS-2101040	Integral points on stacks, hyperplane sections over finite fields, and vectors forming rational angles	47.049	96,829	-
NSF	DMS-2101507	Sheaves, representations and dualities	47.049	127,444	-
NSF	DMS-2104349	Evolution equations in geometry and related fields	47.049	184,815	-
NSF	DMS-2105512	New tools for gauge theory in dimensions 3 and 4	47.049	190,248	-
NSF	DMS-2133851	Collaboration Research: Probabilistic, Geometric, and Topological Analysis of Neural Networks, From Theory to Applications	47.049	3,579	-
NSF	DMS-2134108	Collaborative Research: Foundations of Deep Learning: Theory, Robustness, and the Brain	47.049	150,641	-
NSF	DMS-2153741	Representations of finite reductive groups, character sheaves and theory of total positivity	47.049	117,731	-
NSF	DMS-2153742	Random Surfaces and Related Questions	47.049	157,686	-
NSF	DMS-2203455	The nearby Lagrangian conjecture from the K-theoretic viewpoint	47.049	55,554	-
NSF	DMS-2218846	PRIMES Experience: Broadening Math Research and Enrichment Options for High School Students	47.049	147,685	-
NSF	DMS-2247290	Multi-soliton Dynamics For Dispersive PDEs	47.049	31,900	-
NSF	DMS-2301050	Iterative Algorithms for Statistics: From Convergence Rates to Statistical Accuracy	47.049	8,879	-
NSF	DMS-2304684	Singularities and Rigidity in Geometric Evolution Equations	47.049	75,055	-
NSF	DMS-2311072	Non-parametric estimation under covariate shift: From fundamental bounds to efficient algorithms	47.049	25,749	-
NSF	DMS-2324599	ASE60 Conference: Synergistic Interactions between Theory and Computation	47.049	36,917	-
NSF	DMS-2325184	eMB: Collaborative Research: Discovery and calibration of stochastic chemical reaction network models	47.049	233,341	-
NSF	DMS-2326276	Conference: Young Topologist Meeting 2023	47.049	25,491	-
NSF	DMS-2347885	Probabilistic models with boundary: symmetries and asymptotics	47.049	18,673	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	DMS-2405361	Variational Problems in the Theory of Minimal Surfaces	47.049	19,196	-
NSF	DMS-2405393	Evolution Equations in Geometry	47.049	28,449	-
NSF	MCB-2300136	Collaborative Research: Engineering host-associated synthetic consortia based on ecological modules.	47.049	136,094	-
NSF	OMA-1936263	QII-TAQS Characterizing and Utilizing 2D Van der Wals Materials with Superconducting Qubits	47.049	280,123	241,399
NSF	PHY-1626069	MRI: Development of the IsoDAR Front-End	47.049	-2,110	-
NSF	PHY-1654168	CAREER: Magnetogenesis Revisited: The First Self-consistent Plasma Dynamo	47.049	65,954	-
NSF	PHY-1707999	Inferring the Physics of mRNA Trafficking in Neuronal Systems	47.049	52,484	-
NSF	PHY-1734011	Center for Ultracold Atoms	47.049	757,083	477,515
NSF	PHY-1848247	CAREER: Symmetry and Geometry in Biological Active Matter	47.049	61,060	-
NSF	PHY-1904160	LHCb operations and computing	47.049	196,501	-
NSF	PHY-1904160-001	LHCb operations and computing	47.049	201,850	38,161
NSF	PHY-1912764	The PA-Supported Neutrino Program at MIT	47.049	28,174	-
NSF	PHY-1914418 000	WoU-MMA: Collaborative Research: A Next-Generation SuperNova Early Warning System for Multimessenger Astronomy	47.049	37,038	-
NSF	PHY-1915218	Quantum simulation of out-of-equilibrium spin models	47.049	67,258	-
NSF	PHY-2010136	The Dynamic Onset of Magnetic Reconnection	47.049	22,528	-
NSF	PHY-2011905	Cosmic Censorship from Gauge/Gravity Duality	47.049	-37	-
NSF	PHY-2012088	Quantum optomechanics: from fundamental tests to quantum tools of the future	47.049	5,562	-
NSF	PHY-2012110	Strongly interacting quantum mixtures of ultracold atoms	47.049	132,974	-
NSF	PHY-2019786	AI Institute: AI Research Institute for Fundamental Interactions	47.049	3,603,849	729,220
NSF	PHY-2028125	Composable Next Generation Software Framework for Space Weather Data Assimilation and Uncertainty Quantification	47.049	983,632	253,122
NSF	PHY-2045740	CAREER: Populations and systematic uncertainties in the era of the advanced gravitational-wave detectors	47.049	26,769	-
NSF	PHY-2108050	Developing Pulsed Power Driven Turbulent Reconnection Platforms	47.049	184,601	-
NSF	PHY-2110384	Studies of strong-gravity binaries and their gravitational waves	47.049	95,542	-
NSF	PHY-2110535	Collaborative Research: Quantum-Coherent Interactions between Free and Guided Electrons and Photons	47.049	204,108	-
NSF	PHY-2110569	New Experimental Techniques For Neutrino Physics	47.049	310,386	12,922
NSF	PHY-2110720	Rare Event Searches at MIT	47.049	269,089	-
NSF	PHY-2207367	Microscopy of ultracold magnetic quantum fluids	47.049	89,769	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	PHY-2207387	Collaborative Research: A Data Challenge for the Next Generation of Ground-Based Gravitational Wave Detectors	47.049	132,465	-
NSF	PHY-2207942	Opening the Gravitational-Wave Band below 30 Hz for LIGO and Cosmic Explorer	47.049	67,892	12,454
NSF	PHY-2207996	PM: Search for New Physics Beyond the Standard Model through Precision Isotope Shift Measurements	47.049	472,956	-
NSF	PHY-2208004	A Program in Ultralow-Temperature Atomic Physics	47.049	798,052	-
NSF	PHY-2209181	NSF-BSF: Searching for Physics Beyond the Standard Model at the LHCb Experiment	47.049	191,600	-
NSF	PHY-2210558	NSF-ANR: Physics of chromosomes through mechanical perturbations	47.049	184,389	-
NSF	PHY-2213898	EAGER: Radiatively Cooled Magnetic Reconnection on Z	47.049	100,756	-
NSF	PHY-2308969	QUANTUM OPTICS AND OPTOMECHANICS: FROM FUNDAMENTAL TESTS TO QUANTUM TOOLS OF THE FUTURE	47.049	415,501	-
NSF	PHY-2309064	Launching the Cosmic Explorer Conceptual Design	47.049	316,283	78,605
NSF	PHY-2309267	Collaborative Research: Cosmic Explorer Optical Design	47.049	23,549	-
NSF	PHY-2310051	Collaborative Research: Beyond Standard Model Searches Using the IceCube Neutrino Telescope	47.049	195,092	-
NSF	PHY-2310073	The Flavour anomalies: Fluke, fallacy or new physics?	47.049	76,785	-
NSF	PHY-2317134	Center for Ultra Cold Atoms	47.049	2,230,254	1,341,012
NSF	PHY-2339326	CAREER: Intermittency and two-fluid transitions in pulsed-power-driven magnetized turbulence	47.049	8,546	-
NSF	SES-2332055	Collaborative Research: SII-NRDZ-SBE: Bridging the techno-economic gap for the design of spectrum Zone Management Systems	47.049	93,562	-
NSF	AGS-1835576	Collaborative Research: Framework: Software: HDR: Data-Driven Earth System Modeling	47.050	393,058	-
NSF	AGS-1848863	Collaborative Research: Understanding the role of coupled chemistry-climate interactions in internal climate variability	47.050	6,442	-
NSF	AGS-1906719	Advancing the Understanding of the Impacts of Wave-Induced Temperature Fluctuations On Atmospheric Chemistry	47.050	214,875	-
NSF	AGS-1914920	Collaborative Research: Integrating GEOS-Chem atmospheric chemistry into the NCAR Community Earth System Model (CESM)	47.050	-8,453	-
NSF	AGS-1933005	Collaborative Research: DASI Track 1: Development of a Distributed MIMO Meteor Radar Network for Space Weather Research	47.050	135,581	-
NSF	AGS-1936642	Integrating Observational Constraints and Modeling of Atmospheric Reactive Organic Carbon	47.050	20,638	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	AGS-1945871	The Global Circuits Paradox	47.050	91,682	-
NSF	AGS-1952737	Scientific and Technical Discovery at the Millstone Hill Geospace Facility	47.050	2,825,773	-
NSF	AGS-2031472	Improved understanding of the moist dynamics of the extratropical storm tracks and their response to climate change	47.050	137,442	-
NSF	AGS-2031999	Geospace Facilities: Improving Millstone Geospace Radar Performance and Lifetime	47.050	4,267,818	-
NSF	AGS-2033787	Collaborative Research: CEDAR: Three-dimensional large electron density gradients at mid-latitudes from a TEC-based ionospheric data assimilation system (TIDAS)	47.050	114,300	-
NSF	AGS-2102975	Collaborative Research: Madagascar Caves and Paleoclimate II (MADCAP II), Continuing Investigation of climate variability in the Southern Hemisphere of the Western Indian Ocean	47.050	78,968	-
NSF	AGS-2102976	Collaborative Research: P2C2: Speleothem constraints on seasonal hydroclimate variability in Mainland Southeast Asia since the late Pleistocene	47.050	27,755	-
NSF	AGS-2128617	Improving the Understanding of Halocarbon Lifetimes and Emissions	47.050	144,949	-
NSF	AGS-2129835	Collaborative Research: Laboratory Studies of the Role of RO2 Chemistry on the Evolution of Atmospheric Organic Carbon	47.050	319,476	-
NSF	AGS-2140793	NSF-BSF Collaborative Proposal: Improved understanding of the tropospheric response to zonal asymmetry of the stratospheric polar vortex and its application to S2S prediction	47.050	49,657	-
NSF	AGS-2149698	Collaborative Research: ANSWERS: Impacts of Atmospheric Waves and Geomagnetic Disturbances on Quiet-time and Storm-time Space Weather	47.050	69,520	19,034
NSF	AGS-2202785	Collaborative Research: Assessing climate and stochastic forcing of North Atlantic tropical cyclone activity over the past millennium	47.050	11,717	-
NSF	AGS-2223070	Exploring the impact of future land use change on global air quality and nutrient deposition	47.050	311,874	-
NSF	AGS-2228379	Collaborative Research: Development and applications of GEOS-Chem atmospheric chemistry in CESM and MUSICA	47.050	71,580	-
NSF	AGS-2243909	REU Site: Astronomy and Geoscience at the MIT Haystack Observatory	47.050	48,797	-
NSF	AGS-2316980	Advancing the Understanding of Wildfire Impacts on Stratospheric Chemistry	47.050	98,094	-
NSF	AGS-2327558	2023 Graduate Climate Conference	47.050	67,879	-
NSF	AGS-2411430	Collaborative Research: 4-dimensional impacts of strong polar vortices on the thermosphere-ionosphere system	47.050	2,271	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	EAR-1827715	Collaborative Research: Calibrating the end-Ediacaran extinction at a new boundary site with U-Pb Geochronology & Chemostratigraphy	47.050	4,960	-
NSF	EAR-1843686	Community Facility Support for GNSS Data Analysis with GAMIT/GLOBK	47.050	62,895	-
NSF	EAR-1852946	Methane isotopologue fractionation during microbial methanogenesis and methanotrophy by pure and mixed laboratory cultures	47.050	23,414	-
NSF	EAR-1854564	Impact of vegetation geometry and distribution on bedload transport	47.050	57,997	-
NSF	EAR-1902179	Constraining the Nature and Formation Age of the Shyok Suture Zone in Ladakh, NE India	47.050	6,948	-
NSF	EAR-1905733	Collaborative Research: Development of a turnkey SQUID microscope platform for paleomagnetism and installation in a National Multi-User Facility	47.050	9,677	-
NSF	EAR-1923491	Collaborative Research: Hydrologic Disturbance in Tropical Peatlands: Linking Drainage, Soil Moisture, Flammability, and Carbon Fluxes	47.050	126,737	-
NSF	EAR-1925863	Collaborative Research: Do arc-continent collisions in the tropics set the Earth's climate state?	47.050	152,237	-
NSF	EAR-1948453	Laboratory Acquisition Protocols and Standards: A Standardized Digital Data System for Experimental Results	47.050	60,260	-
NSF	EAR-2021677	Collaborative Research: Modes of melt extraction in silicic mushes: processes, efficiency and timescales	47.050	10,050	-
NSF	EAR-2022928	Collaborative Research: Blueschist Rheology: Experimental Constraints On Glaucophane Strength And Deformation Mechanisms	47.050	10,586	-
NSF	EAR-2044806	Collaborative Research: High temporal resolution paleomagnetism of speleothems	47.050	70,115	-
NSF	EAR-2054414	Collaborative Research: Community Facility Support: Facilitating Access and Innovation through a Collaborative Organization for Rock Deformation (CORD)	47.050	19,793	-
NSF	EAR-2123254	Collaborative Research: The role of subducting seamounts in fault stability and slip behavior throughout the seismic cycle	47.050	177,213	-
NSF	EAR-2141316	Collaborative Research: Coupled flow-geomechanical models applied to assess earthquake triggering in tectonically active regions – The Los Angeles basin, CA	47.050	154,967	-
NSF	EAR-2221963	Collaborative Research: EAR Climate - Pairing calcium and clumped isotopes to inform carbon cycle and climate dynamics at the onset of the Late Paleozoic Ice Age	47.050	94,325	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	EAR-2240376	Collaborative Research: Seismic cycles and earthquake nucleation on heterogeneous faults: Large-scale laboratory experiments, numerical simulations, and Whillans ice stream	47.050	25,174	-
NSF	EAR-2317597	Collaborative Research: EAR Climate: Earth-System Responses to the Penultimate Icehouse-Greenhouse Transition	47.050	2,677	-
NSF	EAR-2323561	Travel: Cargese 2023 School on Active Subduction	47.050	29,392	-
NSF	EAR-2339556	CAREER: Towards a comprehensive model of seismicity throughout the seismic cycle	47.050	8,674	-
NSF	OAC-1835618	Collaborative Research: Framework: Data: Toward Exascale Community Ocean Circulation Modeling	47.050	183,248	-
NSF	OCE-1736109	Collaborative Research: Deep Circulation over the Flanks of a Mid-Ocean Ridge	47.050	25,947	-
NSF	OCE-1756324	Collaborative Research: Bottom Boundary Layer Turbulent and Abyssal Recipes	47.050	219,578	-
NSF	OCE-1923312	Improving Accuracy and Precision of Marine Inorganic Carbon Measurements	47.050	38,228	-
NSF	OCE-2023520	Collaborative Research: Coupling of Trade Winds with the Ocean's Subtropical Cells	47.050	121,997	-
NSF	OCE-2048470	Features and implications of nitrogen assimilation trait variability in populations of Prochlorococcus	47.050	154,163	-
NSF	OCE-2124211	Collaborative Research: Towards a More Comprehensive Understanding of Eulerian and Lagrangian Transport of Active and Passive Tracers in the Ocean	47.050	33,506	-
NSF	OCE-2138890	COVID-19: EAGER: Testing the Galápagos as a long-term monitoring site for nitrous oxide emissions from the Pacific oxygen deficient zones	47.050	172,908	-
NSF	OCE-2140206	EAGER: Characteristic Disruptions of the Marine Carbon Cycle	47.050	88,524	-
NSF	OCE-2142998	CAREER: Carbon, nitrogen, and oxygen biogeochemistry at the scale of a sinking marine particle	47.050	412,190	-
NSF	OCE-2148468	US GEOTRACES GP17-OCE and GP17-ANT: Inorganic Carbon Cycling in the South Pacific and Southern Oceans by Direct Measurement	47.050	255,411	-
NSF	OCE-2148916	Collaborative Research: US GEOTRACES GP17-OCE and GP17-ANT: Pb Isotopes	47.050	255,224	-
NSF	OCE-2319028	Direct measurement of in situ growth and growth limitation of bacterioplankton species	47.050	124,672	-
NSF	OCE-2342986	Collaborative Research: Opening the black box of oxygen deficient zone biogeochemistry through integrative tracers	47.050	111,270	-
NSF	CCF-1231216	A Center for Brains, Minds, and Machines: The Science and the Technology of Intelligence	47.070	2,339,602	451,092

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	CCF-1729369	Collaborative Research: EPIQC: Enabling Practical-Scale Quantum Computation	47.070	551,955	270,286
NSF	CCF-1751011	CAREER: A Programming Language for Developing Software to Execute Reliably on Unreliable Hardware	47.070	52,414	-
NSF	CCF-1816209	CIF: Small: Occlusion-Based Computational Imaging and Scene Analysis: Theory, Methods and Applications	47.070	41,962	-
NSF	CCF-1845763	CAREER: Parallel Algorithms and Frameworks for Graph and Hypergraph Processing	47.070	100,434	-
NSF	CCF-1901292	AF: Medium: Collaborative Research: Theoretical Foundations of Deep Generative Models and High-Dimensional Distributions	47.070	464,173	-
NSF	CCF-1918421	Expeditions: Collaborative Research: Global Pervasive Computational Epidemiology	47.070	49,493	-
NSF	CCF-1918839	Expeditions: Understanding the World Through Code	47.070	909,905	-
NSF	CCF-1937501	RTML: Large: Co-design of Hardware and Algorithms for Energy-efficient Robot Learning	47.070	15,415	-
NSF	CCF-1940205	CAREER: Reducibility among high-dimensional statistics problems: information preserving mappings, algorithms, and complexity.	47.070	128,953	-
NSF	CCF-1943349	CAREER: Efficient Algorithms and Hardware for Accelerated Machine Learning	47.070	102,017	-
NSF	CCF-1955217	Collaborative Research: AF : Medium: Foundations of Structured Optimization	47.070	100,792	-
NSF	CCF-1955864	Collaborative Research: CNS: Occlusion and directional resolution in computational imaging	47.070	101,227	-
NSF	CCF-1956054	AF Medium: DNA-based Data Storage and Computing Materials	47.070	209,015	-
NSF	CCF-1956211	Collaborative Research: FET: Medium: Quantum Localization and Synchronization Networks	47.070	176,347	-
NSF	CCF-2003830	AF: Small: Distributed Algorithms for Dynamic, Noisy Platforms: Wireless Networks, Robot Swarms, and Insect Colonies	47.070	114,006	-
NSF	CCF-2006664	AF: Small: Sparsity in Local Computation	47.070	-3,255	-
NSF	CCF-2006798	Collaborative Research: AF: Small: Fine-grained complexity of approximate problems	47.070	-11,060	-
NSF	CCF-2007674	FET: Small: Robust and modular CRISPR/dCas9 transcriptional programs through regulated dCas9 generators	47.070	198,076	-
NSF	CCF-2028888	Collaborative Research: PPOSS: Planning: Principles for Edge Sensing and Computing for Personalized, Precision Healthcare at National Scale	47.070	-4,979	-
NSF	CCF-2106377	Collaborative Research: CIF: Medium: Analysis and Geometry of Neural Dynamical Systems	47.070	217,144	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	CCF-2106711	Collaborative Research: SHF: Medium: Heterogeneous Architecture for Collaborative Machine Learning	47.070	400,209	-
NSF	CCF-2107244	Collaborative Research: SHF: Medium: Spatial Multi-Tenant Neural Acceleration for Next Generation Datacenters	47.070	158,585	-
NSF	CCF-2107373	Collaborative Research:SHF: Medium : Analog EDA Algorithmic Perspectives for Efficient and Robust Neural Network Design	47.070	65,773	-
NSF	CCF-2119340	Collaborative Research: PPOSS: LARGE: Principles and Infrastructure of Extreme Scale Edge Learning for Computational Screening and Surveillance for Health Care	47.070	99,183	-
NSF	CCF-2123864	Collaborative Research: FMitF: Track I:Composable Verification of Crash-Safe Distributed Systems with Grove	47.070	35,551	-
NSF	CCF-2127597	Lower Bounds in Complexity Theory Via Algorithms	47.070	92,065	-
NSF	CCF-2129139	AF: Small: Shortest Paths and Distance Parameters:Faster, Fault-Tolerant and More Accurate	47.070	20,986	-
NSF	CCF-2131115	Collaborative Research: CIF: Small: Low-Complexity Algorithms for Unsourced Multiple Access and Compressed Sensing in Large Dimensions	47.070	61,934	-
NSF	CCF-2131541	Collaborative Research: DASS: Legally Accountable Cryptographic Computing Systems (LChS)	47.070	133,263	-
NSF	CCF-2139936	AF: Small: An Algorithmic Theory of Brain Behavior: Concept Representation and Learning in Spiking Neural Networks	47.070	108,957	-
NSF	CCF-2153230	NSF-IITP: CNS Core: Small: Quantum Communication and Sensing at Terahertz: A Path Toward 6G and Beyond	47.070	56,468	-
NSF	CCF-2217064	PPoSS: LARGE: Intel: Combining Learning and Formal Verification for Scalable Machine Programming (ScaMP)	47.070	348,630	-
NSF	CCF-2217099	Collaborative Research: PPoSS: LARGE: A Full-Stack Architecture for Sparse Computation	47.070	514,256	-
NSF	CCF-2217878	CAPA: Collaborative Research: ARION: Taming Heterogeneity with DSLs, Approximation, and Synthesis	47.070	6,464	-
NSF	CCF-2227876	AF: SMALL: On the Complexity of Satisfiable CSPs	47.070	104,141	-
NSF	CCF-2232958	SODA 2023 Conference Student and Postdoc Travel Support	47.070	9,267	-
NSF	CCF-2233897	AF: Small: Low-Degree Methods in Optimizing in Random Structures. Power and Limitations	47.070	124,067	-
NSF	CCF-2238030	CAREER: DeepCertify: Data-driven Formal Approach to Safe Autonomy	47.070	12,842	-
NSF	CCF-2238080	CAREER: Statistics through the Sum of Squares Lens	47.070	74,312	-
NSF	CCF-2239160	CAREER: New Challenges in Analysis of Boolean Functions	47.070	9,540	-
NSF	CCF-2310818	AF: SMALL: Extending the reach of distribution testing via structure	47.070	198,529	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	CCF-2313023	SHF: Medium: End-to-End Proofs for Safe Accelerator Programming.	47.070	111,576	-
NSF	CCF-2316235	PPoSS: LARGE: General-Purpose Scalable Technologies for Fundamental Graph Problems.	47.070	3,101	-
NSF	CCF-2319167	Collaborative Research: FMITF: Track I: The Phlox framework for verifying a high-performance distributed database	47.070	48,203	-
NSF	CCF-2326182	Using Machine Learning to Shape the Future of Large-Scale Systems	47.070	115,865	-
NSF	CCF-2328543	CAREER: The Exocompiler: Decoupling Algorithms from the Organization of Computation and Data	47.070	224,638	-
NSF	CCF-2330048	AF: SMALL: Algorithms and Limitations for Matrix Multiplication	47.070	162,831	-
NSF	CCF-2339948	CAREER: Exploring the power of quantum protocols for interactive proofs	47.070	32,521	-
NSF	CCF-2343779	SODA 2024 Conference Student and Postdoc Travel	47.070	13,942	-
NSF	CMMI-2202477	Collision-resilient insect-scale soft aerial robots for collective flights in cluttered environments	47.070	131,824	-
NSF	CNS-1751009	CAREER: Data-Driven Network Resource Management Systems	47.070	11,855	-
NSF	CNS-1801399	SaTC: CORE: Medium: Collaborative: Bridging the Gap between Protocol Design and Implementation through Automated Mapping	47.070	-140	-
NSF	CNS-1844280	CAREER: Wirelesss Sensing for In Vivo Medical Devices	47.070	21,778	-
NSF	CNS-1907905	CNS Core: Small: Wireless Network Control in Uncooperative and Adversarial Environments	47.070	143,234	-
NSF	CNS-1925609	CCRI: Medium: Cilk Infrastructure for Next-Generation Parallel-Programming Research	47.070	77,595	-
NSF	CNS-1933486	Broadening Participation - I-Corps Northeast Regional Inclusion Summit	47.070	72,482	-
NSF	CNS-1955270	Collaborative Research: SaTC: CORE: Medium: Hardening Off-the-Shelf Software Against Side Channel Attacks	47.070	112,898	-
NSF	CNS-2002908	Collaborative Research: MLWiNS: Deep Neural Networks Meet Physical Layer Communications -- Learning with Knowledge of Structure	47.070	-3,489	-
NSF	CNS-2008624	Collaborative Research: CNS Core: Small: A Principled Framework for Workload Distribution Techniques in Large-Scale Networks	47.070	19,736	-
NSF	CNS-2044973	CAREER: Certifiable Perception for Autonomous Cyber-Physical Systems	47.070	276,410	-
NSF	CNS-2046359	CAREER: A Quantitative Framework for Analyzing and Mitigating Microarchitectural Side Channels	47.070	126,050	-
NSF	CNS-2054869	SaTC: CORE: Small: Practical private information retrieval	47.070	226,605	-

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NSF	CNS-2104398	Collaborative: NGSDI: Foundations of Clean and Balanced Datacenters: Treehouse	47.070	-119,961	-
NSF	CNS-2106268	Collaborative Research: CNS Core: Medium: Inference and Control in Overlay Networks	47.070	86,656	-
NSF	CNS-2115587	SaTC: CORE: Medium: Provably Secure, Usable, and Performant Enclaves in Multicore Processors	47.070	314,657	-
NSF	CNS-2130671	SaTC: CORE: Small: Scaling Correct-by-Construction Code Generation for Cryptography	47.070	208,105	-
NSF	CNS-2144766	CAREER: Large-scale Dynamic Reconfigurable Networks	47.070	92,353	-
NSF	CNS-2148128	RINGS: Enabling Wireless Edge-cloud Services via Autonomous Resource Allocation and Robust Physical Layer Technologies	47.070	126,724	18,535
NSF	CNS-2148132	RINGS: Coding over High-Frequency for Absolute Post-Quantum Security (CHAPS)	47.070	287,214	238,650
NSF	CNS-2148251	RINGS: Resilient and Low-Latency Networks for Situation Awareness in the Factory of the Future	47.070	298,559	102,804
NSF	CNS-2149548	Collaborative Research: CPS: Medium: An Online Learning Framework for Socially Emerging Mixed Mobility	47.070	274,117	-
NSF	CNS-2154149	Collaborative Research: SaTC: CORE: Medium: Theoretical Foundations of Block Ciphers	47.070	233,563	-
NSF	CNS-2211382	Collaborative Research: CNS Core: Medium: A Stateful Switch Architecture for In-Network Compute	47.070	92,972	-
NSF	CNS-2212099	Collaborative Research: CNS Core: Medium: High-performance Network Stacks for the Edge	47.070	92,444	-
NSF	CNS-2212102	Collaborative Research: CNS Core: Medium: Robust Behavioral Analysis and Synthesis of Network Control Protocols Using Formal Verification	47.070	313,632	-
NSF	CNS-2219365	CSforAll: RPP: Programming the Acceleration of Computing and Equity in Massachusetts 2 (PACE2)	47.070	332,366	-
NSF	CNS-2225441	SaTC: CORE: Medium: Verifying Hardware Security Modules with Information-Preserving Refinement	47.070	405,348	67,524
NSF	CNS-2236700	EAGER: Developing design principles for network-scale applications derived from Internet thinking and the behavioral sciences.	47.070	148,231	-
NSF	CNS-2239566	CAREER: Learning for Generalization in Large-Scale Cyber-Physical Systems	47.070	69,300	-
NSF	CNS-2308901	NeTS: Small: Enabling Long-Range Underwater Backscatter via Van-Atta Acoustic Networks	47.070	95,767	-
NSF	CNS-2313234	Collaborative Research: CPS: Medium: Robotic Perception and Manipulation via Full-Spectral Wireless Sensing	47.070	423,195	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	CNS-2330065	SaTC: CORE: Medium: Towards a Universal Cryptographic Acceleration System	47.070	13,434	-
NSF	DMS-2329392	Conference: Summer Geometry Initiative	47.070	50,000	-
NSF	ECCS-2230397	2022 IEEE CSS Workshop on Control for Societal-Scale Challenges	47.070	1,545	-
NSF	IIS-1729931	Collaborative Research: Computational Photo-Scatterography: Unraveling Scattered Photons for Bio-imaging	47.070	142,927	-
NSF	IIS-1741341	BIGDATA: F: Collaborative Research: Towards automating data analysis: interpretable, interactive, and scalable learning via discrete probability	47.070	29,219	-
NSF	IIS-1750286	CAREER: Robust, scalable, reliable machine learning	47.070	117,852	-
NSF	IIS-1763434	III: Medium: Massively Parallel Data Analytics on Heterogeneous Architectures	47.070	-534	-
NSF	IIS-1830282	NRI:INT:COLLAB: Collaborative Task Planning and Learning through Language Communication in a Human-Robot Team	47.070	97,982	-
NSF	IIS-1844406	CAREER: Adaptive Physical User Interfaces	47.070	169,289	-
NSF	IIS-1846088	CAREER: Modern nonconvex optimization for machine learning: foundations of geometric and scalable techniques	47.070	82,746	-
NSF	IIS-1900933	III: Medium: Learning-based Synthesis of Data Processing Engines	47.070	-12,277	-
NSF	IIS-1900991	III: Large: Collaborative Research: Analysis Engineering for Robust End-to-End Data Science	47.070	85,002	-
NSF	IIS-1942659	CAREER: Effective Interaction Design for Data Visualization	47.070	118,213	-
NSF	IIS-1955697	Collaborative Research: CHS: Medium: Discovery and Exploration of Design Trade-Offs	47.070	52,945	-
NSF	IIS-2006152	CHS:Small:Capturing Multisensory Interactions in Cutaneous Displays	47.070	60,341	-
NSF	IIS-2008116	Collaborative Research: CHS: Small: Learning Maker Skills By Building Game Props	47.070	84,677	-
NSF	IIS-2014391	SCH:INT: Collaborative Research: Deep Sense: Interpretable Deep Learning for Zero-effort Phenotype Sensing and Its Application to Sleep Medicine	47.070	14,382	-
NSF	IIS-2033792	Quantifying the Unknown Unknowns for Data Integration	47.070	92,867	-
NSF	IIS-2105819	Collaborative Research: HCC: Medium: Differentiable Rendering for Computer Graphic	47.070	200,215	-
NSF	IIS-2106962	Collaborative Research: HCC: Medium: Computational Design of Complex Fluidic Systems	47.070	-64,411	-
NSF	IIS-2133072	Collaborative Research: NRI: Remotely Operated Reconfigurable Walker Robots for Eldercare	47.070	168,101	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	IIS-2151077	RI: Small: Modular structures in the brain and artificial learningsystems: emergence and function	47.070	337,764	-
NSF	IIS-2204914	Collaborative Research: SCH: An AI Coach for Enhancing Teamwork in the Cardiac Operating Room	47.070	11,281	-
NSF	IIS-2205320	Collaborative Research: SCH: Machine Learning Driven User Interfaces for Information Gathering and Synthesis from Medical Records	47.070	132,098	-
NSF	IIS-2211260	Learning Compositional Implicit Representations for 3D Scene Understanding	47.070	111,314	-
NSF	IIS-2212310	Collaborative Research: RI: Medium: Bootstrapping natural feedback for reinforcement learning	47.070	235,164	93,992
NSF	IIS-2213826	HCC: Small: Human-Centered Computing to Support Citizen Data Science on Gender-based Violence and in Other Domains	47.070	278,691	-
NSF	IIS-2214177	Robotics: Flexible manipulation without prior shape models	47.070	69,985	-
NSF	IIS-2234870	Collaborative Research: CPS: Medium: CyberOrganoids: Microrobotics-enabled differentiation control loops for cyber physical organoid formation	47.070	126,894	-
NSF	IIS-2238240	CAREER: Learning Structured Models with Natural Language Supervision	47.070	120,752	-
NSF	IIS-2301356	Collaborative Research: HCC: Small: Computational Design of Knitted Wearable Haptic Devices	47.070	217,144	-
NSF	OAC-1835443	Framework: Software: Next-Generation Cyberinfrastructure for Large-Scale Computer-Based Scientific Analysis and Discovery	47.070	990,382	174,324
NSF	OAC-1931391	Frameworks: Collaborative Research: Extensible and community-driven thermodynamics, transport, and chemical kinetics modeling with Cantera: expanding to diverse scientific domains	47.070	103,469	-
NSF	OAC-1931469	Collaborative Research: Frameworks: Machine learning and FPGA computing for real-time applications in big-data physics experiments	47.070	219,491	-
NSF	OAC-1934700	Collaborative Research: Advancing Science with Accelerated Machine Learning	47.070	-2,011	-
NSF	OAC-2004645	Collaborative Research : Elements : Extending the physics reach of LHCb by developing and deploying algorithms for a fully GPU-based first trigger stage	47.070	85,692	-
NSF	OAC-2103804	Collaborative Research: Frameworks: Convergence of Bayesian inverse methods and scientific machine learning in Earth system models through universal differentiable programming	47.070	-12,424	-
NSF	OAC-2335657	EAGER: Integrating Open and Equitable Research into Open Science	47.070	183,957	59,487
NSF	DEB-1924148	CNH2-S: Mercury Pollution and Human-Technical-Environmental Interactions in Artisanal Mining	47.074	52,833	35,798

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	EF-2125118	Collaborative Research: MIM: Partners in slime: Learning how mucus shapes and maintains microbiomes	47.074	96,715	-
NSF	IOS-1845663	CAREER: Dissecting Neural Mechanisms of Behavioral State Control in <i>C. elegans</i>	47.074	191,533	-
NSF	IOS-2035181	EDGE-FGT: Genetic Tools for Picocyanobacteria that Dominate the Oceans	47.074	53,604	31,716
NSF	IOS-2239070	CAREER: Mechanisms and consequences of Genotype by Environment interaction in a model grass	47.074	201,717	-
NSF	IOS-2319332	Collaborative Research: EDGE-FGT: Furthering Progress on a Genetic System for the Oceans' Most Abundant Phototrophs	47.074	42,468	-
NSF	MCB-1840257	RoL:FELS:RAISE: Principles of Modular Organization in Resource-Limited Biological Circuits	47.074	-6,472	-
NSF	MCB-1844668	CAREER: Cracking the Cleavage Code of RNase Y and Its Associated Y-Complex in Firmicutes	47.074	82,487	-
NSF	MCB-1943141	CAREER: Towards open and community-responsive ecological editing	47.074	268,576	21,237
NSF	MCB-2027165	Programmable Abiotic-Biotic Interface With planar DNA Nanopore Electrodes	47.074	200,390	321,472
NSF	MCB-2027949	Collaborative Research: MODULUS: Uncovering and re-engineering chromatin modification circuits that dictate epigenetic cell memory	47.074	233,491	-
NSF	MCB-2036037	PROTEIN REGULATORS OF 3D GENOME ARCHITECTURE: DYNAMICS, MECHANISM AND FUNCTION	47.074	143,780	-
NSF	MCB-2041555	Collaborative Research: Multidimensional single-cell phenotyping for elucidating genome to phenome relationships	47.074	55,709	-
NSF	MCB-2042362	CAREER: Chromatin Folding from the Bottom-up	47.074	217,183	-
NSF	MCB-2044895	Biophysics of Nuclear Condensates	47.074	970,122	741,349
NSF	MCB-2046778	CAREER: Developing novel structural techniques to untangle bacterial ribosome biogenesis	47.074	233,059	-
NSF	MCB-2116037	NSF-BSF: Sentinels: Viral First Responder Cells (VFRCs) for COVID-19 and Future Rapidly Emerging Infectious Diseases	47.074	573,012	-
NSF	MCB-2130687	BBSRC-NSF/BIO: Quantum-enhanced long-range energy capture	47.074	157,442	-
NSF	MCB-2218259	Collaborative Research: Poise under pressure: Developing strains with minimal genomes for integrated bioprocessing	47.074	248,833	-
NSF	MCB-2236194	Procollagen Assembly	47.074	451,438	-
NSF	MCB-2244770	EAGER: Leveraging Chaperones to Escape the Plant RuBisCO Catalytic Catch-22	47.074	157,553	-
NSF	MCB-2313877	Reversible long-term memory devices in bacteria inspired by mammalian chromatin modification circuits	47.074	153,124	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	MCB-2337728	CAREER: Dynamic dissection of how transcription and loop extrusion regulate 3D genome structure	47.074	67,240	-
NSF	MCB-2339986	CAREER: Understanding and engineering DNA supercoiling-mediated feedback in gene circuits	47.074	15,514	-
NSF	BCS-1826757	CompCog: Advancing Understanding of Visual Crowding	47.075	166,713	-
NSF	BCS-1921501	Computational auditory scene analysis as causal inference	47.075	-10,620	-
NSF	BCS-2016404	Doctoral Dissertation Research: Cultures of North American Cannabis Cultivation in an Age of Legalization	47.075	626	-
NSF	BCS-2016895	Collaborative Research: Cross-Categorical Context Dependence: Bridging Developmental , Experimental, and Theoretical Perspectives	47.075	-643	-
NSF	BCS-2020840	Evaluating Meaning-based explanations of syntactic island effects cross-linguistically	47.075	120,461	-
NSF	BCS-2042748	Collaborative Research: Exploring Variation in English Intonational Acoustic Phonetics from Grammatical Perspectives	47.075	23,798	-
NSF	BCS-2116918	COVID-19: Doctoral Dissertation Research: Developing a scalable theory of alternatives in pragmatics	47.075	432	-
NSF	BCS-2118103	Collaborative Research: Loopholes as a window into the learning of meaning	47.075	51,214	-
NSF	BCS-2121009	Collaborative Research: CompCog: Adversarial Collaborative Research on Intuitive Physical Reasoning	47.075	65,302	-
NSF	BCS-2121074	CompCog: Noisy-channel processing in human language understanding	47.075	303,690	-
NSF	BCS-2124136	Collaborative Research: NCS-FR: Beyond the ventral stream: Reverse engineering the neurocomputational basis of physical scene understanding in the primate brain	47.075	794,932	-
NSF	BCS-2140399	Doctoral Dissertation Research: Presupposition projection in conditionals and conjunctions : Developmental and psycholinguistic evidence	47.075	21	-
NSF	BCS-2213722	Doctoral Dissertation Research: Disability, Technology, and Labor	47.075	9,747	-
NSF	BCS-2218748	Mobility Data for Communities (MD4C): Uncovering Segregation, Climate Resilience, and Economic Development from Cell-Phone Records	47.075	50,731	-
NSF	BCS-2240406	The Perception and Cognition of Sound Texture	47.075	274,206	-
NSF	CNS-2319025	SaTC: CORE: Small: Amplifying Deepfake Detection by Humans Using Cognitively-Inspired Interfaces	47.075	43,963	-
NSF	IIS-2418125	Conference: New horizons in language science: large language models, language structure, and the neural basis of language	47.075	66,799	-
NSF	SES-1848857	Risk Markets Imbalances and Macroeconomics	47.075	62,488	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	SES-1919437	Collaborative Research: The Tax Administration Production Function: Evidence from Indonesia	47.075	15,023	15,023
NSF	SES-1944138	CAREER: Information Frictions in Consumer Credit Markets: Evidence on Policy, Practice, and Beliefs	47.075	46,333	-
NSF	SES-1947087	Standard Grant: Genetown: Tracing the History of the Biotechnology Industry in the Greater Boston Area, 1973-2000	47.075	81,036	-
NSF	SES-1948692	Collaborative Research: The economics of social data	47.075	61,732	-
NSF	SES-1951056	Apprenticeship, Cooperation and Choice	47.075	16,258	-
NSF	SES-2017315	Strategic Links Between Campaign Donations and Lobbying: Evidence from the LobbyView Database of Money in Politics	47.075	96,817	-
NSF	SES-2047152	Integrating Political Science and Cognitive Science to Meet the Challenge of Promoting Accurate Information on Social Media	47.075	214,348	-
NSF	SES-2047513	CAREER: Toward A Framework for Intersectional Antiracism in Technology Development, Design and Distribution	47.075	257,484	-
NSF	SES-2049263	NSF-BSF: Collaborative Research: Market Conduct in Technology Adoption in the Automobile Industry	47.075	83,754	-
NSF	SES-2049744	Collaborative Research: Information and Markets	47.075	54,210	-
NSF	SES-2147166	Doctoral Dissertation Research: Enigmatic Nature: Absent Laws and Hidden Objects in Theoretical Physics, 1967-2004	47.075	6,463	-
NSF	SES-2329988	Understanding the effect of individual decision-making strategies on collective decision outcomes	47.075	78,665	33,184
NSF	DGE-0645960	NSF Fellowship: Cost of Education Allowance 06/07	47.076	-377	-
NSF	DGE-0645960	NSF Graduate Fellowship Program	47.076	-942,860	-
NSF	DGE-0645960	NSF Graduate Fellowship Program - 2011	47.076	-6,098,561	-
NSF	DGE-1122374	Graduate Research Fellowship Program	47.076	6,750,736	-
NSF	DGE-1806815	IGE: Enhancing Graduate Education in Systems Thinking and Multi-Stakeholder Design through a Co-Creation Toolkit	47.076	-82	-
NSF	DGE-2141064	Graduate Research Fellowship Program (GRFP)	47.076	19,506,453	-
NSF	DRL_2005702	Collaborative Research: Facilitating Computational Tinkering: Design-Based Strategies to Engage Children and Families in Creating with Code	47.076	85,969	-
NSF	DRL-1934126	Made with Math	47.076	265,193	-
NSF	DRL-2024679	Collaborative Research:NCS-FO: How cognitive maps potentiate newlearning: constraining a computational model by decoding the thoughtsof superior memorists	47.076	75,917	-
NSF	DRL-2048746	Developing and Testing Innovations [DTI]: Everyday AI for Youth	47.076	376,215	139,225
NSF	DRL-2124052	Collaborative Research: NCS-FO: Studying language in the brain in the modern machine learning era	47.076	4,615	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	DRL-2200917	Collaborative Research: Designing Computational Modeling Curricula across Science Subjects to Study How Repeated Engagement Impacts Student Learning throughout High School	47.076	537,938	-
NSF	DRL-2321499	Research Infrastructure: Million Tutor Moves Observatories Project (MT MOP): Incubating Digital Infrastructure for an Equitable, Intelligent, and Resilient STEM Education System	47.076	63,687	-
NSF	DUE-2142638	Making the makers: Understanding how increased agency and social impact driven makerspaces grow engineering identity and self-efficacy in marginalized students	47.076	301,682	79,903
NSF	IIS-2202431	We are in this together!: Leveraging mixed reality headset technologies to re-design participatory simulations for complex systems learning in classrooms	47.076	191,460	-
NSF	OAC-2209756	Frameworks: Cyberinfrastructure for Remote Data Collection with Children	47.076	528,451	-
NSF	OPP-1853918	NSFGEO-NERC: Collaborative Research: A new mechanistic framework for modeling rift processes in Antarctic ice shelves validated through improved strain-rate and seismic observations	47.078	34,632	-
NSF	OPP-1931131	A New Instrument and Measurement Approach to Cryo-Seismogeodesy: Monitoring Antarctic Ice Shelf Stability Using Ice Penetrators	47.078	299,919	-
NSF	OPP-2103100	Collaborative Research: Temperature and atmospheric circulation history of high-latitude Canada across interglacials of the past 1.5 Myr from cave deposits	47.078	67,242	-
NSF	OPP-2136940	COVID-19: Collaborative Research: EAGER: Generation of high resolution surface melting maps over Antarctica using regional climate models, remote sensing and machine learning	47.078	-2,881	-
NSF	OPP-2302530	A low-cost, long-endurance observational platform for the Arctic atmospheric boundary layer	47.078	76,334	-
NSF	CBET-2328775	2023 Alan T Waterman Award	47.083	292,042	-
NSF	OIA-2132318	A1: Knowledge Network Development Infrastructure with Application to COVID-19 Science and Economics	47.083	286,802	207,458
NSF	OIA-2134795	NSF Convergence Accelerator Track D: A Community Resource for Innovation in Polymer Technology (CRIPT)	47.083	1,441,146	188,338
NSF	OIA-2137530	NSF Convergence Accelerator Track F: Adapting and Scaling Existing Educational Programs to Combat Inauthenticity and Instill Trust in Information	47.083	19,650	18,138
NSF	OIA-2219052	GCR:Collaborative Research: Micro-robo-genetics for programmable organoid formation	47.083	241,504	-
NSF	PHY-2320699	MRI: Track 1 Development of DarkQuest: A dark sector upgrade to SpinQuest at the 120 GeV Fermilab Main Injector	47.083	16,727	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	2326986	I-Corps: Surface Innovation for Energy Efficiency and Water Management	47.084	41,777	-
NSF	DMR-2329088	Collaborative Research: FuSe: PHACEO: High-throughput Discovery of Phase Change Materials for Co-designed Electronic and Optical Computational Devices	47.084	31,350	-
NSF	ECCS-2328839	Collaborative Research: FuSe:Substrate-inverted Multi-Material Integration Technology (SuMMIT)	47.084	84,623	-
NSF	EEC-2329190	Collaborative Research: FuSe: Monolithic 3D Integration (M3D) of 2D materials-based CFET Logic Elements towards Advanced Microelectronics	47.084	85,553	-
NSF	ITE-2235945	NSF Convergence Accelerator Track I: Sustainable Topological Energy Materials (STEM) for Energy-efficient Applications	47.084	559,127	250,892
NSF	ITE-2236093	NSF Convergence Accelerator Track I: Building a Sustainable, Innovative Ecosystem for Microchip Manufacturing	47.084	648,777	25,816
NSF	ITE-2236190	NSF Convergence Accelerator Track I: Mind over Matter: Socioresilient Materials Design: A New Paradigm For Addressing Global Challenges in Sustainability	47.084	637,760	377,675
NSF	ITE-2342005	EAGER: Choosing a Regional Innovation Engine: The Impact of Innovation Ecosystem Acceleration Training on Ecosystem Mapping, Stakeholder Engagement, and Regional Innovation Engine Choice	47.084	111,671	-
NSF	ITE-2344314	NSF Convergence Accelerator Track M: Soft Growing Robots for Mobility Support	47.084	279,125	35,704
NSF	ITE-2345076	NSF Convergence Accelerator Track I:Phase 2	47.084	399,437	-
NSF	ITE-2345084	NSF Convergence Accelerator Track I: Advancing Sustainable Topological Material Prototype Devices for Energy-efficient Applications	47.084	408,044	-
NSF	TI-2229704	POSE: PHASE I: Open Source Ecosystem for OpenCilk	47.084	150,457	30,571
NSF	TI-2234141	I-Corps Team: Artificial Intelligence Models to Improve Heart Failure Management	47.084	8,541	-
NSF	TI-2234204	I- Corps: Manufacturing miniaturized high density printed circuit boards (PCB)	47.084	31,266	-
NSF	TI-2302151	ICorps:System for rapid detection of virus-loaded aerosol	47.084	36,753	-
NSF	TI-2324992	I-Corps: Catalytic Porous Organic Polymers	47.084	26,898	-
NSF	TI-2331740	I-Corps: Electrokinetic Drug Delivery into Dental Enamel	47.084	19,054	-
NSF	TI-2332387	I-Corps Teams: Hybrid solid-liquid cathode to boost lithium primary battery energy	47.084	38,636	-
NSF	TI-2333500	Cyber Tactile Perception Platform for Manufacturing Robotics Applications	47.084	55,224	-
NSF	TI-2335930	I-Corps: AI for predicting Polymer Properties for Biopolymer Films	47.084	23,069	-

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Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NSF	TI-2338198	EAGER: Preserving Privacy in the Use of Digital Currencies	47.084	252,494	-
NSF	TI-2402654	I-Corps: minimally-invasive, patient-specific intracardiac implants	47.084	3,080	-
NSF	TI-2403794	I-Corps Teams: Serrice Space Systems	47.084	21,930	-
NSF	TI-2412147	I-Corps: Using neural radiance fields (NeRF) and photogrammetry algorithms for creating 3D models	47.084	16,667	-
NSF	TI-2420417	I-Corps: Translation Potential of a Machine Learning Risk Stratification Tool for Venous Thromboembolism	47.084	11,040	-
NSF	CMMI-1826216	Manufacturing USA: Fundamentals and Applications of High-Resolution Flexographic Printing Using Nanoporous Stamps	47.RD	3,662	-
NSF	CMMI-1917891	Trinity: Tradable Mobility Credits for Efficient Transportation	47.RD	45,442	-
NSF	CNS-1932406	CPS: DFG Joint: Medium: Collaborative Research: Data-driven Secure Holonic control and Optimization for the Networked Cyber-Physical Systems (DeCisiON-CPS)	47.RD	21,698	-
NSF	DGE-0946798	Graduate Research Fellowship Program	47.RD	0	-
NSF	ECCS-1954606	Collaborative Research: Energy Efficient Voltage Controlled Non-volatile Domain Wall Devices for Neural Networks	47.RD	-3,754	-
Total for National Science Foundation				100,153,554	7,921,291
TOTAL for National Science Foundation				100,153,554	7,921,291
TOTAL Federal Research Support - On Campus				460,658,639	69,532,690

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Schedule of Expenditures of Federal Awards - Lincoln Laboratory
By Sponsor & Contract - FY 2024

Sponsor	Contract Number	Program Name	AL #	Total \$ Amount Expended	\$ Amount Passed to Subrecipients
<u>DEPARTMENT OF DEFENSE</u>					
AIR FORCE	FA8702-15-D-0001		12.RD	\$ 378,163,683	\$ 19,505,319
ARMY	FA8702-15-D-0001		12.RD	89,846,989	2,962,967
CLASSIFIED	FA8702-15-D-0001		12.RD	300,413,760	16,426,274
COMBATANT COMMANDS	FA8702-15-D-0001		12.RD	37,876,070	2,242,979
NAVY	FA8702-15-D-0001		12.RD	92,532,189	10,871,957
OFFICE OF THE SECRETARY OF DEFENSE	FA8721-05-C-0002		12.RD	(4,694)	-
	FA8702-15-D-0001		12.RD	243,402,889	11,812,219
OTHER DEPARTMENT OF DEFENSE	FA8702-15-D-0001		12.RD	94,238,233	3,763,749
TOTAL DEPARTMENT OF DEFENSE				\$ 1,236,469,119	\$ 67,585,464
<u>NON DEPARTMENT OF DEFENSE</u>					
DEPARTMENT OF COMMERCE	FA8702-15-D-0001		11.RD	8,248,654	524,911
DEPARTMENT OF ENERGY	FA8702-15-D-0001		81.RD	11,049,952	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	FA8702-15-D-0001		93.RD	5,515,615	(1,058)
DEPARTMENT OF HOMELAND SECURITY	FA8702-15-D-0001		97.RD	18,160,745	71,160
DEPARTMENT OF JUSTICE	FA8702-15-D-0001		16.RD	3,282,431	(347)
DEPARTMENT OF STATE	FA8702-15-D-0001		19.RD	3	-
DEPARTMENT OF TRANSPORTATION	FA8702-15-D-0001		20.RD	21,895,479	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	FA8702-15-D-0001		43.RD	16,409,498	1,969,299
US AGENCY FOR INTERNATIONAL DEVELOPMENT	FA8702-15-D-0001		98.RD	1,154,046	-
OTHER NON DOD	FA8702-15-D-0001		99.RD	45,753	-
TOTAL NON-DEPARTMENT OF DEFENSE				\$ 85,762,176	\$ 2,563,965
TOTAL DIRECT AWARDS				\$ 1,322,231,295	\$ 70,149,429

Appendix A-2
Massachusetts Institute of Technology
Schedule of Expenditures of Federal Awards - Lincoln Laboratory
By Sponsor & Contract - FY 2024 Continued

Prime Sponsor and Sponsor	Passthrough Contract Number	Program Name	AL #	Total	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE					
ARMY					
Advanced Functional Fabrics of America	W15QKN-16-3-0001	Controlled Reflectivity Fabrics	12.RD	11,889	-
Mesh Inc.	W911SR-23-C-0023	Improved Standoff Plume Mapping	12.RD	150,117	-
MIT Campus	W911NF-13-D-0001	Micropropulsion System for Picosatellite	12.RD	(3)	-
MIT Campus	W911NF-20-1-0037	Metastable Qubits Multi-Ion Systems	12.RD	102,598	-
Synoptic Inc.	W56KGU-21-C-0013	Retrodirective Coherency Linking Advanc	12.RD	155,441	-
TransWave Photonics LLC	W911NF-22-C-0050	Mid-wave Infrared Beam Steering	12.RD	67,350	-
DEPARTMENT OF THE AIR FORCE					
Bright Silicon Technologies	FA873024PB008	Optical Com Terminal for Airborne Netwrk	12.RD	34,420	-
Magma Space Inc.	FA864924P0043	Magnetic Bearing Reaction Wheels	12.RD	19,204	-
MIT Campus	FA8750-19-2-1000	AI for Personalized Foreign Language Education	12.RD	(153)	-
MIT Campus	FA8750-19-2-1000	AI-Enhanced Spectral Awareness	12.RD	18,185	-
MIT Campus	FA8750-19-2-1000	Objective Performance Prediction & Optimization	12.RD	293,523	-
MIT Campus	FA8750-19-2-1000	AI-Enhanced Spectral Awareness	12.RD	118,283	-
MIT Campus	FA8750-19-2-1000	AI-Robust Neural Differential Models	12.RD	218,748	-
MIT Campus	FA8750-19-2-1000	AI-Automation in Space Domain Aware	12.RD	951,500	-
MIT Campus	FA8750-19-2-1000	Trustworthy AI	12.RD	473,104	-
MIT Campus	FA8750-19-2-1000	Few-Shot and Continual Lear	12.RD	169,920	-
MIT Campus	FA8750-19-2-1000	Better Networks Via AI Enabled Hierarchic	12.RD	192,011	-
MIT Campus	FA8750-19-2-1000	Guardian Autonomy for Safe Decision Making	12.RD	244,661	-
MIT Campus	FA8750-19-2-1000	Fast AI: Quick Development of Portable H	12.RD	177,058	-
MIT Campus	FA8750-19-2-1000	ML-Enhanced Data Collection, Integration	12.RD	158,988	-
MIT Campus	FA8750-19-2-1000	Transferring Multi-Robot Learning Through	12.RD	176,843	-
MIT Campus	FA8750-19-2-1000	Conversational Interaction for Unstructured	12.RD	179,408	-
MIT Campus	FA8750-19-2-1000	Multimodal Vision for Synthetic Aperture	12.RD	209,722	-
MIT Campus	FA8750-19-2-1000	AI-Assisted Optimization of Training Sch	12.RD	168,345	-
MIT Campus	FA8750-19-2-1000	AF-Weather: Newman Child	12.RD	218,651	-
MIT Campus	FA8750-19-2-1000	AI Education & Training	12.RD	129,731	-
MIT Campus	FA8750-19-2-1000	Agents- Conflict Res and Diplomacy (AIA)	12.RD	61,664	-
MRI Global	FA8075-18-D-0017	M8 Chemistry	12.RD	114,743	-
Omni Fed LLC	FA233024PB001	Synthetic Weather Environment Injection	12.RD	18,777	-
Sedaro Corporation	FA8649-24-P-0137	Digital Twin for Hypersonics	12.RD	34,693	-
Thrust AI, LLC	FA864923P0372	Runway Situation Awareness and Alerting	12.RD	216,924	-
Ultralight Industries Corporation	FA864923P0917	Adaptable RF System for TCCBMS	12.RD	10,345	-
Ultralight Industries Corporation	FA864923P0919	Adaptable RF System for TRTRS	12.RD	33,906	-
DIRECTOR OF NATIONAL INTELLIGENCE					
MIT Campus	2022-22072700001	IC-MIT Strategic Partnership	54.RD	48,910	-
MIT Campus	2022-22072700001	IC-MIT Strategic Partnership - 2024	54.RD	11,249	-

Appendix A-2
Massachusetts Institute of Technology
Schedule of Expenditures of Federal Awards - Lincoln Laboratory
By Sponsor & Contract - FY 2024 Continued

Prime Sponsor and Sponsor	Passthrough Contract Number	Program Name	AL #	Total	\$ Amount Passed to Subrecipients
NAVY					
Aptima, Inc.	N68335-23-C-0494	Digital Sidekick for Submarines	12.RD	19,622	-
Metis Foundation	W81XWH-22-9-0009	AI-Enabled Nerve Blocks	12.RD	209,967	-
Pendar Technologies	N68335-20-C-0845	QCL Array with IW Beam Combining	12.RD	28,719	-
Pendar Technologies	N68936-21-C-0034	QCL Manufacturing 10X Cost Reduction	12.RD	14,979	-
Pendar Technologies	N68335-22-C-0009	Affordable and Efficient High-Power Long	12.RD	16,858	-
Triton Systems, Inc.	N68335-20-C-0704	Retractable Antenna for Improved Communications in Satellite-denied Environments	12.RD	13,595	-
Vescent Photonics LLC	N68335-19-C-0642	Diamond Deployed Devices	12.RD	151,958	-
OFFICE OF THE SECRETARY OF DEFENSE					
Creare, LLC	W81XWH22C006	Efficient Measure/Noise Blast	12.RD	30,750	-
Geegah, LLC	HR001121C0231	Ultracompact CMOS Integrated Ultrasonic	12.RD	8,454	-
Johns Hopkins University Applied Physics Laboratory	HQ003419D0006 (WHS1)	Cyber Resilience Assessments	12.RD	(153)	-
MIT Campus	HR00112390143	Visible-Frequency Metavalent Materials	12.RD	191,287	-
SI2 Technologies, Inc.	HQ0727-23-C-0004	High Tg Radiation Shielding	12.RD	72,569	-
Triton Systems, Inc.	W31P4Q-23-C-0001	Low Acoustic Air	12.RD	40,215	-
University of Nebraska	HHM402-23-D-0006	Beaverworks	12.RD	69,251	-
Total Department of Defense				\$ 6,058,826	\$ -
NON DEPARTMENT OF DEFENSE					
DEPARTMENT OF ENERGY					
Lawrence Berkeley National Laboratory	DE-AC02-05CH11231	Advanced Quantum Testbed	81.RD	154,065	-
MIT Campus	N000428947	Atmospheric Microplasma Sputtering	81.RD	77	-
MIT Campus	DE-AR0001591	8-GAN-ON-SI Super Junction Devices	81.RD	492,099	-
MIT Campus	N000461457	Third Phase Development of Atmospheric M	81.RD	40,169	-
MIT Campus	DE-AR0001527	VAMCO Prototype Development	81.RD	15,214	-
NP Photonics, Inc.	DE-SC0024019	Ultrafast Fiber Laser Amplifiers	81.RD	64,810	-
DEPARTMENT OF HEALTH & HUMAN SERVICES					
Massachusetts General Hospital	1-R01-DK119860-01	Diagnostic Assistant for Fatty Liver Disease	93.RD	54,290	-
Massachusetts General Hospital	1-U01-EB028660-01	Diffuse Correlation Spectroscopy for Functional Imaging of the Human Brain	93.RD	262,713	-
MBF Bioscience	2-R44-MH128076-02	Next Generation Axonal Quantification	93.RD	79,974	-
MIT Campus	5-U01-MH117072-05	Integrated Cell Type Brain Mapping (Yr 5)	93.RD	(1,211)	-
State of Maine	OSA-22-3000	Mobile Crisis Data System for Maine	93.RD	80,610	-
University of Florida	2RF1AG049722-06	Functional Connectivity Mapping	93.RD	9,472	-
University of Massachusetts Chan Medical School	K23DC016656	Speech Markers for Parkinson's	93.RD	32,057	-
FEDERAL AVIATION AUTHORITY					
MIT Campus	13-C-AJFE-MIT-047	Ascent Project 46	20.RD	1,314	-

Appendix A-2
Massachusetts Institute of Technology
Schedule of Expenditures of Federal Awards - Lincoln Laboratory
By Sponsor & Contract - FY 2024 Continued

Prime Sponsor and Sponsor	Passthrough Contract Number	Program Name	AL #	Total	\$ Amount Passed to Subrecipients
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION					
AdvR Inc.	80NSSC20C0643	High-purity, High-rate, Photon Pair Sour	43.RD	103,239	-
AdvR Inc.	80NSSC23P307	High-Rep Sources for Entanglement	43.RD	22,386	-
George Washington University	80NSSC21M0087	Autonomous Air Traffic Mgt Adv Air Mobil	43.RD	206,869	-
Goeppert, LLC	80NSSC24CA003	Study of In-Space Fabrication of 2D Semi	43.RD	28,288	-
Jet Propulsion Laboratory	NNN12AA01C	Psyche Deep-Space Optical Communications	43.RD	25,411	-
Jet Propulsion Laboratory	NNN12AA01C	Europa Lander Ladar Design Study	43.RD	936,129	-
Jet Propulsion Laboratory	NNN12AA01C	Uplink Laser Transmitter Study	43.RD	225,402	-
Jet Propulsion Laboratory	80NM0018D0004	JPL DEEP SPACE OPTICAL COMMUNICATIONS 3	43.RD	2,152	-
MIT Campus	80NSSC20K0401	Toward Fast, Low-Noise, Radiation-Tolerant	43.RD	6,660	-
MIT Campus	62467927-176172	Safe Aviation Autonomy	43.RD	249,155	-
MIT Campus	NNG14FC03C	Faint Object Detection in TESS Data	43.RD	51,590	-
MIT Campus	80NSSC23K0211	Extremely Low-Noise, High Frame-Rate X-R	43.RD	467,547	-
MIT Campus	80NSSC22K0788	Curved Detectors for Future X-Ray Astrop	43.RD	473,611	-
MIT Campus	80GSFC23CA045	Survey and Time Domain	43.RD	282,078	-
MIT Campus	63043778-249824	Digital CCD Characterization	43.RD	2,636	-
Physical Sciences, Inc.	80NSSC23CA138	Customized Fiber for DSOC	43.RD	175,834	-
TruWeather Solutions	80NSSC22PB235	Multipurpose Doppler Lidar Measurements	43.RD	87,028	-
Vescent Photonics, LLC	80NSSC21C0091	SBS Lasers for Quantum Timing	43.RD	185,194	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION					
NOAA Collaboration Agreement	NA21OAR4590385	Development and Deployment of a Sea Clutter Class within the Operational WSR-88D	11.RD	60,784	-
National Weather Service	NA23OAR4590397	PADWOS-2	11.RD	228,058	-
NATIONAL SCIENCE FOUNDATION					
University of Illinois Urbana-Champaign	FAIN 2016244	Quantum Leap Challenge Institute	47.070	220,345	-
MIT Campus	AST-1836002	LLAMAS Optical System Integration	47.070	129,891	-
Regents of the University of Michigan	1952279	Improving Human-Exoskeleton through Dyna	47.070	17,288	-
The Regents of the University of Colorado	OMA 2016244	Quantum Leap Challenge Institute	47.070	82,213	-
MIT Campus	AGS-1952737	Millstone Hill Geospace Facility: Vector Sensor Meteor	47.070	210,816	-
Sangtera, Inc.	2335170	Fast Microactuator Stage Technology	47.070	120,326	-
Other					
Tennessee Technological University	MU-21579-23	Multi-State Smart Grid Deployment	23.RD	50,399	-
Total Non Department of Defense				\$ 5,936,982	\$ -
Total Passthrough Awards				\$ 11,995,808	\$ -
Total Federal Awards				\$ 1,334,227,103	\$ 70,149,429

Appendix A3
Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE					
Boise State University					
DEPARTMENT OF DEFENSE	10287-PO140635	Extending Electron Emission Physics in Crossed Field Devices	12.800	285,652	-
Total for Boise State University				285,652	-
Carnegie-Mellon University					
DEPARTMENT OF DEFENSE	1150205-477380	Synthetic biological systems made using structural PNA nanotechnology	12.800	190,183	-
DEPARTMENT OF DEFENSE	1130252-431282	Individualized Adaptation in Human Agent Teams	12.630	31,183	-
DEPARTMENT OF DEFENSE	1190068-455963	RECTIFY: Rechargeability Enabled by Coated inTerfaces and dIFferentable phYsical modeling	12.910	89,685	-
DEPARTMENT OF DEFENSE	1130233-469602	Multimodal World Models	12.431	377,860	-
Total for Carnegie-Mellon University				688,911	-
Purdue University					
DEPARTMENT OF DEFENSE	13001075-011	Topological plasma structures for control of electromagnetic interactions	12.800	-48,209	-
DEPARTMENT OF DEFENSE	13001259-054	EMBR: A Collaborative Center for Energetic Materials Basic Research	12.431	348,753	-
Total for Purdue University				300,544	-
University of Maryland					
DEPARTMENT OF DEFENSE	131730-Z8615202	Design and control of atomic defects in group II-oxide materials	12.800	123,163	-
Total for University of Maryland				123,163	-
Bluehalo					
DEPARTMENT OF DEFENSE	16383	Space Logistics Assembly Disassembly Experiment with Swarms (SLADES)	12.RD	117,323	-
Total for Bluehalo				117,323	-
Columbia University					
DEPARTMENT OF DEFENSE	2(GG016303)/PO SAPOG15323	Ensembles of Molecules in Controlled Quantum States for Quantum Simulations, Ultracold Reactions, and Precision Metrology	12.800	222,590	-
DEPARTMENT OF DEFENSE	1(GG018601-04)	IMPEDE: Inhibiting Molds with Probiotic Ensembles from Diverse Environments	12.910	469,525	-

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Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE	SUB# 5(GG015670) / PO# SAPOG16919	TRAUMAS: Treatment and recovery augmented with electrical and ultrasound- mediated actuation and sensing	12.910	231,616	-
Total for Columbia University				923,731	-
Stanford University					
DEPARTMENT OF DEFENSE	62455258-159327	ANSRE: Analysis and Synthesis of Rare Events	12.800	171,333	-
DEPARTMENT OF DEFENSE	62780871-155611	Engineering native human skin commensals to eliminate attractants and introduce repellents and mosquito tracking using millisecond device apparati	12.910	-537	-
DEPARTMENT OF DEFENSE	62781405-155611	Engineering native human skin commensals to eliminate attractants and introduce repellents and mosquito tracking using millisecond device apparati	12.910	-56,228	-
DEPARTMENT OF DEFENSE	62781407-155611	Engineering native human skin commensals to eliminate attractants and introduce repellents and mosquito tracking using millisecond device apparati	12.910	12,230	-
DEPARTMENT OF DEFENSE	62781408-155611	Engineering native human skin commensals to eliminate attractants and introduce repellents and mosquito tracking using millisecond device apparati	12.910	-537	-
DEPARTMENT OF DEFENSE	MULTIPLE	Engineering native human skin commensals to eliminate attractants and introduce repellents and mosquito tracking using millisecond device apparati	12.910	86,921	-
DEPARTMENT OF DEFENSE	SUBAWARD NO. 62780872-155611	Engineering native human skin commensals to eliminate attractants and introduce repellents and mosquito tracking using millisecond device apparati	12.910	-60,483	-
DEPARTMENT OF DEFENSE	61957754-136921	AI Nets: Predicting Action and Inferring Intentions of Groups of Targets with a Network of Surveillance Robots	12.300	69,860	-
Total for Stanford University				222,559	-
Lincoln Laboratory					
DEPARTMENT OF DEFENSE	7000511601	Aluminum-Water Buoyancy Engine for Fast Vertical Underwater Glider	12.RD	-4,270	-
DEPARTMENT OF DEFENSE	7000569882	Safety in Aerobatic Flight Regimes (SAFR)	12.RD	60,149	-
DEPARTMENT OF DEFENSE	7000597266	Simulating Spacecraft Attitude Dynamics During In-Space Assembly, Manufacturing and Deployment	12.RD	49,347	-
DEPARTMENT OF DEFENSE	7000597323	Tunable Knitted Tissue Scaffolds	12.RD	117,243	-
DEPARTMENT OF DEFENSE	7100541584	Audio-Visual Learning from Unannotated Video	12.RD	148,814	-
DEPARTMENT OF DEFENSE	PO #7000582877	Traction Drive Design Considerations for Large Ships	12.RD	20,540	-
DEPARTMENT OF DEFENSE	PO #7000588541	Electrification Study Lincoln Labs	12.RD	142,943	-
DEPARTMENT OF DEFENSE	PO #7000603392	Miniaturized Coherent Raman Spectrometer.	12.RD	59,691	-

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Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE	PO #7000604683	Acoustic Expander for Cryogenic Refrigeration	12.RD	27,304	-
DEPARTMENT OF DEFENSE	PO #7000607038	Rapid Biosynthesis	12.RD	89,249	-
DEPARTMENT OF DEFENSE	PO #7000607119	Self-Aligning Flight Optical System (SAFOS) Technology Initiative Campus collaboration	12.RD	4,320	-
DEPARTMENT OF DEFENSE	PO 7000550459	Autonomous Systems Line Robot Training from Demonstration	12.RD	126,876	-
DEPARTMENT OF DEFENSE	PO 7000558287	MIT Haystack Observatory Engineering Support for The Lincoln Space Surveillance Complex (LSSC)	12.RD	3,427,477	-
DEPARTMENT OF DEFENSE	PO 7000558703	Compact Second Harmonic Generation for Atomic Clocks and Sensors	12.RD	62,578	-
DEPARTMENT OF DEFENSE	PO 7000570786	Exergy Control for Supplying Mission-critical Loads	12.RD	100,911	-
DEPARTMENT OF DEFENSE	PO 7000589362	Machine Learning-Enabled Materials Engineering (MEME)	12.RD	47,922	-
DEPARTMENT OF DEFENSE	PO 7000592866	Space-WATCH Marketplace Architecture Design	12.RD	192,993	-
DEPARTMENT OF DEFENSE	PO 7000594535	New Data-Driven Signal Processing Methods for Satcom Systems and Networks	12.RD	59,690	-
DEPARTMENT OF DEFENSE	PO 7100386377 / 7000386377	Time-Resolved Observations of Precipitation structure and storm Intensity with a Constellation of Smallsats (TROPICS)	12.RD	-16,523	-
DEPARTMENT OF DEFENSE	PO 7100533287	Heteroepitaxial Integrated Photonics (HIP)	12.800	-1,270	-
DEPARTMENT OF DEFENSE	PO 7100540807	Project Tandem - Advance Open Autonomy for AUVs	12.RD	-51	-
DEPARTMENT OF DEFENSE	PO 7100545061	Line-funded SNSPD-array Program	12.RD	102,111	-
DEPARTMENT OF DEFENSE	PO OLD 7000535491 / NEW 7100535491	Midwave Infrared Integrated Photonics Platform	12.RD	18,587	-
DEPARTMENT OF DEFENSE	PO# 7100502464	Long Range Transmissive X-ray Study	12.RD	6,133	-
DEPARTMENT OF DEFENSE	PO# 7000379430	Lane-keeping with Localizing GPR in Poor Conditions	12.RD	1,381	-
DEPARTMENT OF DEFENSE	PO# 7000385936	Design and Characterization of JTWPAs	12.RD	-231	-
DEPARTMENT OF DEFENSE	PO# 7000444597	Wide Area Ocean Floor Mapping	12.RD	16,289	-
DEPARTMENT OF DEFENSE	PO# 7000445983	Ionobot: Autonomous Ocean Platform	12.RD	5	-
DEPARTMENT OF DEFENSE	PO# 7000455589	Wallace Observatory Support in Mustang Program	12.RD	2,170	-
DEPARTMENT OF DEFENSE	PO# 7000471328	Superconducting Sensors for Neutrino Detection	12.RD	38,540	-
DEPARTMENT OF DEFENSE	PO# 7000483598	System Analysis and Prototype Development for Undersea Exploration Platforms	12.RD	4,147	-
DEPARTMENT OF DEFENSE	PO# 7000497681	Multimodal Learning for Medical Diagnostics and Decision-Making (ML4MD)	12.RD	22,857	-
DEPARTMENT OF DEFENSE	PO# 7000526012	Quantum Bus	12.RD	-430	-
DEPARTMENT OF DEFENSE	PO# 7000527979	SBS Lasers for Quantum Timing	12.RD	124,132	-

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Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE	PO# 7000530004	Demonstrating Performance of 3D-Integrated Qubit Arrays and Protected Qubits	12.RD	144,298	-
DEPARTMENT OF DEFENSE	PO# 7000531792	Dual-Purpose Gasphilic Surfaces for Enhanced Microchannel Flow Boiling and Drag Reduction	12.RD	-11,757	-
DEPARTMENT OF DEFENSE	PO# 7000534582	Optical Antenna Design for Advanced Cooling and State Preparation of Trapped Ions	12.RD	25,016	-
DEPARTMENT OF DEFENSE	PO# 7000538504	Miniaturized Coherent Raman Spectrometer	12.RD	-186	-
DEPARTMENT OF DEFENSE	PO# 7000544674	Secure Blended Service for 5G and Beyond	12.RD	-256	-
DEPARTMENT OF DEFENSE	PO# 7000552061	Development of Coupled Thermomechanics Models of Material Ablation and Spallation in Hypersonic Environments	12.RD	28,489	-
DEPARTMENT OF DEFENSE	PO# 7000562772	Wearable Stem Cell Scaffolds for Expedited Tissue Regeneration	12.RD	28,077	-
DEPARTMENT OF DEFENSE	PO# 7000563119	MANATEE -Multi-Agent Naval Autonomy Tactical Evaluation Environment	12.RD	24,929	-
DEPARTMENT OF DEFENSE	PO# 7000564234	Fabrication of Quadrant TIRGAS	12.RD	34,015	-
DEPARTMENT OF DEFENSE	PO# 7000564486	Air-Launched Balloon	12.RD	66,217	-
DEPARTMENT OF DEFENSE	PO# 7000564817	Aircraft Routing for Reduced Climate Impact (ARRCI)	12.RD	26,094	-
DEPARTMENT OF DEFENSE	PO# 7000564981	Optimal Diver AUV Teaming for Sticky Missions	12.RD	100,881	-
DEPARTMENT OF DEFENSE	PO# 7000566745	Extending the Cyber Threat, Vulnerability and Mitigation Knowledge in BRON with Exploit Information	12.RD	60,024	-
DEPARTMENT OF DEFENSE	PO# 7000567147	Autonomy AI fresco	12.RD	287,976	-
DEPARTMENT OF DEFENSE	PO# 7000568006	Spherical Control Moment Gyroscope	12.RD	101,974	-
DEPARTMENT OF DEFENSE	PO# 7000569054	High-throughput electron microscopy for materials reactions	12.RD	149,160	-
DEPARTMENT OF DEFENSE	PO# 7000570582	MAESTRO / COBALT	12.RD	60,005	-
DEPARTMENT OF DEFENSE	PO# 7000571412	Epitaxial Cubic BN/Diamond Heterostructures for High-Power RF Electronics	12.RD	94,337	-
DEPARTMENT OF DEFENSE	PO# 7000575655	Network Coding for Secure Low Latency Communications	12.RD	60,282	-
DEPARTMENT OF DEFENSE	PO# 7000578192	Widely-Tunable and Low-Loss Surface Acoustic Wave Radiofrequency Filters	12.RD	89,234	-
DEPARTMENT OF DEFENSE	PO# 7000580647	Pulse-Modulation Techniques for Fast Quantum Logic Using Trapped Ions	12.RD	40,885	-
DEPARTMENT OF DEFENSE	PO# 7000583375	OBSIDIAN:Optimized Brillouin-Stabilized	12.RD	158,040	-
DEPARTMENT OF DEFENSE	PO# 7000585128	Scalable Automation of High-Fidelity Computational Fluid Simulations with Geometric Deep Learning	12.RD	48,586	-

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FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE	PO# 7000585267	Development of Coupled Thermomechanics Models of Material Ablation and Spallation in Hypersonic Environments	12.RD	210,860	-
DEPARTMENT OF DEFENSE	PO# 7000587144	Explaining why a treatment effect can vary across populations: Understanding generalization via the transport problem	12.RD	51,397	-
DEPARTMENT OF DEFENSE	PO# 7000588173	Sensor Fusion for Autonomous Systems	12.RD	176,095	-
DEPARTMENT OF DEFENSE	PO# 7000589385	Deep learning tools for strain engineering	12.RD	50,324	-
DEPARTMENT OF DEFENSE	PO# 7000594760	Transforming industrial solvent waste management by separation and recovery of water-solvent mixtures using nanoporous atomically thin membranes	12.RD	51,436	-
DEPARTMENT OF DEFENSE	PO# 7000601079	Delay Line Memories	12.RD	53,752	-
DEPARTMENT OF DEFENSE	PO# 7000602819	SensorGPT – Optical Design	12.RD	13,277	-
DEPARTMENT OF DEFENSE	PO# 7000616010	Event Camera Robotic Perception	12.RD	6,940	-
DEPARTMENT OF DEFENSE	PO# 7100389700	WaferSat	12.RD	21,099	-
DEPARTMENT OF DEFENSE	PO# 7100471328	Superconducting Sensors for Neutrino Detection	12.RD	27	-
DEPARTMENT OF DEFENSE	PO# 7100501363	Reconfigurable Computer Generated Holograms for Freeform Optics	12.RD	-8,158	-
DEPARTMENT OF DEFENSE	PO# 7100514642	Development of Coupled Thermomechanics Models of Material Ablation and Spallation in Hypersonic Environments	12.RD	-3	-
DEPARTMENT OF DEFENSE	PO# 7100531720	Influence Quantification (IQ)	12.RD	170,521	-
DEPARTMENT OF DEFENSE	PO# 7100532906	Sampling the thermodynamic of materials interfaces with machine learning	12.RD	99,300	-
DEPARTMENT OF DEFENSE	PO# 7100537912	High-Performance Micropropulsion System	12.RD	61,283	-
DEPARTMENT OF DEFENSE	PO# 7100544348	Germanium Charge-Coupled Devices for Large-Format, Low-Noise Hard X-Ray Sensors	12.RD	101,354	-
DEPARTMENT OF DEFENSE	PO#7000555953	An Integrated Visible Light Platform for Compact Ultranarrow Linewidth Lasers	12.RD	28,142	-
DEPARTMENT OF DEFENSE	PO#7000559666	Synthetic electricity and gas load profiles for buildings	12.RD	121,641	-
DEPARTMENT OF DEFENSE	PO#7000561077	Electrostatic Actuation of Deployable Space Structures	12.RD	31,805	-
Total for Lincoln Laboratory				7,909,036	-
University of California/Davis					
DEPARTMENT OF DEFENSE	A22-2094-S003	ExPlor -Center of Excellence on Brain-Derived Neuromorphic Computing with Intelligent Photonic and Electronic Materials	12.800	56,478	-
Total for University of California/Davis				56,478	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Emory University					
DEPARTMENT OF DEFENSE	A755302 (FORMERLY A007735)	MURI: Molecular Level Studies of Solid-Liquid Interfaces in Electrochemical Processes	12.800	332,632	-
Total for Emory University				332,632	-
AI Asset Management LLC					
DEPARTMENT OF DEFENSE	AGMNT DTD 6/1/23	Robotic Process Automation using NLP	12.RD	11,237	-
DEPARTMENT OF DEFENSE	AGMT DTD 2/27/24	Native Language Manual Translation (NLMT): (USAF, STTR: AFWERX; AFX23E-TPCSO1)	12.RD	34,894	-
Total for AI Asset Management LLC				46,131	-
Autonomous Cyber LLC					
DEPARTMENT OF DEFENSE	AGMT DATED 3/14/2024	AI-Driven Cyber Operations: Automated Vulnerability Discovery and Weaponization	12.RD	28,518	-
DEPARTMENT OF DEFENSE	AGMT. DTD. 07/01/2023	Human-AI Teams for Cyber Operations	12.RD	23,363	-
Total for Autonomous Cyber LLC				51,881	-
Electra.aero					
DEPARTMENT OF DEFENSE	AGMT DATED 5/6/2022	Innovative Control and Configurations for Aircraft with Distributed Electric Propulsion	12.RD	95,916	-
Total for Electra.aero				95,916	-
Atlantic Quantum					
DEPARTMENT OF DEFENSE	AGMT DTD 1/18/24	Supporting infrastructure for Fluxonium Quantum Processors	12.RD	32,856	-
Total for Atlantic Quantum				32,856	-
Istari, Inc.					
DEPARTMENT OF DEFENSE	AGMT DTD 2/3/23	Feasibility of Neural Control Certificates for Rare Events: Towards a Fully Digital Airworthiness Certification	12.RD	-57	-
Total for Istari, Inc.				-57	-
Mesodyne					
DEPARTMENT OF DEFENSE	AGMT DTD 3/31/2022	Design and Optimization of a JP-8 injector for meso-combustors	12.RD	66,850	-
Total for Mesodyne				66,850	-
Camo Platforms, Inc.					
DEPARTMENT OF DEFENSE	AGMT DTD 5/5/23	AI-enabled health and wellness platform for Air Force	12.RD	18,467	-
Total for Camo Platforms, Inc.				18,467	-

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Metis Design Corporation					
DEPARTMENT OF DEFENSE	AGMT DTD. 2/13/23	AFWERX Direct to Phase II proposal: Low-Cost Manufacturing of Autoclave-Grade Composite Structures Outside of an Oven	12.RD	94,330	-
DEPARTMENT OF DEFENSE	AGMT DTD 1/23/2020	Scalable Manufacturing of Composite Components using Nanostructured Heaters - STTR Phase 2	12.RD	23,199	-
DEPARTMENT OF DEFENSE	STTR AGRMNT DTD. 5/29/2020	N19A-T003: Phase 2 - Interlaminar Reinforcement of Composite Rotorcraft Components via Tailored Nanomorphologies of Aligned Carbon Nanotubes	12.RD	107,892	-
Total for Metis Design Corporation				225,421	-
Alexandria Health LLC					
DEPARTMENT OF DEFENSE	AGMT. DTD. 11/15/2022	Benchmarking Low Volume / High Risk Trauma Procedures to Improve Surgical Outcomes and Improve Readiness using Machine-Learning Algorithms	12.RD	92,364	-
Total for Alexandria Health LLC				92,364	-
Research Foundation of SUNY Polytechnic Institute					
DEPARTMENT OF DEFENSE	AGREEMENT DATED 1-1-2021	AIM Phase II	12.800	654,258	-
Total for Research Foundation of SUNY Polytechnic Institute				654,258	-
Research Foundation of SUNY-Buffalo					
DEPARTMENT OF DEFENSE	AGREEMENT DATED 1-1-2021	AIM Phase II	12.800	168,427	-
Total for Research Foundation of SUNY-Buffalo				168,427	-
Federal Foundry					
DEPARTMENT OF DEFENSE	AGRMT DTD 08/05/2022	Profit Analysis Aligned to Performer Go/No-Go Decision Criteria	12.RD	274,173	-
Total for Federal Foundry				274,173	-
Kall Morris Inc.					
DEPARTMENT OF DEFENSE	AGRMT DTD. 2/11/2022	STTR: Comprehensive RSO Salvage with Megaconstellation Repurposing	12.RD	-1,186	-
Total for Kall Morris Inc.				-1,186	-
Nominal Inc					
DEPARTMENT OF DEFENSE	AGRMT EFFECTIVE 9/1/23	Advanced Telemetry Data Review and Analysis Tools for Accelerating Vehicle Assessment	12.RD	15,873	-

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Total for Nominal Inc				15,873	-
XAnalytix Systems, LLC					
DEPARTMENT OF DEFENSE	AGRMT. DTD 3-1-2023	Co-Orbital Threat Prediction and Assessment	12.RD	30,240	-
Total for XAnalytix Systems, LLC				30,240	-
University of Chicago					
DEPARTMENT OF DEFENSE	AWD103286 (SUB00000755)	Design and Optimization of Synthesizable Materials with Targeted Quantum Characteristics	12.800	236,191	-
Total for University of Chicago				236,191	-
NeuroGeneces LLC					
DEPARTMENT OF DEFENSE	AWRD DTD 2/8/2021	Transforming Cognitive Performance While You Sleep	12.RD	14,927	-
Total for NeuroGeneces LLC				14,927	-
Picogrid, Inc					
DEPARTMENT OF DEFENSE	AWRD DTD 9/1/23	Adapting Picogrid FireOps Capability as Military/Civil Authorities Integration Dashboard (AID)	12.RD	22,853	-
DEPARTMENT OF DEFENSE	AWRD DTD 9/1/23	Adapting Picogrid Lander as Contingency Starlink Solar Terminal (CSST)	12.RD	22,786	-
DEPARTMENT OF DEFENSE	AWRD DTD 9/1/23	Integrating Picogrid and Distributed Spectrum Platforms for Ground-to-Space Electronic Warfare (GEW)	12.RD	22,787	-
Total for Picogrid, Inc				68,426	-
The University of Central Florida					
DEPARTMENT OF DEFENSE	GR108261	Towards a Programmable Plasmonic Information Processor based on Graphene, 2D Materials, and Rare-Earth Atoms	12.800	131,350	-
Total for The University of Central Florida				131,350	-
University of California-Santa Barbara					
DEPARTMENT OF DEFENSE	KK2014	Quantum Codes, Tensor Networks, and Quantum Spacetime	12.800	189,030	-
DEPARTMENT OF DEFENSE	KK1713	Neural foundations of expertise based on optimal decision-making, physical control and responses to stress	12.431	25,100	-
DEPARTMENT OF DEFENSE	KK1808	From Data-Driven Operator Theoretic Schemes to Predication, Inference, and Control of Systems	12.431	46,212	-
DEPARTMENT OF DEFENSE	SUBAWARD KK1957-29	Fundamental Biological Factors Underlying Human Performance	12.RD	211,260	-
DEPARTMENT OF DEFENSE	SUBAWARD NO. KK1955	ICB UARC projects - Research Projects	12.431	637,357	-

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DEPARTMENT OF DEFENSE	SUBAWARD NO. KK1957-02	Fundamental Biological Factors Underlying Human Performance	12.RD	941	-
DEPARTMENT OF DEFENSE	SUBAWARD NO. KK1957-18	Fundamental Biological Factors Underlying Human Performance	12.RD	337,833	-
Total for University of California-Santa Barbara				1,447,733	-
University of New Hampshire					
DEPARTMENT OF DEFENSE	L0149	Radio Interferometer for Thunderstorm Studies	12.800	199	-
Total for University of New Hampshire				199	-
Raytheon Technologies Corporation					
DEPARTMENT OF DEFENSE	PO 2609839	Scalable Predictions and Analytics of Rare events in Titanium Alloys (SPARTA)	12.RD	64,707	-
Total for Raytheon Technologies Corporation				64,707	-
GE Global Research					
DEPARTMENT OF DEFENSE	PO 401134429	Measuring Biological aptitude	12.RD	264,538	-
DEPARTMENT OF DEFENSE	PO 401170010	Human-inspired IDentity Extraction (HIDE) [IARPA BRIAR]	12.RD	414,856	-
Total for GE Global Research				679,394	-
State University of New York					
DEPARTMENT OF DEFENSE	R1302889	Space Object Understanding and Reconnaissance of Complex Events (SOURCE)	12.800	94,758	-
Total for State University of New York				94,758	-
UES, Inc.					
DEPARTMENT OF DEFENSE	S-210-21P-001	Polymers and Responsive Materials Research, Development, and Exploration	12.RD	31,837	-
Total for UES, Inc.				31,837	-
Applied Research Associates, Inc.					
DEPARTMENT OF DEFENSE	S-D00243-05-IDIQ-MIT	Machine Intelligence Solutions for Nuclear Explosion Monitoring (MINEM)	12.RD	59,885	-
Total for Applied Research Associates, Inc.				59,885	-
Johns Hopkins University					
DEPARTMENT OF DEFENSE	SUB #2005171653, AGMT DTD 9/1/21	The Science of Learning from Observations: Leveraging Scientific Computation with Intrinsic Machine Learning Models and Lifelong Learning	12.800	127,595	-

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Total for Johns Hopkins University				127,595	-
Siemens Corporation, Corporate Technology					
DEPARTMENT OF DEFENSE	SUB AGREEMENT NO. 198-02	Systemic Generative Engineering	12.RD	14,193	-
Total for Siemens Corporation, Corporate Technology				14,193	-
Azimuth Corporation					
DEPARTMENT OF DEFENSE	SUBCONTRACT AGREEMENT # 303-001-MIT	Reducing ISR Sensor Acquisition and Sustainment Costs through Improved Metalens Design and Manufacturability	12.RD	170,402	-
Total for Azimuth Corporation				170,402	-
Radiation Monitoring Devices					
DEPARTMENT OF DEFENSE	SUBCONTRACT C24-14	Tunable and Reconfigurable Metasurfaces enabled by Atomic Layer Deposition of Phase Change Materials	12.RD	227,021	-
Total for Radiation Monitoring Devices				227,021	-
University of Washington					
DEPARTMENT OF DEFENSE	UWSC11381 BPO42935	Neural-inspired sparse sensing and control for agile flight	12.800	368,384	-
DEPARTMENT OF DEFENSE	UWSC11420	2D MAGIC: New Science from Two-Dimensional MAGnetIC Heterostructures	12.800	318,939	-
DEPARTMENT OF DEFENSE	UWSC13445	Scalable Hybrid-optics Integrated Night-vision Eyeglass (SHINE)	12.RD	114,956	-
Total for University of Washington				802,279	-
Wright Brothers Institute					
DEPARTMENT OF DEFENSE	WBPO-21-018-MIT	Probiotic interventions to reduce fatigue by maintaining brain ATP levels	12.RD	-17,107	-
Total for Wright Brothers Institute				-17,107	-
University of Wisconsin-Madison					
DEPARTMENT OF DEFENSE	0000000208	From Particles to Landforms: Integrating Theory, Computation, Experiments and Field Data to Overcome Empiricisms	12.431	49,611	-
Total for University of Wisconsin-Madison				49,611	-
Beth Israel Deaconess Medical Center					
DEPARTMENT OF DEFENSE	01029123	DAMP-Mediated Innate Immune Failure and Pneumonia after Trauma	12.420	-1,705	-

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Total for Beth Israel Deaconess Medical Center				-1,705	-
Tufts University					
DEPARTMENT OF DEFENSE	104564-00001/PO EP0221331	Functional Protein□Metal Composites via Modeling and Selection	12.431	76,838	-
Total for Tufts University				76,838	-
Brigham & Women's Hospital					
DEPARTMENT OF DEFENSE	122096	A Novel Approach to Lower Extremity Residual Limb Revision to Augment Volitional Motor Control, Restore Proprioception and Reverse Limb Atrophy	12.420	125,462	-
DEPARTMENT OF DEFENSE	SUBAWARD 117951	A Novel Approach to Lower Extremity Amputation to Augment Volitional Motor Control and Restore Proprioception	12.420	-10,556	-
DEPARTMENT OF DEFENSE	SUBAWARD 119948	A Novel Approach to Upper Extremity Amputation to Augment Volitional Motor Control and Restore Proprioception	12.420	-42,490	-
Total for Brigham & Women's Hospital				72,416	-
Harvard University					
DEPARTMENT OF DEFENSE	134119-5110647	Topological Superconductivity using Layered Materials	12.431	-30	-
DEPARTMENT OF DEFENSE	134371-5113608	Quantum optimization with programmable simulators based on atom arrays	12.431	788,289	-
DEPARTMENT OF DEFENSE	134396-5117987	Multi-Functional Devices in Precisely Engineering van der Waals Homojunctions	12.431	124,240	-
DEPARTMENT OF DEFENSE	134430-5127403	Entangled Neutral Atoms for Logical Quantum Teleportation (ENAQT)	12.431	119,572	-
DEPARTMENT OF DEFENSE	130417-5114573	Next-Generation Materials for Oxygen Generation, Transport, and Storage in the Undersea Environment	12.300	317,742	-
Total for Harvard University				1,349,813	-
Duke University					
DEPARTMENT OF DEFENSE	313-0837	Quantum control based on real-time environment analysis by spectator qubits	12.431	216,705	-
Total for Duke University				216,705	-
University of Pennsylvania					
DEPARTMENT OF DEFENSE	572622	ARCHES: Autonomous Resilient Cognitive Heterogeneous Swarms	12.630	14,421	-
DEPARTMENT OF DEFENSE	586938	ARCHES: Autonomous Resilient Cognitive Heterogeneous Swarms Y6	12.630	872,770	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE	SUB# 580416 / PO# 4531469	High-speed Off-Road Dataset Collection	12.630	-28	-
DEPARTMENT OF DEFENSE	572339	New phase change materials for photonics: from in-silico design to novel device concepts	12.300	2,461	-
DEPARTMENT OF DEFENSE	584551	Low Cost Autonomous Navigation & Semantic Mapping in the Littorals	12.630	291,412	-
DEPARTMENT OF DEFENSE	PO 4928948, 4673492, 574340	Blueprint for design and assembly of multifunctional, adaptive materials using the nanocrystal periodic table	12.300	11,066	-
DEPARTMENT OF DEFENSE	SUBAWARD NO. 585666	Uncertainty-based Active Self-Learning for Perception	12.300	128,414	-
Total for University of Pennsylvania				1,320,516	-
Northwestern University					
DEPARTMENT OF DEFENSE	60063525 MIT	The Army Synthetic Biology Center for Predictive Materials Design (PreMaDe)	12.431	415,540	-
Total for Northwestern University				415,540	-
Dexai Robotics					
DEPARTMENT OF DEFENSE	AGMT DTD 02/02/2024	Time-Optimal Motion Planning on Convex Sets	12.630	50,000	-
Total for Dexai Robotics				50,000	-
Somagenics, Inc.					
DEPARTMENT OF DEFENSE	AGRMNT DTD 9/1/22	Acceleration of burn healing through a novel sustained-release smart dressing	12.420	25,659	-
Total for Somagenics, Inc.				25,659	-
Georgia Institute of Technology					
DEPARTMENT OF DEFENSE	AWD-000084-G3	Formal Foundations of Algorithmic Matter and Emergent Computation	12.431	162,998	-
DEPARTMENT OF DEFENSE	AWD-005072-G1	Understanding and Building Overall Cognitive Capability through Attention Control	12.300	209,251	-
DEPARTMENT OF DEFENSE	RK015-G3/AWD-102036-G3/PO-5011372	Leveraging a New Theoretical Paradigm to Enhance Interfacial Thermal Transport in Wide Bandgap Power Electronics	12.300	5,405	-
Total for Georgia Institute of Technology				377,654	-
Texas A & M					
DEPARTMENT OF DEFENSE	M2101903	Extreme Mechanics of Bio-inspired Mixed-Dimensional Carbon Nanostructures with Thermally Robust Interfacial Bonds	12.431	2,649	-
Total for Texas A & M				2,649	-
University of Massachusetts - Amherst					

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DEPARTMENT OF DEFENSE	PO# WA01334478/SUB00000116	Determining Mechanistic Links Between Traumatic Brain Injury, Stress Response, and Neurodegeneration	12.420	-10,008	-
Total for University of Massachusetts - Amherst				-10,008	-
University of Michigan					
DEPARTMENT OF DEFENSE	PO3005498246/SUBK00010160	Near-Field Radiative Heat Transfer and Energy Conversion in Nanogaps of Nano- and Meta-Structured Materials	12.431	118,252	-
DEPARTMENT OF DEFENSE	SUBK00020420 / PO# 3007917911	Programming Indigenous Gut Bacteria to Prevent Colorectal Cancer Induced by Microbial Carcinogen	12.420	26,736	-
DEPARTMENT OF DEFENSE	3004811123	Applications Driving Architectures (ADA) Center	12.RD	-15,177	-
DEPARTMENT OF DEFENSE	SUB# SUBK00020518 / PO# 3008135063	RECTIFY: Rechargeability Enabled by Coated inTerfaces and dIFferentable pHysical modeling	12.910	15,005	-
DEPARTMENT OF DEFENSE	SUBK00020903	Passive surface drag reduction with closed loop texture design	12.RD	44,571	-
DEPARTMENT OF DEFENSE	SUBK00009163 / PO3005498095	Rapid Autopilot Prototyping for Minimally Modeled Aircraft	12.300	-1,518	-
Total for University of Michigan				187,869	-
University of Arizona					
DEPARTMENT OF DEFENSE	PURCHASE ORDER NO. 641689	Generation, manipulation, control, and applications of entanglement in a large network	12.431	404,267	-
Total for University of Arizona				404,267	-
California Institute of Technology					
DEPARTMENT OF DEFENSE	S581840	Disorder engineering: a Geometry-Enhanced Network Theory for irregular METamaterials (GENT-MET)	12.431	165,197	-
Total for California Institute of Technology				165,197	-
CREARE, Incorporated					
DEPARTMENT OF DEFENSE	S829	Hybrid Nanofluids for Enhanced Liquid Cooling in Pumped Loops	12.RD	53,431	-
Total for CREARE, Incorporated				53,431	-
University of Southern California					
DEPARTMENT OF DEFENSE	SCON-00002258	Anomalous Polar Textures in Quasi-1D Chalcogenides and Heterostructures	12.431	38,473	-
DEPARTMENT OF DEFENSE	SCON-00005095	Quantum Error Correction Under Control	12.431	140,643	-
DEPARTMENT OF DEFENSE	SCON-00005421	TRACER	12.RD	379,320	-

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DEPARTMENT OF DEFENSE	SCON-00005835	Tensor Optical Processors using Coherent Hyperspectral Integrated Photonics (TOPCHIP)	12.910	42,998	-
DEPARTMENT OF DEFENSE	107215392	Livtronics: Living Electronics for Biologically-Enhanced Sensing, Computing, and Signal Transmission	12.300	105,603	-
DEPARTMENT OF DEFENSE	125046653	Multi-modal Open World Grounded Learning and Inference (MOWGLI)	12.910	274,415	-
Total for University of Southern California				981,452	-
Ohio State University					
DEPARTMENT OF DEFENSE	SPC-1000007046 GR129057	Science and Technology of Next Generation mm-Wave and THz AlGaN Transistors	12.431	272,811	-
Total for Ohio State University				272,811	-
LongWave Photonics LLC					
DEPARTMENT OF DEFENSE	STTR AGMT UNDER W911NF21C0054	Tunable Active HETerodyne THz Imager (TAHETI)	12.RD	56,131	-
Total for LongWave Photonics LLC				56,131	-
University of California - Berkeley					
DEPARTMENT OF DEFENSE	SUB#00010865/PO#BB01662896	Collaborative Hierarchical and Agile Responsive Materials (CHARM)	12.431	141,661	-
DEPARTMENT OF DEFENSE	10333/PO# BB01624595	:MESS: Model Building, Exploratory, Social System	12.910	53,589	-
DEPARTMENT OF DEFENSE	SUB 00010360 PO #BB01624014	Verifying Computations Securely and Robustly in Post-Quantum Era	12.910	584,905	-
DEPARTMENT OF DEFENSE	00010803, PO BB01666803	Compositional Scene Understanding with Self-Supervised Object-Centric Dorso-Ventral Neural Networks	12.300	626,205	-
DEPARTMENT OF DEFENSE	00010918	Frugal, Lifelong-Learning Control Systems with Execution Guarantees	12.300	50,699	-
DEPARTMENT OF DEFENSE	SUBAGREEMENT NO. 00010066/ PO BB01645201	Rational Design of Statistical Heteropolymers as Biomimetic Enzymes and Binders	12.351	134,345	-
Total for University of California - Berkeley				1,591,404	-
Eldgenossische Technische Hochschule Zurich (ETH Zurich)					
DEPARTMENT OF DEFENSE	W911NF2320212-MIT1	IARPA ELQ: Superconducting Circuits for Modular Creation of Surface Code Entanglement (SuperMOOSE)	12.RD	201,021	-
Total for Eldgenossische Technische Hochschule Zurich (ETH Zurich)				201,021	-
Rice University					
DEPARTMENT OF DEFENSE	X03151586	Collaborative Hierarchical and Agile Responsive Materials (CHARM)	12.431	170,117	-

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Total for Rice University				170,117	-
QLEDCures, LLC					
DEPARTMENT OF DEFENSE	140D0422C0020	DNA Origami Guided Assembly of Monolayer Quantum Dot Pixels for Flexible Electroluminescent Displays	12.RD	-11,146	-
Total for QLEDCures, LLC				-11,146	-
Cornell University					
DEPARTMENT OF DEFENSE	145105-21913	SUPeRior Energy-efficient Materials and dEvices (SUPREME)	12.RD	1,082	-
DEPARTMENT OF DEFENSE	81825-10911	PERISCOPE: Perceptual Representations for Actions, Composition, and Verification	12.300	19,479	-
DEPARTMENT OF DEFENSE	87748-11235	Modeling and Planning with Human Impressions of Robots	12.300	126,110	-
Total for Cornell University				146,671	-
Harvard Medical School					
DEPARTMENT OF DEFENSE	152318.5112612.0014	STOP PAIN: Safe Therapeutic Options for Pain and Inflammation	12.910	-23	-
Total for Harvard Medical School				-23	-
Aarno Labs LLC					
DEPARTMENT OF DEFENSE	2020-MIT-AMP-01	TA2 - Multifocal Relational Analysis for Assured Micropatching (MRAM)	12.RD	487,516	-
Total for Aarno Labs LLC				487,516	-
The Broad Institute, Inc.					
DEPARTMENT OF DEFENSE	5001153-5500001656	Microbial immunotherapy using chimeric small molecules	12.910	-19,960	-
DEPARTMENT OF DEFENSE	5001155-5500001656	Microbial immunotherapy using chimeric small molecules	12.910	207,484	-
Total for The Broad Institute, Inc.				187,524	-
Sri International					
DEPARTMENT OF DEFENSE	94141	Principles of Undersea Magnetohydrodynamic Pumps (PUMP)	12.RD	1,156	-
DEPARTMENT OF DEFENSE	PO81455	PRINCE: Photorealistic Rendering from Neural Columns	12.RD	195,049	-
Total for Sri International				196,205	-
Intellectual Ventures Management, LLC					

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DEPARTMENT OF DEFENSE	AGMT DTD 10/31/23	Superconducting Quantum Metamaterial Enhanced Devices (SQMED)	12.RD	32,361	-
Total for Intellectual Ventures Management, LLC				32,361	-
Quansight LLC					
DEPARTMENT OF DEFENSE	AGMT DTD 6/11/24	Universal and High-Performance Sparsity in Python with TACO and PyData/Sparse	12.RD	133,394	-
Total for Quansight LLC				133,394	-
Bionet Sonar, Inc.					
DEPARTMENT OF DEFENSE	AGMT EFF 2/16/24	Heterogeneous Self-Optimizing Mesh Network Demonstration	12.RD	52,994	-
Total for Bionet Sonar, Inc.				52,994	-
Dynamic Object Language Labs, Inc.					
DEPARTMENT OF DEFENSE	AGMT. DTD 09/01/2023	Team Assistance Research Platform for Search+ Tasks	12.RD	132,559	-
DEPARTMENT OF DEFENSE	AGMT. DTD 12/21/2023	Lightweight Interaction and Storytelling Archive (LISA)	12.RD	251,951	-
DEPARTMENT OF DEFENSE	SUB UNDER HR0011-20-C-0035	Robust Ideal Team Assistant (RITA)	12.RD	55,890	-
DEPARTMENT OF DEFENSE	W911NF-22-C-0060	Multi-Modal Knowledge Tracking and Storytelling (MM-KTS)	12.RD	151,953	-
Total for Dynamic Object Language Labs, Inc.				592,353	-
Aurora Flight Sciences RDC					
DEPARTMENT OF DEFENSE	AMA-22-0002	Enabling Confidence (EC)	12.RD	136,875	-
Total for Aurora Flight Sciences RDC				136,875	-
Aurora Flight Sciences Corporation					
DEPARTMENT OF DEFENSE	AMA-23-0003	Fast Adaptation & Learning for Control ONline (FALCON)	12.RD	58,263	-
DEPARTMENT OF DEFENSE	AMA-23-0004	Fast Adaptation & Learning for Control ONline (FALCON)	12.RD	211,797	-
Total for Aurora Flight Sciences Corporation				270,060	-
Yale University					
DEPARTMENT OF DEFENSE	CON-80004813 (GR121356)	Dynamic optical control for quantum matter	12.910	152,310	-
Total for Yale University				152,310	-
IBM Thomas J. Watson Research Center					
DEPARTMENT OF DEFENSE	CW3013540\PO4700205308	Building Machine Common Sense the Human Way	12.RD	980,911	-

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DEPARTMENT OF DEFENSE	CW3031624 / PO# 4700346953	Transfer, Augmentation and Automatic Learning with Less Labels	12.RD	23,961	-
Total for IBM Thomas J. Watson Research Center				1,004,872	-
Georgia Tech Research Institute					
DEPARTMENT OF DEFENSE	D8989-S2	Optimization with Trapped Ion Qubits (OPTIQ)	12.RD	252,204	-
Total for Georgia Tech Research Institute				252,204	-
RTX BBN Technologies, Inc.					
DEPARTMENT OF DEFENSE	PO# 4202290027 BBN REF# 90144	Bullet Train	12.RD	139,556	-
Total for RTX BBN Technologies, Inc.				139,556	-
BBN Technologies Corporation					
DEPARTMENT OF DEFENSE	PO# 4202290027 BBN REF# 90144	Bullet Train	12.RD	661,185	-
Total for BBN Technologies Corporation				661,185	-
GE Vernova Advanced Research Center					
DEPARTMENT OF DEFENSE	PROJECT 261673 / PO 401180662	Inter-Metallic MORphogen Tailored Activity Lithium (IMMORTAL) Battery	12.RD	110,096	-
Total for GE Vernova Advanced Research Center				110,096	-
Draper Laboratory Incorporated					
DEPARTMENT OF DEFENSE	SC001-0000001514	Engineering Biology for Underwater and Ground Sensors (EBUGS)	12.RD	12,790	-
DEPARTMENT OF DEFENSE	SC001-1442	Nanoparticle-based Optical Components and Coatings (NOCC)	12.300	62,102	-
Total for Draper Laboratory Incorporated				74,892	-
Charles River Analytics					
DEPARTMENT OF DEFENSE	SC2214301	Compositionally Organized Learning To Reason About Novel Experience (COLTRANE) for the DARPA SAIL-ON program	12.RD	-18,187	-
Total for Charles River Analytics				-18,187	-
Princeton University					
DEPARTMENT OF DEFENSE	SUB0000294	Re-configurable IR frequency comb spectrscopic sending platform for chemical threat detection	12.910	-535	-
Total for Princeton University				-535	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Woods Hole Oceanographic Institution					
DEPARTMENT OF DEFENSE	SUBAWARD A101593/49011500	Enabling a Batteryless & Perpetual Subsea IoT via Underwater Backscatter	12.RD	5,928	-
Total for Woods Hole Oceanographic Institution				5,928	-
Haverford College					
DEPARTMENT OF DEFENSE	SUBK DTD. 12/15/2019	Discovering Reactions and Uncovering Mechanisms of Hybrid Organohalide Perovskite Formation	12.RD	-24,702	-
Total for Haverford College				-24,702	-
Scientific Systems Company, Incorporated					
DEPARTMENT OF DEFENSE	# SC-1699-01	Explanaton Systems	12.RD	158,456	-
Total for Scientific Systems Company, Incorporated				158,456	-
University of Cincinnati					
DEPARTMENT OF DEFENSE	015220-00002	Advancing Prediction Methods for Complex Curvature Nozzle Flows Relevant to Next-Generation Naval Aircraft Propulsion	12.300	48,897	-
Total for University of Cincinnati				48,897	-
University of California-San Diego					
DEPARTMENT OF DEFENSE	108548654	RAIDER: Resilient Actionable Intelligence for Distributed Environment understanding and Reasoning	12.300	2,372	-
DEPARTMENT OF DEFENSE	706191	Resilient Multi-Agent Perception and Planning in Dynamic Domains	12.300	116,362	-
Total for University of California-San Diego				118,734	-
Temple University					
DEPARTMENT OF DEFENSE	264443-MIT / PO P0583584	Elements of Causal Learning: Basic Concepts, Theory, Methods, Algorithms and Applications	12.300	15,932	-
Total for Temple University				15,932	-
Boston University					
DEPARTMENT OF DEFENSE	4500003329	Neuro_autonomy: Neuroscience-Inspired Perception, Navigation, and Spatial Awareness for Autonomous Robots	12.300	514,131	-
Total for Boston University				514,131	-
Virginia Polytechnic Institute & State University					
DEPARTMENT OF DEFENSE	450677-19825	Science of Tracking, Control, and Optimization of Information Latency for Dynamic Military IoT Systems	12.300	301,927	-

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Total for Virginia Polytechnic Institute & State University				301,927	-
Triton Systems					
DEPARTMENT OF DEFENSE	AGMT DTD 1/19/24	Automated Anchoring System	12.RD	24,089	-
Total for Triton Systems				24,089	-
Pliant Energy Systems LLC					
DEPARTMENT OF DEFENSE	AGMT DTD 9/07/2021	Payload Autonomy and Navigation for the Pliant C-Ray Platform	12.RD	90,033	-
Total for Pliant Energy Systems LLC				90,033	-
Pendar Technologies LLC					
DEPARTMENT OF DEFENSE	AGREEMENT DATED 5/25/2021	Quantum cascade laser array with integrated wavelength beam combining (STTR Phase II)	12.RD	54,698	-
Total for Pendar Technologies LLC				54,698	-
American Society/Engineering Education					
DEPARTMENT OF DEFENSE	LETTER DATED 8/11/99	NDSEG Fellowship Program	12.300	2,656,999	-
Total for American Society/Engineering Education				2,656,999	-
Institute for the Study of Learning & Expertise					
DEPARTMENT OF DEFENSE	N00014-20-1-2643	Rapid Acquisition of Hierarchical Procedures from Instructional Documents	12.300	163,529	-
Total for Institute for the Study of Learning & Expertise				163,529	-
Tecnologico de Monterrey					
DEPARTMENT OF DEFENSE	N62909-23-1-2109	Dual envelope multifunctional fabric	12.300	120,269	-
Total for Tecnologico de Monterrey				120,269	-
Florida State University					
DEPARTMENT OF DEFENSE	R000002829	ESRDC: Electric Ship Research and Development Consortium 2021 - 2025	12.300	599,721	-
DEPARTMENT OF DEFENSE	R000002977	Training Future Navy Workforce II Undergraduate Funding	12.300	8,699	-
DEPARTMENT OF DEFENSE	R02117	A SUMMER PROGRAM TO INTRODUCE ENGINEER RESEARCH TO UNDERGRADUATES	12.300	-15	-
Total for Florida State University				608,405	-
Dartmouth College					
DEPARTMENT OF DEFENSE	R1387	Integrated Foundations of Sensing, Modeling, and Data Assimilation for Sea Ice Prediction	12.300	278,635	-

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Total for Dartmouth College				278,635	-
University of Illinois					
DEPARTMENT OF DEFENSE	SUB# 099963-17888	Robust Photonic Materials with High-Order Topological Protection	12.300	285,177	-
Total for University of Illinois				285,177	-
Vanderbilt University					
DEPARTMENT OF DEFENSE	P22011798; UNIV62036	Cognitive Attack Planning Spanning from Threats to Vulnerabilities CLIN 1	12.RD	-128,386	-
Total for Vanderbilt University				-128,386	-
Massachusetts Technology Collaborative					
DEPARTMENT OF DEFENSE	07120-OLDCC-MASSTECH-01	New England Regional Defense Sector Modernization	12.617	125,130	-
Total for Massachusetts Technology Collaborative				125,130	-
BAE Systems Info & Electronic Systems Integration, Inc					
DEPARTMENT OF DEFENSE	1111254	Investigation of Small Solid Rocket Performance to Support to the Kenai Program	12.RD	5,932	-
Total for BAE Systems Info & Electronic Systems Integration, Inc				5,932	-
SYSTEMS & TECHNOLOGY RESEARCH LLC					
DEPARTMENT OF DEFENSE	2020-0071/10372.11.1101	Space-Based Machine Automated Recognition Technique (SMART) Program	12.RD	139,104	-
DEPARTMENT OF DEFENSE	SUBCONTRACT 2023-0023	Hidden ActiviY Signal and Trajectory Anomaly Characterization (HAYSTAC)	12.RD	189,717	-
Total for SYSTEMS & TECHNOLOGY RESEARCH LLC				328,821	-
HRL Laboratories, LLC					
DEPARTMENT OF DEFENSE	21004-213647-QS	MIRO	12.RD	300,247	-
Total for HRL Laboratories, LLC				300,247	-
Orbit Logic Incorporated					
DEPARTMENT OF DEFENSE	AGMT DATED 9/23/22	SOFAR – Satellite Onboard Fault Attribution and Response	12.RD	43,518	-
Total for Orbit Logic Incorporated				43,518	-
Arizona State University					
DEPARTMENT OF DEFENSE	ASUB00000951	Ferroelectric Capacitive Materials and Devices for Next Generation AI Hardware	12.RD	123,803	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Total for Arizona State University				123,803	-
Advanced Functional Fabrics of America (AFFOA)					
DEPARTMENT OF DEFENSE	EXHIBIT 1-A	Shape-Shifting Climate-Adaptive Garments	12.800	-13,678	-
Total for Advanced Functional Fabrics of America (AFFOA)				-13,678	-
Leidos, Inc.					
DEPARTMENT OF DEFENSE	P010309621	Hypersonic PNT (H-PNT) IMU Drift Correlation	12.RD	43,259	-
Total for Leidos, Inc.				43,259	-
North American Philips Corporation - Philips L					
DEPARTMENT OF DEFENSE	PO # 4520230567/W81XWH18103 32	Intelligent Mobile Ultrasound for Semi-autonomous, Noninvasive Intracranial Pressure Estimation in Pre- Hospital and PFC settings	12.420	32,478	-
Total for North American Philips Corporation - Philips L				32,478	-
Saab, Inc.					
DEPARTMENT OF DEFENSE	PO# 61020	Marine Autonomy for A-Size UUVs	12.RD	83,903	-
Total for Saab, Inc.				83,903	-
Attollo Engineering, LLC					
DEPARTMENT OF DEFENSE	PO# AE2748	An Ultra-Compact, Lightweight MWIR Camera with an Integrated Zoom Metalens	12.RD	63,000	-
Total for Attollo Engineering, LLC				63,000	-
West Virginia University					
DEPARTMENT OF DEFENSE	PO#: MM000351862	Discovery and development of small molecule and antibody therapeutics using artificial intelligence and machine learning	12.351	537,961	-
Total for West Virginia University				537,961	-
Accenture Federal Services LLC					
DEPARTMENT OF DEFENSE	S000632	MUTATED – MODELING and UNDERSTANDING using TEMPORAL ANALYSIS of TRANSIENT EARTH DATA	12.RD	23,284	-
Total for Accenture Federal Services LLC				23,284	-
Pennsylvania State University					
DEPARTMENT OF DEFENSE	SA21-03	Interaction of Ionizing Radiation in Materials University Research Alliance (IIRM-URA)	12.351	483,354	-
Total for Pennsylvania State University				483,354	-

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Spectral Energies, LLC					
DEPARTMENT OF DEFENSE	SB2309-001-1	Automatic Mesh Adaptation Method for Aero-Thermal- Structural Design	12.RD	39,404	-
		Total for Spectral Energies, LLC		39,404	-
Applied Ocean Sciences, LLC					
DEPARTMENT OF DEFENSE	STTR AGREEMENT DTD 09/18/2020	Local Stochastic Prediction for UUV/USV Environmental Awareness	12.RD	196,665	-
		Total for Applied Ocean Sciences, LLC		196,665	-
		TOTAL for Department of Defense		37,225,830	-

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DEPARTMENT OF COMMERCE					
Virginia Polytechnic Institute & State University					
DEPARTMENT OF COMMERCE	451874-19825	Leaning based ORAN testing	11.038	10,315	-
Total for Virginia Polytechnic Institute & State University				10,315	-
Northwestern University					
DEPARTMENT OF COMMERCE	60052977 MIT	CHiMaD Award-Sub from Northwestern Univeristy	11.609	90,911	-
Total for Northwestern University				90,911	-
U Delaware: National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)					
DEPARTMENT OF COMMERCE	AGREEMENT EFFECTIVE 5/4/17	The National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL) - Memberships	11.619	40,567	-
DEPARTMENT OF COMMERCE	PC1.0-007	NIIMBL Projects	11.619	-1,549	-
DEPARTMENT OF COMMERCE	PC5.2-105	NIIMBL Projects	11.619	161,791	-
DEPARTMENT OF COMMERCE	PC5.2-212	NIIMBL Projects	11.619	204,101	-
DEPARTMENT OF COMMERCE	UDR0000095 ARP-14	COVID-19: Accelerating the manufacture and scale up of virus-like particle vaccines, Non-Residual Decontamination of Clinical Spaces	11.619	197,227	-
DEPARTMENT OF COMMERCE	UDR0000114 NMBL 1006	Next-generation Modeling of Glycosylation in Fed-batch CHO Cell Culture and Application to Adaptive Process Control of CQAs	11.619	-26	-
DEPARTMENT OF COMMERCE	UDR0000359	Next-generation Modeling of Glycosylation in Fed-batch CHO Cell Culture and Application to Adaptive Process Control of CQAs	11.619	618,376	-
Total for U Delaware: National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)				1,220,487	-
Advanced Functional Fabrics of America (AFFOA)					
DEPARTMENT OF COMMERCE	MASTER AGREEMENT NO. 22-B-0039	RAPID ASSISSTANCE FOR CORONAVIRUS ECONOMIC RESPONSE (RACER)	11.619	175,163	-
Total for Advanced Functional Fabrics of America (AFFOA)				175,163	-
TOTAL for Department of Commerce				1,496,876	-

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DEPARTMENT OF ENERGY					
Stanford University					
DEPARTMENT OF ENERGY		An Equitable, Affordable & Resilient Nationwide Energy System Transition (EARNEST)	81.087	91,890	-
DEPARTMENT OF ENERGY	63074009-212281	Understanding the Structure-Property Relationships and Unusual Aging Behavior of Microporous CANAL Polymer Membranes for Gas Separation	81.049	202,893	-
Total for Stanford University				294,783	-
Brown University					
DEPARTMENT OF ENERGY	00001292	Bridging the time scale in exascale computing of chemical systems	81.049	103,750	-
Total for Brown University				103,750	-
Columbia University					
DEPARTMENT OF ENERGY	1(GG019448-01)	Towards machine-learning a fully-coupled constitutive model for thermal-hydraulic fracture in geothermal systems: phase I	81.049	38,283	-
DEPARTMENT OF ENERGY	SUBAWARD 5(GG008711-10)	PINE: Photonic Integrated Networked Energy Efficient Datacenter	81.135	-4,514	-
Total for Columbia University				33,769	-
Electric Power Research Institute, Inc.					
DEPARTMENT OF ENERGY	10013019	Build-to-Replace: A New Paradigm for Reducing Advanced Reactor O&M Costs	81.135	33,271	-
Total for Electric Power Research Institute, Inc.				33,271	-
Tufts University					
DEPARTMENT OF ENERGY	104616-00001/PO EP0224907/ENG010	Development of REBCO Cabling Technologies for SC Magnets	81.049	133,084	-
Total for Tufts University				133,084	-
AltaRock Energy, LLC					
DEPARTMENT OF ENERGY	1051-2	Millimeter-Wave Technology Demonstration for Geothermal Direct Energy Drilling	81.135	123,114	-
Total for AltaRock Energy, LLC				123,114	-
Worcester Polytechnic Institute					
DEPARTMENT OF ENERGY	10634-GR	A Catalytic Process to Convert Municipal Solid Waste Components to Energy	81.087	-3,420	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Total for Worcester Polytechnic Institute				-3,420	-
University of Illinois-Urbana Champaign					
DEPARTMENT OF ENERGY	110904-19219	EFRC for Regenerative Energy-Efficient Manufacturing of Thermoset Polymeric Materials (RE-MAT)000	81.049	335,091	-
Total for University of Illinois-Urbana Champaign				335,091	-
Harvard University					
DEPARTMENT OF ENERGY	124369-5120804	Machine Learning for Understanding and Driving Non-Equilibrium Dynamic Catalysis	81.049	198,277	-
DEPARTMENT OF ENERGY	133512-5028381	Transport and Imaging of Mesoscopic Phenomena in Single and Bilayer Graphene	81.049	-4,785	-
DEPARTMENT OF ENERGY	AGREEMENT NO. 134126-5110101	QPress: Quantum Press for Next-Generation Quantum Information Platforms	81.049	-24,122	-
Total for Harvard University				169,370	-
Washington State University					
DEPARTMENT OF ENERGY	130616 SPC001315	UI-ASSIST: US-India collaborative for smart distribution System with Storage	81.122	-6	-
Total for Washington State University				-6	-
University of Wisconsin-Madison					
DEPARTMENT OF ENERGY	1336	Axisymmetric Mirror Development and RF Modeling and Conceptual Design for the Launching Antenna in WHAM	81.135	20,645	-
DEPARTMENT OF ENERGY	3352	Thermal-Hydraulics Assessment of SiC Compared to Other ATF Cladding Materials and Performance to Mitigate CRUD	81.121	62,889	-
Total for University of Wisconsin-Madison				83,534	-
Purdue University					
DEPARTMENT OF ENERGY	14000497-047	Oxidation-Resistant, Thermomechanically-Robust Ceramic Composite Heat Exchangers	81.087	74,592	-
Total for Purdue University				74,592	-
Cornell University					
DEPARTMENT OF ENERGY	145228-21943	Integrated CO2 capture and conversion to building materials with inherent recovery of high value metals	81.089	120,084	-
Total for Cornell University				120,084	-
University of Connecticut					

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DEPARTMENT OF ENERGY	150512807, PO# 459734	AI Tools for the Characterization and Design of Achievable Hypothetical Materials	81.049	774,494	-
Total for University of Connecticut				774,494	-
Sustainable Horizons Institute					
DEPARTMENT OF ENERGY	2024-1004	Improving Scientific Software Reliability through Continuous Learning	81.RD	10,665	-
Total for Sustainable Horizons Institute				10,665	-
Sandia National Laboratories					
DEPARTMENT OF ENERGY	2193618 / PO 2304502	Utilization of CR39 on Z for DD Yield, Yield Anisotropies and Neutron Spectroscopy	81.RD	66,209	-
DEPARTMENT OF ENERGY	AGR# 2193618/PO# 2330765	Heterogeneous Integration of Vertical GaN Power Devices via Direct Diamond Bonding	81.RD	9,026	-
DEPARTMENT OF ENERGY	PO 2417139	Engineering Sketch Pad (ESP) Enhancements for Sandia Applications	81.RD	89,569	23,501
DEPARTMENT OF ENERGY	PO 2558398	ExaEpi: Calibration of Next-Generation Epidemiology Models	81.RD	59,630	-
DEPARTMENT OF ENERGY	SPO 2206572 / CPA 2193618	Quantum Systems Accelerator	81.RD	225,044	-
Total for Sandia National Laboratories				449,478	23,501
Jefferson Science Associates, LLC					
DEPARTMENT OF ENERGY	24-D0863	Development and implementation of digital blocks in the Repeated Stitched Units (RSU) and Left End-Cap (LEC) of the Si/MAPS-ITS3 sensor	81.RD	35,587	-
DEPARTMENT OF ENERGY	JSA-24-Q429733	MOLLER Reviews - Upstream Toroid Engineering and Integration	81.RD	52,315	-
Total for Jefferson Science Associates, LLC				87,902	-
RTX Corporation					
DEPARTMENT OF ENERGY	2610126	Electrochemically Mediated Air Separation Modules (EM-ASM)	81.089	30,169	-
Total for RTX Corporation				30,169	-
North Carolina Agriculture & Technology State University					
DEPARTMENT OF ENERGY	270197C	Center for Electrochemical Dynamics And Reactions on Surfaces	81.049	264,979	-
Total for North Carolina Agriculture & Technology State University				264,979	-
Battelle Energy Alliance, LLC					

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DEPARTMENT OF ENERGY	289605	MIT Irradiations and PIE	81.RD	26,214	-
DEPARTMENT OF ENERGY	CONTR NO. 112583 RELEASE 31	The Deployment and In-Pile Test of an Instrument for Real-Time Monitoring Thermal Conductivity Evolution of Nuclear Fuels	81.049	-28,908	-
DEPARTMENT OF ENERGY	RELEASE 1/BMC 288889	Collaboration on Techno-Economic Analysis of the Role of Nuclear Generation in the Energy Market Transition and New Market Opportunities	81.RD	6,301	-
DEPARTMENT OF ENERGY	RELEASE 24/BMC 112583	Collaboration on Techno-Economic Analysis of the Role of Nuclear Generation in the Energy Market Transition and New Market Opportunities	81.RD	-764	-
DEPARTMENT OF ENERGY	RELEASE 25/BMC 112583	An Innovative Approach for Accelerated Irradiation Studies of Materials	81.RD	58,532	-
DEPARTMENT OF ENERGY	RELEASE 26/BMC 112583	Passive Strain Measurements for Experiments in Radiation Environments	81.RD	14,738	-
DEPARTMENT OF ENERGY	RELEASE 27 /BMC 0112583	NASA Fuel and Material Irradiation	81.RD	591,388	161,695
DEPARTMENT OF ENERGY	RELEASE 29/BMC 112583	Informative Design of High-Temperature Metal Hydride Moderators in Microreactors	81.RD	8,906	-
Total for Battelle Energy Alliance, LLC				676,407	161,695
UChicago Argonne, LLC					
DEPARTMENT OF ENERGY	2F-60027	Q-NEXT	81.049	212,083	-
DEPARTMENT OF ENERGY	2F-60215	Advanced Characterization of Lithium/Electrolyte Interface	81.RD	193,779	-
DEPARTMENT OF ENERGY	3F-60023	SciDAC-5 NUCLEI	81.RD	98,088	-
DEPARTMENT OF ENERGY	3F-60041	JuliaLab	81.RD	56,519	-
DEPARTMENT OF ENERGY	8F-30212	Joint Center for Energy Storage Research (JCESR) Renewal Year 1	81.RD	66,781	-
DEPARTMENT OF ENERGY	DE-AR0001578	Non-neutron Transmutation of Used Nuclear Fuel	81.135	620,655	365,537
DEPARTMENT OF ENERGY	WO 2J-30101-0010A	Task 10: Preliminary SAR Review and Alternative HEU-LEU Mixed Core Transition for the MITR-II Research Reactor	81.RD	557,265	-
DEPARTMENT OF ENERGY	WO 2J-30101-0011A	LEU Fuel Specification Impact Assessment for the MITR Research Reactor – Phase II	81.RD	56,462	-
Total for UChicago Argonne, LLC				1,861,632	365,537
University of Wisconsin					
DEPARTMENT OF ENERGY	3553	Reduced-Activation High-Entropy Alloys as Cost-Effective Plasma Facing Components for Fusion Power Generation	81.135	87,299	-
Total for University of Wisconsin				87,299	-

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Brookhaven National Laboratory					
DEPARTMENT OF ENERGY	368338	R&D on the sPHENIX MAPS Vertex Detector upgrade	81.RD	18,948	-
DEPARTMENT OF ENERGY	443510	Annual US FCC Workshop FY24	81.RD	9,778	-
DEPARTMENT OF ENERGY	NO. 435828	Polarized He-3 Ions from the Electron Beam Ionization Source	81.RD	68,074	-
DEPARTMENT OF ENERGY	SUBK# 390034	Co-design Center for Quantum Advantage (C2QA)	81.RD	2,163,781	-
DEPARTMENT OF ENERGY	SUBK# 425236	Multiscale acceleration: Powering future discoveries in High Energy Physics	81.RD	87,477	-
Total for Brookhaven National Laboratory				2,348,058	-
UT- Battelle LLC					
DEPARTMENT OF ENERGY	4000155797 / PO 4000193546	Coupled Monte Carlo Neutronics and Fluid Flow Simulation of Small Modular Reactors (ExaSMR)	81.RD	67,478	-
DEPARTMENT OF ENERGY	4000177261	Consortium on Coal-based Carbon Materials Manufacturing - Coal-based Separation Membranes	81.RD	1,030	-
DEPARTMENT OF ENERGY	4000179517	Turbulence Modeling - Systematic comparison between measured and modelled ion heat diffusivities using VITALS	81.RD	27,781	-
DEPARTMENT OF ENERGY	4000183826	Understanding and Controlling Entangled and Correlated Quantum States in Confined Solid-state Systems Created via Atomic Scale Manipulation	81.049	14,801	-
DEPARTMENT OF ENERGY	4000192102/4000206053	Development of advanced compressible flow solver technology	81.049	185,824	-
DEPARTMENT OF ENERGY	4000192753	Consortium on Coal-based Carbon Materials Manufacturing - Coal-based Separation Membranes	81.RD	-189	-
DEPARTMENT OF ENERGY	4000192798	Understanding and Controlling Entangled and Correlated Quantum States in Confined Solid-state Systems Created via Atomic Scale Manipulation	81.049	11,003	-
DEPARTMENT OF ENERGY	CW31155, PO# 4000198874	Adaptive Meshing Model Development	81.RD	85,699	-
DEPARTMENT OF ENERGY	CW45368 / PO# 4000208714	Center for Bioenergy Innovation	81.RD	255,767	-
DEPARTMENT OF ENERGY	PO# 4000215852	S4PST, Sustainability for Node Level Programming Systems and Tools	81.RD	9,993	-
Total for UT- Battelle LLC				659,187	-
University of Rochester					
DEPARTMENT OF ENERGY	417532G/ UR FAO GR510907	Nuclear-particle Spectroscopy and Analysis at Omega	81.112	182,484	48,937
DEPARTMENT OF ENERGY	SUB00000794/GR534356	Nuclear-particle Spectroscopy and Analysis at Omega	81.112	149,909	-
Total for University of Rochester				332,393	48,937

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Brookhaven Science Associates, LLC					
DEPARTMENT OF ENERGY	433702	Quantum Algorithms Across Topological and Quantum Circuit Models	81.RD	25,051	-
DEPARTMENT OF ENERGY	440210	Machine learning-assisted, high-throughput development of high entropy alloys for nuclear applications	81.RD	21,308	-
		Total for Brookhaven Science Associates, LLC		46,359	-
Boston University					
DEPARTMENT OF ENERGY	4500003689	Market Clearing of Risky Assets	81.135	338,564	-
		Total for Boston University		338,564	-
Northeastern University					
DEPARTMENT OF ENERGY	503036-78052	Design, Control and Application of Next-Generation Qubits	81.049	335	-
		Total for Northeastern University		335	-
Lehigh University					
DEPARTMENT OF ENERGY	544241-78001	Application of Banking Scoring and Rating for Coherent Risk Measures in Electricity Systems	81.135	220,948	-
		Total for Lehigh University		220,948	-
University of Pennsylvania					
DEPARTMENT OF ENERGY	578218	Complex Quantum Systems and the Quantum Universe	81.049	157,552	-
		Total for University of Pennsylvania		157,552	-
Pennsylvania State University					
DEPARTMENT OF ENERGY	5952-MIT-DOE-1090	Center for Lignocellulose Structure and Formation (CLSF III)	81.049	848	-
DEPARTMENT OF ENERGY	S001256-USDOE	Center for thermal-fluids application in nuclear energy: Establishing the knowledgebase for thermal-hydraulic multiscale simulation to accelerate the deployment of advanced reactors	81.121	146,009	-
		Total for Pennsylvania State University		146,857	-
Northwestern University					
DEPARTMENT OF ENERGY	60038340 MIT	Center for Bio-Inspired Energy Science (CBES)	81.049	6,135	-
DEPARTMENT OF ENERGY	60051564 MIT	Creating and Interfacing Designer Chemical Qubits	81.049	240,795	-
DEPARTMENT OF ENERGY	60057508 MIT	Center for Molecular Quantum Transduction	81.049	213,260	-
DEPARTMENT OF ENERGY	60063420 MIT	Hydrogen in Energy and Information Sciences (HEISs)	81.049	297,178	-

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Total for Northwestern University				757,368	-
Battelle Memorial Institute					
DEPARTMENT OF ENERGY	634147	New NDA Methods for Thorium Fuel Cycle Safeguards (NRTA-SG)	81.RD	118,564	-
DEPARTMENT OF ENERGY	680381	Toward Dynamic Monitoring and Decision Systems (DyMonDS) framework for resilient electricity services: Puerto Rico BPS feasibility study	81.RD	148,017	-
DEPARTMENT OF ENERGY	CONTRACT #: 543753	Making an inorganic analogue of a cell for direct air capture of CO2	81.RD	217,919	-
DEPARTMENT OF ENERGY	CONTRACT #: 547784	Uncertainty Characterization and Scenario Discovery in GCIMS	81.RD	161,016	-
DEPARTMENT OF ENERGY	CONTRACT# 649490	Correlating structure-activity relationships between molecular and interfacial electrocatalysis	81.RD	18,035	-
Total for Battelle Memorial Institute				663,551	-
Fermi Research Alliance, LLC					
DEPARTMENT OF ENERGY	656002	US CMS DAQ Subsystem	81.RD	270,599	-
DEPARTMENT OF ENERGY	SUBCONTRACT 672189	Quantum Metrology for Dark Matter Axion Detection	81.RD	42,294	-
DEPARTMENT OF ENERGY	SUBCONTRACT 675352	QuantISED Theory Consortium	81.RD	88,155	-
DEPARTMENT OF ENERGY	SUBCONTRACT 688370	Hybrid Cryogenic Detector Architectures for Sensing and Edge Computing enabled by new Fabrication Processes	81.RD	214,650	-
Total for Fermi Research Alliance, LLC				615,698	-
University of California-San Diego					
DEPARTMENT OF ENERGY	706492	SMARTS: Surrogate Models for Accurate and Rapid Transport Simulations	81.049	171,481	-
Total for University of California-San Diego				171,481	-
Lawrence Berkeley National Laboratory					
DEPARTMENT OF ENERGY	7601691	Solvent-Driven Zero Liquid Discharge for Production of Synthetic Gypsum	81.RD	105,250	-
DEPARTMENT OF ENERGY	7614576	Large-scale algorithms and software for modeling chemical reactivity in complex systems	81.RD	167,594	-
DEPARTMENT OF ENERGY	7648833	Building subsurface elastic models at FORGE, Utah, using surface and borehole seismic data	81.RD	29,243	-
DEPARTMENT OF ENERGY	7706016	Rapid detection and characterization of induced seismicity at geothermal fields	81.RD	72,818	-
DEPARTMENT OF ENERGY	7708600	Model and Remote Sensing-Guided Monitoring Design	81.RD	9,404	-

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DEPARTMENT OF ENERGY	RES SUBCONTRACT #7571809	Quantum Systems Accelerator	81.RD	3,371	-
DEPARTMENT OF ENERGY	RESEARCH SUBCONTRACT NO. 7571809	Quantum Systems Accelerator	81.RD	1,511,931	-
DEPARTMENT OF ENERGY	SUBCONTRACT NO. 7645408	Advanced Long-Term Monitoring Systems (ALTEMIS)	81.RD	248,114	-
Total for Lawrence Berkeley National Laboratory				2,147,725	-
The Research Foundation - Stony Brook University					
DEPARTMENT OF ENERGY	90589/2/1166708	ENHANCED Shield: A Critical Materials Technology Enabling Compact Superconducting Tokamaks	81.135	75,232	-
DEPARTMENT OF ENERGY	94863/1176279/2	ARPA-E Onwards: Microreactor Enabled by Hydride Moderators	81.135	309,214	-
DEPARTMENT OF ENERGY	95821/1178553/2	A Comprehensive Approach to Reduce the Burden of C-14 in Next Generation Graphite Moderated Reactors	81.121	216,935	-
Total for The Research Foundation - Stony Brook University				601,381	-
University of Maryland					
DEPARTMENT OF ENERGY	94434-Z7124201	Solution-verification, grid-adaptation and uncertainty quantification for chaotic turbulent flow problems	81.124	270,471	-
Total for University of Maryland				270,471	-
University of Minnesota					
DEPARTMENT OF ENERGY	A008795401	BOTTLE – Recyclable and Biodegradable Manufacturing and Processing of Plastics and Polymers based on Renewable Branched Caprolactones	81.086	178,038	-
DEPARTMENT OF ENERGY	A009091801	Interface Engineering using Vapor Transport Deposited Perovskite Films for Solar Cells	81.087	120,191	-
Total for University of Minnesota				298,229	-
University of Minnesota-Morris					
DEPARTMENT OF ENERGY	A010469802	Center for Programmable Energy Catalysis	81.049	150,273	-
Total for University of Minnesota-Morris				150,273	-
University of Tennessee					
DEPARTMENT OF ENERGY	A22-0526-S001	Safety Implications of High Burnup Fuel for a 2-Year PWR Fuel Cycle	81.121	81,889	-
Total for University of Tennessee				81,889	-
Advanced Ceramics Manufacturing					

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DEPARTMENT OF ENERGY	AGMT DTD 5/25/23	Structural Components with Corrosion Resistant Surface Layers for Nuclear Reactor Systems	81.049	49,940	-
		Total for Advanced Ceramics Manufacturing		49,940	-
Vuronyx Technologies LLC					
DEPARTMENT OF ENERGY	AGMT DTD 7/19/22	Developing a fast-synthesis method for NCM811 battery cathode materials with flame-assisted spray pyrolysis.	81.049	1,928	-
		Total for Vuronyx Technologies LLC		1,928	-
Atlantic Quantum					
DEPARTMENT OF ENERGY	AGMT DTD. 2/21/2023	Software for Automatic Control, Calibration and Validation of Quantum Processors	81.089	54,158	-
		Total for Atlantic Quantum		54,158	-
Brookhaven Technology Group, Inc.					
DEPARTMENT OF ENERGY	AGMT EFF 2/01/2024	Low-cost structural high-current high-field REBCO cable development	81.049	19,568	-
DEPARTMENT OF ENERGY	AGMT. DTD. 09/18/2019	HTS Cable development for the central solenoid of the DEMO fusion reactor	81.049	-2,421	-
		Total for Brookhaven Technology Group, Inc.		17,147	-
Arzeda Corporation					
DEPARTMENT OF ENERGY	AGMT EFF 2/21/2023	Novel enzymes and synthetic metabolic pathways for complete degradation and upcycling of recalcitrant polyamides	81.049	119,861	-
		Total for Arzeda Corporation		119,861	-
FGC Plasma Solutions					
DEPARTMENT OF ENERGY	AGMT SIGNED 10/11/2019	Control of Static and Dynamic Stability in Lean Combustion via Plasma Actuation in a Novel Fuel Injector Design	81.049	51,604	-
		Total for FGC Plasma Solutions		51,604	-
Eden GeoPower, Inc					
DEPARTMENT OF ENERGY	AGMT. DTD. 04/22/2022	Electro-Hydraulic Fracturing for Enhanced Geothermal Systems	81.135	506,743	-
		Total for Eden GeoPower, Inc		506,743	-
AMPeers LLC					
DEPARTMENT OF ENERGY	AGMT. DTD. 06/27/2022	Neutron Irradiation Tolerant REBCO Tapes for Compact Fusion Reactors	81.049	-992	-

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Total for AMPeers LLC				-992	-
Bridge 12 Technologies					
DEPARTMENT OF ENERGY	AGMT. DTD. 07/10/2023/PO #0000000900	A 350 GHz, 1 MW Class Gyrotron for Commercial Fusion Reactors	81.049	35,755	-
DEPARTMENT OF ENERGY	AGRMT. DTD. 3/22/2021	High Efficiency Megawatt Class Gyrotrons for Instability Control of Burning Plasma Machines	81.135	97,765	-
DEPARTMENT OF ENERGY	PO# 0000000856	A 15 T Superconducting Magnet for 350 GHz, 1 MW Class Gyrotrons for Commercial Fusion Reactors	81.049	104,936	-
Total for Bridge 12 Technologies				238,456	-
Via Separations, LLC					
DEPARTMENT OF ENERGY	AGMT. DTD. 8/1/19	Scalable Graphene Oxide Membranes for Energy-Efficient Chemical Separations	81.135	1,002	-
Total for Via Separations, LLC				1,002	-
24M Technologies Inc.					
DEPARTMENT OF ENERGY	AGREEMENT DTD 09/28/23	Anode-Free Sodium Metal Batteries	81.135	302,016	-
Total for 24M Technologies Inc.				302,016	-
Sublime Systems					
DEPARTMENT OF ENERGY	AGREEMENT EFFECTIVE 7/28/2022	ELECTROCHEMICAL UPCYCLING FOR LOW-CO2 MATERIALS PRODUCTION	81.135	243,175	-
Total for Sublime Systems				243,175	-
Commonwealth Fusion Systems					
DEPARTMENT OF ENERGY	AWD EFF 3/1/22	CFS-Phase 2 Mitei Startup Member Framework Agreement	81.049	-14,187	-
DEPARTMENT OF ENERGY	MEMBER AGREEMENT DTD 3/7/18	CFS-Mitei Startup Member Framework Agreement	81.RD	-2	-
Total for Commonwealth Fusion Systems				-14,189	-
Georgia Institute of Technology					
DEPARTMENT OF ENERGY	AWD-000372-G2	CONSORTIUM FOR ENABLING TECHNOLOGIES & INNOVATION (ETI)	81.113	342,897	-
Total for Georgia Institute of Technology				342,897	-
Lawrence Livermore National Security, LLC					
DEPARTMENT OF ENERGY	B627203	Microscale biophysical analyses of algal bacterial interactions	81.RD	75,086	-

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DEPARTMENT OF ENERGY	B645222	Advanced Experimental Capability to Study High-Velocity Collisions of Metallic Microparticles	81.RD	122,208	-
DEPARTMENT OF ENERGY	B652285	Design and implementation of the MRSt neutron spectrometer in support of NIF	81.RD	146,027	-
DEPARTMENT OF ENERGY	B652561	Biological Ligands and Materials Design for Rare Earth Recovery and Separation	81.RD	40,259	-
DEPARTMENT OF ENERGY	B656484	High-Density Implosions on Omega and the National Ignition Facility (NIF)	81.RD	507,229	-
DEPARTMENT OF ENERGY	B663014	THE NATIONAL IFE "STARFIRE" HUB: SCIENCE & TECHNOLOGY ACCELERATED RESEARCH FOR FUSION INNOVATION & REACTOR ENGINEERING	81.049	20,527	-
DEPARTMENT OF ENERGY	B663068	Quantify uncertainties associated with field observations & model simulations across scales for accelerating soil-based carbon drawdown	81.RD	6,575	-
DEPARTMENT OF ENERGY	B664043	EBIT EXPERIMENTS TO IDENTIFY W LINES NEAR 2.7 A	81.RD	2,578	-
DEPARTMENT OF ENERGY	B664091	Studying implosion degradations at OMEGA and the National Ignition Facility (NIF) to advance Inertial Fusion Energy	81.RD	1,362	-
DEPARTMENT OF ENERGY	SUBCONTRACT NO. B652251	HED NIF Catcher Development	81.RD	77,607	-
DEPARTMENT OF ENERGY	SUBCONTRACT NO. B655620	Differentiating Large-Scale Finite Element Applications	81.RD	41,753	-
Total for Lawrence Livermore National Security, LLC				1,041,211	-
Triad National Security, LLC					
DEPARTMENT OF ENERGY	C2352 / CW23868	Readout and Fast triggers for the sPHENIX MVTX	81.RD	112,235	-
DEPARTMENT OF ENERGY	C2543/531711 PO EP69970	Analysis and Optimization of Parallel Unstructured-Mesh Computations	81.RD	22,938	-
DEPARTMENT OF ENERGY	C3464	Human-Robot Collaboration for Teaching, Tasking and Supervisory control of Mobile Manipulation Robots	81.RD	415,272	-
DEPARTMENT OF ENERGY	PO #EP115905; SUB NO. CW9131	Advancements in Monte Carlo methods for transient modelling and performance on GPUs	81.RD	159,920	-
DEPARTMENT OF ENERGY	PO #EP122805; SUB NO. CW22206	Actinide-Molten Salt Pair Distribution Function (PDF) Studies	81.RD	19,075	-
Total for Triad National Security, LLC				729,440	-
Battelle-Pacific Northwest Laboratories					
DEPARTMENT OF ENERGY	CONTRACT# 428422	Center for Molecular Electrocatalysis	81.RD	-10,442	-
Total for Battelle-Pacific Northwest Laboratories				-10,442	-

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Sequoia Scientific, Inc.					
DEPARTMENT OF ENERGY	DE-AR0001232-MIT	REAL-TIME, IN-SITU SENSING OF SEDIMENT PROPERTIES FOR ENVIRONMENTAL MONITORING OF DEEP-SEA POLYMETALLIC NODULE MINING	81.135	-7,200	-
		Total for Sequoia Scientific, Inc.		-7,200	-
Type One Energy Group, Inc.					
DEPARTMENT OF ENERGY	DE-AR0001287	Proposal for a Demonstration HTS Stellarator Coil with an Additive-Manufactured Support Case	81.135	13,692	-
		Total for Type One Energy Group, Inc.		13,692	-
Technology Holding, LLC					
DEPARTMENT OF ENERGY	DE-FOA-0002322	Next Generation Separation Method for Rare Earths	81.RD	96,010	-
		Total for Technology Holding, LLC		96,010	-
Colorado State University					
DEPARTMENT OF ENERGY	G-64020-01	Redesigning Polymers to Leverage A Circular Economy (REPLACE)	81.049	277,034	-
		Total for Colorado State University		277,034	-
SURA / Jefferson Lab					
DEPARTMENT OF ENERGY	JSA-21-C0815	MOLLER Upstream Toroid System Design Statement of Work	81.RD	8,866	-
		Total for SURA / Jefferson Lab		8,866	-
University of California-Santa Barbara					
DEPARTMENT OF ENERGY	KK1939	PhILMs: Collaboratory on Mathematics and Physics Informed Learning Machines for Multiscale and Multiphysics Problems	81.049	-8,389	-
		Total for University of California-Santa Barbara		-8,389	-
Texas A & M					
DEPARTMENT OF ENERGY	M2100082	Secure Monitoring and Control of Solar Power Distribution System Through Dynamic Watermarking	81.087	147,234	-
		Total for Texas A & M		147,234	-
National Renewable Energy Laboratory					
DEPARTMENT OF ENERGY	NO. UGA-0-41029-21	NREL: Lignin-First Biorefinery Development	81.049	51,983	-
DEPARTMENT OF ENERGY	UGA-0-41029-25	Investigation of Plastic Deconstruction Methods to Aid in Upcycling and Redesign	81.RD	893,242	-

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DEPARTMENT OF ENERGY	UGA-0-41029-27	Metal-to-ceramic joining methods to support development of advanced ceramic-based CSP components	81.RD	103,153	-
DEPARTMENT OF ENERGY	UGA-0-41029-28	Lignin Conversion to Sustainable Aviation Fuel Blendstocks	81.RD	24,742	-
DEPARTMENT OF ENERGY	UGA-0-41029-30	Economics analysis and support for demand-side bidding in electricity markets	81.RD	22,094	-
DEPARTMENT OF ENERGY	UGA-0-41029-34	NREL: Lignin-First Biorefinery Development	81.RD	33,214	-
DEPARTMENT OF ENERGY	UGA-0-41029-35	Towards sustainable aviation fuels from biomass	81.RD	13,648	-
Total for National Renewable Energy Laboratory				1,142,076	-
Plasma Processes, LLC					
DEPARTMENT OF ENERGY	PO 1017-002-JK-050222	Additive Manufacture of GRCop Waveguides for Fusion	81.049	186,932	-
Total for Plasma Processes, LLC				186,932	-
Fluor Marine Propulsion					
DEPARTMENT OF ENERGY	PO 135265 / LINE ITEM 1	Effect of surface properties on the two-phase heat transfer and critical heat flux	81.RD	145,012	-
Total for Fluor Marine Propulsion				145,012	-
University of Michigan					
DEPARTMENT OF ENERGY	PO 3005787040 / SUBK00009794	Consortium for Monitoring, Technology, and Verification	81.113	402,402	-
DEPARTMENT OF ENERGY	SUBK00017477	Mechano-Chemical Understanding of Solid Ion Conductors (MUSIC)	81.049	398,273	-
DEPARTMENT OF ENERGY	SUBK00018472 / 3007875053	The Center for Magnetic Acceleration, Compression, and Heating (MACH)	81.112	155,995	-
Total for University of Michigan				956,670	-
University of California - Berkeley					
DEPARTMENT OF ENERGY	PO BB01575432/00010929	Probing the Speciation of Light Elements in Molten Salt by Electrochemistry, High Temperature Liquid NMR and Neutron Diffraction	81.121	25,580	-
Total for University of California - Berkeley				25,580	-
Honeywell Federal Manufacturing & Technologies, Llc					
DEPARTMENT OF ENERGY	PO N000462960	Multiaxial Vibration Test of Electronic Systems	81.RD	103,802	-
DEPARTMENT OF ENERGY	PO N000509491	Multiaxial Vibration Test of Electronic Systems	81.RD	92,893	-
Total for Honeywell Federal Manufacturing & Technologies, Llc				196,695	-

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General Atomics					
DEPARTMENT OF ENERGY	PO# 4500071909	AToM: Advanced Tokamak Modeling Environment	81.049	38,582	-
Total for General Atomics				38,582	-
Lincoln Laboratory					
DEPARTMENT OF ENERGY	PO# 7120477965	Advanced Quantum Testbed (AQT)	81.RD	43,281	-
Total for Lincoln Laboratory				43,281	-
Michigan State University					
DEPARTMENT OF ENERGY	RC108389 - MIT	CRIS at FRIB-MIT	81.049	-2,586	-
DEPARTMENT OF ENERGY	RC115542 - MIT	High Energy Physics Computing Traineeship for Lattice Gauge Theory	81.049	33,687	-
Total for Michigan State University				31,101	-
Adelphi Technology Inc					
DEPARTMENT OF ENERGY	STTR UNDER DE-SC0020555	Multiplexing Focusing Analyzer for Efficient Stress-Strain Measurements	81.049	141,945	-
DEPARTMENT OF ENERGY	STTR UNDER DE-SC0023629	Compact, portable single-crystal neutron diffractometer.	81.049	118,999	-
Total for Adelphi Technology Inc				260,944	-
Princeton University					
DEPARTMENT OF ENERGY	SUB0000289	Bioinspired Light-Escalated Chemistry (BioLEC)	81.049	146,274	-
Total for Princeton University				146,274	-
Clean Energy States Alliance					
DEPARTMENT OF ENERGY	SUBAWARD AGREEMENT DATED APRIL 1 2021/USDOE AWARD DE-EE009360	Effective Knowledge Dissemination for LMI Solar: The Roles of CBOs and State Governments	81.087	72,348	-
Total for Clean Energy States Alliance				72,348	-
Radiation Monitoring Devices					
DEPARTMENT OF ENERGY	SUBCONTRACT C24-05	Doping and Contact Engineering of CsPbBr3 for Gamma-Ray Spectroscopy	81.049	30,997	-
Total for Radiation Monitoring Devices				30,997	-
Form Energy, Inc.					

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DEPARTMENT OF ENERGY	SUBCONTRACT RESEARCH AGREEMENT DATED 10-24-2019	Aqueous Sulfur Systems for Long-Duration Grid Storage	81.135	42,210	-
Total for Form Energy, Inc.				42,210	-
University of Alaska-Fairbanks					
DEPARTMENT OF ENERGY	UA 23-0045/ P.O. 564325	Environmental Justice and Equity Framework for siting nuclear energy in America's Arctic	81.121	40,053	-
Total for University of Alaska-Fairbanks				40,053	-
University of Texas - Austin					
DEPARTMENT OF ENERGY	UTA18-000276	Partnership for Multiscale Gyrokinetic (MGK) Turbulence	81.049	26,058	-
DEPARTMENT OF ENERGY	UTA18-001328	AEOLUS: Advances in Experimental Design, Optimal Control, and Learning for Uncertain Complex Systems	81.049	437	-
Total for University of Texas - Austin				26,495	-
University of Washington					
DEPARTMENT OF ENERGY	UWSC12397 PO BPO52447	Ultrafast Control of Emerging Electronic Phenomena in 2D Quantum Materials	81.049	188,918	-
Total for University of Washington				188,918	-
Rice University					
DEPARTMENT OF ENERGY	X03136842	CMS Endcap Timing Layer Upgrade	81.049	94,754	-
Total for Rice University				94,754	-
TOTAL for Department of Energy				23,622,484	599,670

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DEPARTMENT OF HEALTH & HUMAN SERVICES					
Harvard School of Public Health					
DEPARTMENT OF HEALTH & HUMAN SERVICES	115034-5119517	The Harvard TH Chan School of Public Health Center for Work, Health and Wellbeing	93.262	130,877	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	117127-5108050	Multi-Pathway DNA Repair Capacity Measurements in Lung Cancer Patients and Healthy Controls	93.113	16,766	-
Total for Harvard School of Public Health				147,643	-
Synensys, LLC					
DEPARTMENT OF HEALTH & HUMAN SERVICES	AGMT EFF 9/8/22	Systems-Theoretic Analysis to Improve Safety of Laboratory Data	93.RD	394,343	-
Total for Synensys, LLC				394,343	-
National Institute for Pharmaceutical Technology and Education (NIPTE)					
DEPARTMENT OF HEALTH & HUMAN SERVICES	NIPTE-75F-MIT-2022-001	Continuous Drug Substance Manufacturing from biomass-derived building blocks	93.RD	318,043	-
Total for National Institute for Pharmaceutical Technology and Education (NIPTE)				318,043	-
Draper Laboratory Incorporated					
DEPARTMENT OF HEALTH & HUMAN SERVICES	SC001-000001500	Human Tissue Models of Radiation-Induced Damage to Enable Medical Countermeasure Discovery	93.RD	2,379	-
Total for Draper Laboratory Incorporated				2,379	-
Brown University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	00001628	Multifidelity and multiscale modeling of the spleen function in hereditary spherocytosis and sickle cell disease with in vitro and ex vivo validations	93.839	270,141	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	00001959	Population modeling of bladder cancer detection and control	93.393	46,228	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	00002019	Fluorinated macrocyclic peptides as BBB penetrating agent for improved GBM treatment	93.395	217,651	-
Total for Brown University				534,020	-
Fred Hutchinson Cancer Research Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	0001109660	The Syngenic DNA and uPOET Platform: Overcoming Innate Barriers to Genetic Engineering in Bacteria	93.121	12,878	-
Total for Fred Hutchinson Cancer Research Center				12,878	-
Beth Israel Deaconess Medical Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	01062677	Research Resource for Complex Physiologic Data	93.286	338,160	-

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DEPARTMENT OF HEALTH & HUMAN SERVICES	01064315	Structure-Guided Design of Intestine-Selective AHR Agonists for Restoration of Gut Barrier Integrity in IBD	93.847	1,488	-
		Total for Beth Israel Deaconess Medical Center		339,648	-
Icahn School of Medicine at Mount Sinai					
DEPARTMENT OF HEALTH & HUMAN SERVICES	0255-E503-4609	Physical Activity Genomics, Epigenomics/transcriptomics Site	93.310	-1,981	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	0255-H291-4609	Integration of adjuvant derived nanoparticles and engineered mRNA for HIV vaccine discovery	93.855	182,463	-
		Total for Icahn School of Medicine at Mount Sinai		180,482	-
Columbia University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	1(GG012741-07)-SAPO G17330	The role of stem cells and the microenvironment in gastrointestinal cancers	93.393	15,000	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	2(GG018142-01)	Extramural Research Programs in the Neurosciences and Neurological Disorders	93.853	291,180	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	3(GG014961-01)	Integrating Air Pollution Prediction Models: Uncertainty Quantification and Propagation in Health Studies	93.113	92,942	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	6(GG017143-07) PO# SAPO G16033	State-dependent Decision-making in Brainwide Neural Circuits	93.853	137,386	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	6(GG017143-18) SAPO #18129	State-dependent Decision-making in Brainwide Neural Circuits	93.853	54,038	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO G13407 1(GG014640)	Distal enhancers controlling motor neuron gene expression program	93.853	-9,419	-
		Total for Columbia University		581,127	-
Joslin Diabetes Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	100190-2150186	Fibroblast Growth Factor and Energy Metabolism	93.847	37,689	-
		Total for Joslin Diabetes Center		37,689	-
Boston Medical Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	100192022-MIT 05349	A multi-modular approach for human pluripotent stem cell-based liver regeneration	93.847	125,252	-
		Total for Boston Medical Center		125,252	-
University of Utah					
DEPARTMENT OF HEALTH & HUMAN SERVICES	10062103-15-MIT	ARRA - CHEETAH Center for the Structural Biology of HIV Infection, Restriction, and Viral Dynamics	93.855	96,573	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	10062103-15-MIT	CHEETAH Center for the Structural Biology of HIV Infection, Restriction, and Viral Dynamics	93.855	189,152	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Total for University of Utah				285,725	-
Oregon Health and Science University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	1020958_MIT	Multispecies NHP dGTE _x Research Center	93.172	500,666	-
Total for Oregon Health and Science University				500,666	-
Tufts University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	102188-00001-PETER_SZOLOVITS	Tufts Clinical and Translational Science Institute (CTSI)	93.350	39,429	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	102188-00061:NH9094_EDELMAN PO# EP0182273	Clinical and Translational Science Award U54	93.350	-1,205	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	103076-00001/NIH113/PO EP0192109	Voltage imaging of astrocyte-neuron interactions	93.853	92,045	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5020410 SERV	Pathogenesis of Cardiopulmonary Fibrosis Associated with Heart Failure in the Elderly	93.866	82,758	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO EP0233974	Understanding and designing cyclic peptides	93.859	38,968	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO EP0235091	Optimizing integration of veterinary clinical research findings with human health systems to improve strategies for early detection and intervention	93.350	164,809	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO EP0235120	Genetic and Functional dissection of frontal thalamocortical circuitry	93.242	503,655	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO# EP0234282	Tufts Clinical and Translational Institute	93.350	192,715	-
Total for Tufts University				1,113,174	-
Cummings School of Veterinary Medicine at Tufts University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	104489-00001 PO# EP0234333	Cross-Disciplinary Training for Veterinary Students	93.351	4,550	-
Total for Cummings School of Veterinary Medicine at Tufts University				4,550	-
Harvard University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	109786.5110773	Immune Mechanisms of Protection against Mycobacterium Tuberculosis Center (IMPAC-TB)	93.RD	588,032	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	109786.5110775	Immune Mechanisms of Protection against Mycobacterium Tuberculosis Center (IMPAC-TB)	93.RD	797,836	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	132692-5106604	Developmental origins of mental illness: evolution and reversibility	93.242	-2	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	138152-5124654	Rapid and Cost-effective Connectomics With Intelligent Image Acquisition, Reconstruction, and Querying	93.372	238,909	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	164647-5107687	Novel Age-Dependent DNA Modifications	93.866	30,785	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF HEALTH & HUMAN SERVICES	164677-5115233	High throughput assaying of circuit activity and connectivity in brain organoids	93.242	247,306	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	168051-5119965	Platform technologies for scalable highly multiplexed proteomic phenotyping of the brain	93.242	442,725	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	168051-5119967	Platform technologies for scalable highly multiplexed proteomic phenotyping of the brain	93.242	922,930	-
Total for Harvard University				3,268,521	-
Brigham & Women's Hospital					
DEPARTMENT OF HEALTH & HUMAN SERVICES	120368	Neuroimaging Analysis Center	93.286	-13,813	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	121535	Pro-inflammatory activation of human macrophages regulated by lncRNAs	93.837	9,306	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	123929	Epigenetics and 3D structure of miR-10b/HoxD locus in the brain and malignant glioma	93.853	119,803	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	126094	Predicting the impact of genetic variants, genes and pathways on human Disease	93.172	28,023	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	126466	Monitoring pro-resolving leukocyte responses in peripheral blood predicts clinical severity during sepsis	93.859	58,917	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	127817	Targeting platinum(IV) prodrug to GBM tumors using a brevicin-binding peptide	93.395	147,177	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	127862	Functional analysis of glia in tauopathy	93.866	171,221	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	130278	Circumventing Barriers to Effective Oncolytic Virotherapy of Malignant Gliomas_Project 2	93.395	12,628	-
Total for Brigham & Women's Hospital				533,262	-
Dana Farber Cancer Institute					
DEPARTMENT OF HEALTH & HUMAN SERVICES	1283206	Altered metabolism and machine learning for pancreatic cancer early detection	93.394	34,670	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	1283207	Altered metabolism and machine learning for pancreatic cancer early detection	93.394	60,300	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	1311401	Development and implementation of multiplex methods to understand the biology and heterogeneity of patient-derived cancer models	93.353	5,329	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	1318003	Development of microRNA-based cell-targeted polymeric nanoparticles for multiple myeloma therapy	93.395	96,845	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	1318004	Development of microRNA-based cell-targeted polymeric nanoparticles for multiple myeloma therapy	93.395	40,333	-
Total for Dana Farber Cancer Institute				237,477	-
University of California - San Francisco					

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF HEALTH & HUMAN SERVICES	13617SC	COVID-19: AViDD U19: QBI Coronavirus Research Group (QCRG)	93.855	591,013	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	13777SC	Project 2: Defining the Unique Properties of the Distinct Signaling Machinery Used by the TCR	93.855	77,786	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	13778SC	Project 3: Defining the Unique Properties of the Distinct Signaling Machinery Used by the TCR	93.855	63,821	-
Total for University of California - San Francisco				732,620	-
Harvard Medical School					
DEPARTMENT OF HEALTH & HUMAN SERVICES	150609.5117888.0002	mHealth-Community Health Worker tool for comprehensive post-cesarean follow-up in rural Rwanda	93.865	5,613	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	151757.5123384.0002	Contributing roles of T cell-produced cytokine interleukin-17 in promoting Alzheimer's Disease	93.866	492,311	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	152074.5128550.007	mHealth-Community Health Worker tool for comprehensive post-cesarean follow-up in rural Rwanda	93.865	10,330	-
Total for Harvard Medical School				508,254	-
University of California, Los Angeles					
DEPARTMENT OF HEALTH & HUMAN SERVICES	1554 G WC474	Molecular Analysis of Host Immune Response in Leprosy	93.855	196,698	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	1554 G XA369	IL-26 in host defense against infection by intracellular bacteria in skin	93.846	81,275	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	20000000087938	Next-generation MORF Mice for Scalable Brainwide Morphological Mapping and Genetic Perturbation of Single Neurons	93.242	335,766	-
Total for University of California, Los Angeles				613,739	-
Health Resources in Action					
DEPARTMENT OF HEALTH & HUMAN SERVICES	1R25OD023756	LEAH-Knox Scholars Program in Biomedical Research	93.859	4,691	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	AGREEMENT DTD 10/25/2023	Data Science Internship Program	93.310	32,081	-
Total for Health Resources in Action				36,772	-
Codomax, Inc.					
DEPARTMENT OF HEALTH & HUMAN SERVICES	1R41TR004774-01	Exploiting translation elongation for improved biologics manufacturing	93.350	82,060	-
Total for Codomax, Inc.				82,060	-
La Jolla Institute for Allergy and Immunology					
DEPARTMENT OF HEALTH & HUMAN SERVICES	20012-01-133-284	ImmuneSignatures HIPC IOF project	93.855	93,904	-

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DEPARTMENT OF HEALTH & HUMAN SERVICES	20021-08-133-382	Maximizing germinal centers and somatic hypermutation to HIV Env immunogens	93.855	152,670	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	27909-04-133-408	Consortium for Immunotherapeutics against Emerging Viral Threats	93.855	157	-
Total for La Jolla Institute for Allergy and Immunology				246,731	-
Johns Hopkins University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	2006077065	A Digital Biomarker for Vascular Cognitive Impairment in Patients with Minor Stroke	93.866	10,629	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	2006198036	Reverse Engineering Zonation-Specific and Age-Specific iPSC-Derived Cerebrovascular Models Based on Transcriptomic Profiling of the Human Brain	93.839	148,213	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO# 2005303292	Reverse Engineering Zonation-Specific and Age-Specific iPSC-Derived Cerebrovascular Models Based on Transcriptomic Profiling of the Human Brain	93.839	205,607	-
Total for Johns Hopkins University				364,449	-
North Carolina State University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	2021-0285-01	Biomaterial Scaffolds for Ex Vivo and In Situ CAR-T Cell Production	93.395	34,235	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PAM-P23-000937-SA01	MASTER Scaffolds for Rapid, Single-Step Manufacture and Prototyping of CAR-T cells	93.395	26,420	-
Total for North Carolina State University				60,655	-
Allen Institute for Brain Science					
DEPARTMENT OF HEALTH & HUMAN SERVICES	2021-0590	Cell Type and Circuit Mechanisms of Non-Invasive Brain Stimulation by Sensory Entrainment	93.279	456,750	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	2022-0624	Functionally guided adult whole brain cell atlas in human and NHP	93.242	265,752	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	2022-0625	Functionally guided adult whole brain cell atlas in human and NHP	93.242	667,367	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	2022-0638	A Knowledgebase for Community Exploration of Brain Cell Types	93.242	420,919	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	2023-0605	BRAIN CONNECTS: Mapping brain-wide connectivity of neuronal types using barcoded connectomics	93.853	469,577	-
Total for Allen Institute for Brain Science				2,280,365	-
University of California - Irvine					
DEPARTMENT OF HEALTH & HUMAN SERVICES	2022-1731	Molecular Mechanisms of Pathogenesis in Huntington's disease	93.853	-1,425	-
Total for University of California - Irvine				-1,425	-

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Cornell University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	203763, BOUROUIBA	Halting TB transmission: Bacterial determinants of Mtb aerobiology	93.855	65,368	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	222469, BOUROUIBA	Halting TB transmission: Bacterial determinants of Mtb aerobiology	93.855	-18,838	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	223317	Targeted delivery of cytopathicity enhancing agents, and co-ordination with shock and kill, to reduce levels of persistent HIV and enable remission	93.855	23,854	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	228323, BOUROUIBA	Halting TB transmission: Bacterial determinants of Mtb aerobiology	93.855	343,752	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUBAWARD NO. 230778	Targeted delivery of cytopathicity enhancing agents, and co-ordination with shock and kill, to reduce levels of persistent HIV and enable remission	93.855	294,952	-
Total for Cornell University				709,088	-
University of Texas Medical Branch					
DEPARTMENT OF HEALTH & HUMAN SERVICES	20-85074-01	Coordinating Research on Emerging Arboviral Threats Encompassing the Neotropics (CREATE-NEO)	93.855	503	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	23-85074-04	Coordinating Research on Emerging Arboviral Threats Encompassing the Neotropics (CREATE-NEO)	93.855	75,340	-
Total for University of Texas Medical Branch				75,843	-
Massachusetts General Hospital					
DEPARTMENT OF HEALTH & HUMAN SERVICES	233405	Harnessing Diverse BioInformatic Approaches to Repurpose Drugs for Alzheimers Disease (R01 Resub)	93.866	-2,491	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	233811	Leveraging Artificial Intelligence for the assessment of severity of depressive symptoms	93.242	90,688	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	235400	DISCOVERY: Determinants of Incident Stroke Cognitive Outcomes and Vascular Effects on RecoverY	93.853	41,567	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	236596	Defining the Fc-correlates of protection against influenza	93.855	61,619	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	236632	Multiplexed Antigen-Specific Antibody Fc Profiling on a Chip for Point-of-Care Diagnosis of TB in HIV-infected Children	93.855	29,216	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	236707	Prebiotic effect of eicosapentaenoic acid treatment for colorectal cancer	93.396	59,284	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	236829	Drug Addiction Stress Prediction from Wearable Sensors	93.273	17,726	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	236887	Mechanisms of HIV-associated epithelial intestinal stem cell (ISC) dysfunction	93.847	296,458	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	237498	Development of the Human Dynamic Neurochemical Connectome Scanner	93.286	34,162	-

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DEPARTMENT OF HEALTH & HUMAN SERVICES	237869	Defining functional humoral correlates of immunity to guide vaccine design	93.855	171,883	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	238575	Effects of inflammaging on intestinal epithelial cells and aspirin chemoprevention.	93.393	177,251	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	238641	Centers for Studies of IBD - Cellular and In Vivo Models (CIVM) Core	93.847	24,987	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	238695	Improving treatment of HER2+ breast cancer brain metastasis by targeting cancer metabolism	93.396	141,653	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	241484	Immunometabolic regulation of CD8+ T cell mediated intestinal epithelial cell death in people with HIV (PWH)	93.847	324,084	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	241551	Intravascular all-optical microstructural and biomechanical characterization of coronary plaques	93.286	117,395	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	242793	Clinical Research Center for the Improved Prevention, Diagnosis, and Treatment of Vocal Hyperfunction	93.173	130,781	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	242982	Investigating the Protective Efficacy of SIV/HIV T and B cell Immunity Induced by RNA Replicons	93.855	149,191	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	243877	Circuits across scales in the monkey and human	93.242	259,559	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	244001	Harnessing Diverse BioInformatic Approaches to Repurpose Drugs for Alzheimers Disease and Related Dementias	93.866	42,949	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	244110	Biophysical Mechanisms of Cortical MicroStimulation	93.853	651,531	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	300374	The effects of unison production on speech fluency in people with aphasia	93.173	12,405	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	300416	Influence of ADHD and Executive Function on the Development of Dyslexia	93.865	484,659	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	AGR 241802/1OT2OD032701	Bridge2AI CHoRUS	93.310	256,843	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUBAWARD# 238799	COVID-19: CIMIT Research Proposal Peko Hosoi	93.286	104,722	-
Total for Massachusetts General Hospital				3,678,122	-
Research Foundation of SUNY-Albany					
DEPARTMENT OF HEALTH & HUMAN SERVICES	2-88226	Translational regulation during cigarette smoking-induced reprogramming of the rRNA epitranscriptome, in vitro and in a mouse smoking model	93.113	96,412	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	2-95806	Translational regulation in exposure biology - Xenobiotic-induced reprogramming of tRNA modifications and selective translation of codon-biased response genes in rat and human models	93.113	128,519	-
Total for Research Foundation of SUNY-Albany				224,931	-

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Duke University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	303001422	Screening for Cys-Reactive Ligands to Target PAX3-FOXO1	93.353	37,719	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	A032777	Project 3: Chemical Probe Discovery for PAX3-FOXO1	93.393	181,052	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	A034481	Using Genetic Tools to Dissect Neural Circuits for Social Communication	93.242	27,520	-
Total for Duke University				246,291	-
University of Kentucky					
DEPARTMENT OF HEALTH & HUMAN SERVICES	3200005065-23-112	The impact of metformin on mechanisms that drive inflammation in older adults	93.866	107,877	-
Total for University of Kentucky				107,877	-
University of Louisiana at Lafayette					
DEPARTMENT OF HEALTH & HUMAN SERVICES	330185-01	HIVRAD Project: Defense-in-depth against mucosal HIV clade C invasion	93.855	-5,771	-
Total for University of Louisiana at Lafayette				-5,771	-
Augusta University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	36350-10	Field deployable rapid diagnosis of sickle cell disease	93.847	95,032	-
Total for Augusta University				95,032	-
McLean Hospital					
DEPARTMENT OF HEALTH & HUMAN SERVICES	401663	Novel Treatment Targets For Affective Disorders Through Cross-Species Investigation of Approach/Avoidance Decision Making	93.242	417,513	-
Total for McLean Hospital				417,513	-
National Bureau of Economic Research, Inc.					
DEPARTMENT OF HEALTH & HUMAN SERVICES	4126B.MIT	What Does Health Insurance Do? Evidence from the Oregon Health Insurance Lottery	93.866	451,031	-
Total for National Bureau of Economic Research, Inc.				451,031	-
Boston University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	4500003010	Functional reorganization of the language and domain-general multiple demand systems in aphasia	93.173	256,013	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	4500003437	Multidimensional Optimization of Voltage Indicators for In Vivo Neural Activity Imaging	93.242	355,151	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	4500004266	Precise targeting of T1D specific T cells using CAR and peptide-MHC chimeric antigen ligands	93.847	200,930	-

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Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF HEALTH & HUMAN SERVICES	4500004579	Neural Markers of Treatment Mechanisms and Prediction of Treatment Outcomes in Social Anxiety	93.242	488,141	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	4500004746	Neural Markers of Treatment Mechanisms and Prediction of Treatment Outcomes in Social Anxiety	93.242	30,686	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	4500004824	Synthetic vascularization and regeneration in engineered tissues	93.286	97,096	-
Total for Boston University				1,428,017	-
Trustees of Boston University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	4500004794	Local neuronal drive and neuromodulatory control of activity in the pial neurovascular circuit	93.279	128,851	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUBAWARD NO. 4500004896	Precision Monitoring and Assessment in the Framingham Study: Cognitive, MRI, Genetic and Biomarker Precursors of AD & Dementia	93.866	259,226	-
Total for Trustees of Boston University				388,077	-
The Broad Institute, Inc.					
DEPARTMENT OF HEALTH & HUMAN SERVICES	50000655-5500001351	Infection site-specific activation and amplification of antimicrobial peptide activity	93.855	596,936	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5000659-5500001353	Innovative technologies to transform antibiotic discovery - Administrative Core	93.855	-864	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5001243-5500001658	Single Cell Transcriptomic and Epigenomic Dissection of Opioid and Cocaine Responses in HIV	93.279	59,670	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5001244-5500001658	Single Cell Transcriptomic and Epigenomic Dissection of Opioid and Cocaine Responses in HIV	93.279	1,655,727	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5001436-5500001352	Genomic applications to transform Gram-negative Abx discovery	93.855	48,655	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5001644-5500001849	Unraveling the genetic programs engaged in ASD neurons through coupled transcriptomic and phenotypic readouts	93.242	137,682	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5001913-5500001352	Genomic applications to transform Gram-negative Abx discovery	93.855	131,070	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5100660-5500001353	Innovative technologies to transform antibiotic discovery - Administrative Core	93.855	6,321	-
Total for The Broad Institute, Inc.				2,635,197	-
Schepens Eye Research Institute					
DEPARTMENT OF HEALTH & HUMAN SERVICES	533468	Innate and Adaptive Immunity in the Pathogenesis of Glaucoma	93.867	183,196	-
Total for Schepens Eye Research Institute				183,196	-

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Lehigh University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	544267-78002	Promoting Receptor Protein Tyrosine Phosphatase Activity by Targeting Transmembrane Domain Interactions	93.859	57,810	-
Total for Lehigh University				57,810	-
The Scripps Research Institute					
DEPARTMENT OF HEALTH & HUMAN SERVICES	5-54881; K00071	Consortia for HIV/AIDS Vaccine Development (CHAVD) RFA-AI-18-001	93.855	-41,938	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5-54944	Consortium for HIV/AIDS Vaccine Development (CHAVD)-Supplement 6	93.855	3,213	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5-54952	Consortia for HIV/AIDS Vaccine Development (CHAVD) Supplement Project 8	93.855	1,827	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5-55023	The Consortium for Viral Systems Biology (CViSB)	93.855	63,587	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	5-55136	Consortia for HIV/AIDS Vaccine Development (CHAVD) RFA-AI-18-001	93.855	693,525	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	GR000094	The Consortium for Viral Systems Biology (CViSB)	93.855	11,704	-
Total for The Scripps Research Institute				731,918	-
University of Connecticut					
DEPARTMENT OF HEALTH & HUMAN SERVICES	5652840/PO#357361/357361	Inhibition of Translesion Synthesis as a Novel Strategy for Cancer Chemotherapy	93.395	126,809	-
Total for University of Connecticut				126,809	-
Northwestern University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	60056285 MIT	Modeling the Incompleteness and Biases of Health Data	93.879	114,997	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	60059581 MIT	CRITICAL: Collaborative Resource for Intensive care Translational science, Informatics, Comprehensive Analytics, and Learning	93.350	84,794	-
Total for Northwestern University				199,791	-
University of South Florida					
DEPARTMENT OF HEALTH & HUMAN SERVICES	6128-1009-00-A	Voice as a Biomarker of Health: Building an ethically sourced, bio-acoustic database to understand diseases like never before	93.310	13,479	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	6128-1009-02-A	Voice as a Biomarker of Health: Building an ethically sourced, bio-acoustic database to understand diseases like never before	93.310	315,815	-
Total for University of South Florida				329,294	-

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Stanford University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	62106626-28291	Project 1 - Influenza responses and repertoire in vaccination, infection and tonsil organoids	93.855	15,866	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	62196377-28291	Influenza responses and repertoire in vaccination, infection and tonsil organoids	93.855	77,491	-
Total for Stanford University				93,357	-
Cold Spring Harbor Laboratory					
DEPARTMENT OF HEALTH & HUMAN SERVICES	64580527/PO# 921003-SV	A High Resolution Cell Type Atlas of the Mouse Forebrain.	93.242	-17,339	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	65300112/PO#: 921072-SV	High-throughput approaches to local and long-range synaptic connectivity	93.242	250,249	-
Total for Cold Spring Harbor Laboratory				232,910	-
University of California-San Diego					
DEPARTMENT OF HEALTH & HUMAN SERVICES	704347	Reverse Engineering the Brain Stem Circuits that Govern Exploratory Behavior	93.853	-15,096	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	706254	Harnessing iron acquisition to hinder enterobacterial pathogenesis	93.855	162,756	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	706653	Macrophage-targeting Nanoplatfroms as Immunotherapy against Pulmonary Infections	93.855	6,607	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUBAWARD# 705701	Harnessing iron acquisition to hinder enterobacterial pathogenesis	93.855	1,076	-
Total for University of California-San Diego				155,343	-
Indiana University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	8750-MIT	Molecular engineering of complementary glucose-responsive conformational switches in insulin and glucagon	93.847	-3,351	-
Total for Indiana University				-3,351	-
University of California/Davis					
DEPARTMENT OF HEALTH & HUMAN SERVICES	A19-1044-S004	Recombinant Immunolabels for Nanoprecise Brain Mapping Across Scales	93.853	97,628	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	A21-1551-S003	Multiplex imaging in vivo with an extend color-palette of neuromodulator sensors	93.853	3,010	-
Total for University of California/Davis				100,638	-
Praevium Research Inc.					

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DEPARTMENT OF HEALTH & HUMAN SERVICES	AGMT DATED 06/13/2024	SBIR Phase I Swept source retinal visible optical coherence tomography using broadband frequency doubling of MEMS-VCSELs	93.867	3,889	-
Total for Praevium Research Inc.				3,889	-
University of Pittsburgh					
DEPARTMENT OF HEALTH & HUMAN SERVICES	AWD00001777 (133980-1)	Motor cortical signaling of impedance during manipulation	93.853	196,014	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	AWD00002100 (136326-1)	Multi-cell type human liver on chip microphysiological platform to examine CRISPR-based gene modulation	93.847	-23,841	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	AWD00004831 (138924-2)	Identification of TDP-43 modifiers through single-cell transcriptional and epigenomic dissection of ALS and FTLD-MND	93.853	6,848	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	AWD00004831 (139510-2)	Identification of TDP-43 modifiers through single-cell transcriptional and epigenomic dissection of ALS and FTLD-MND	93.853	46,513	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	AWD00008090 (139597-3)	Genetic and hypoxic control of a lncRNA axis orchestrates endothelial reprogramming in pulmonary hypertension	93.838	42,659	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	AWD00008239 (139572-2)	Endothelial Dysfunction and Restoration in Trauma Induced Coagulopathy	93.839	118,562	-
Total for University of Pittsburgh				386,755	-
Children's Hospital Boston					
DEPARTMENT OF HEALTH & HUMAN SERVICES	GENFD0001734192	Novel MRI Assessment of Placental Structure and Function Throughout Pregnancy	93.865	111,975	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	GENFD0002152100	Fetal MRI: robust self-driving brain acquisition and body movement quantification	93.286	392,032	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	GENFD0002214909/GENFD 0002058190/GENFD0001889 843	Molecular Circuits in the Hematopoietic Stem Cell Niche	93.847	264,347	-
Total for Children's Hospital Boston				768,354	-
University of Virginia					
DEPARTMENT OF HEALTH & HUMAN SERVICES	GR013362.SUB00000063	Multi-scale model of microbial phenotype modulation by mucins	93.855	42,403	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	GR100645.SUB00000113	Discover the signaling basis for OPC homeostasis	93.853	30,465	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	GR102273.SUB00000788	A synthetic toolkit for the recombinant production of tyrosine phosphorylated proteins and peptides	93.396	68,678	-
Total for University of Virginia				141,546	-

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Yale University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	GR105733 (CON-80001701)	Human-centered Design and Communities of Practice to Improve Delivery of Home-based TB Contact Investigation in Uganda	93.855	3,245	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	GR110761 (CON-80002664)	ELECTRO-BOOST: Electroencephalography for cerebral trauma recovery & oxygenation	93.853	41	-
Total for Yale University				3,286	-
Roswell Park Comprehensive Cancer Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	HRI CONTRACT# 521-01	Targeting complement to enhance antitumor immunity and control malignant effusions in patients with recurrent epithelial ovarian cancer	93.395	26,797	-
Total for Roswell Park Comprehensive Cancer Center				26,797	-
MicroBrightField, Inc					
DEPARTMENT OF HEALTH & HUMAN SERVICES	MH124566-01A1	NeuroExM	93.242	115,023	-
Total for MicroBrightField, Inc				115,023	-
European Bioinformatics Institute					
DEPARTMENT OF HEALTH & HUMAN SERVICES	MIT-4559-04	GENCODE: comprehensive reference genome annotation for human and mouse	93.172	221,592	-
Total for European Bioinformatics Institute				221,592	-
Neural Dynamics Technologies					
DEPARTMENT OF HEALTH & HUMAN SERVICES	NDT_21_01	Designing low-cost, customizable high-density probes for acute and chronic neural recordings in rodents	93.242	-229	-
Total for Neural Dynamics Technologies				-229	-
University of Massachusetts					
DEPARTMENT OF HEALTH & HUMAN SERVICES	OSP2018099/ PO NO.WA01134898	Structural annotation of the human genome	93.172	-1,115	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO WA01519284, SUB00000103	ReproNim: A Center for Reproducible Neuroimaging Computation	93.286	367,676	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB00000344/PO#WA01465 914	Structural Annotation of the Human Genome	93.172	75,159	-
Total for University of Massachusetts				441,720	-
University of Massachusetts Medical Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	OSP33133-02	Center for 3D Structure and Physics of the Genome	93.310	216,245	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	OSP33133-03	Center for 3D Structure and Physics of the Genome	93.310	65,859	-

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DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB00000076/PO# #WA01556657	Develop combinatorial non-viral and viral CRISPR delivery for lung diseases	93.310	116,680	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB00000076/PO# WA01159829	Develop combinatorial non-viral and viral CRISPR delivery for lung diseases	93.310	-15,731	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB00000139	A systems immunology approach to evaluate malaria vaccine performance in endemic regions of Kenya	93.855	36,458	-
Total for University of Massachusetts Medical Center				419,511	-
New York University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO# M190200494; 18-A0-00-1001558-01	CRCNS: An Integrative Approach for the Study of Hippocampal-Neocortical Memory Coding during Sleep	93.242	-2	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO#M220565946/21-A1-00-1006306	Chromatin architecture as a regulator of dendritic cell function	93.855	102,018	-
Total for New York University				102,016	-
University of Maryland					
DEPARTMENT OF HEALTH & HUMAN SERVICES	PO#1000001612/SUBAWAR D F301577-1	Internal Dynamics of the Postsynaptic Density	93.242	125,125	-
Total for University of Maryland				125,125	-
Dartmouth College					
DEPARTMENT OF HEALTH & HUMAN SERVICES	R1346	Computational design of novel protein binders based on structure mining and learning from data	93.859	247,048	-
Total for Dartmouth College				247,048	-
University of California-Riverside					
DEPARTMENT OF HEALTH & HUMAN SERVICES	S-001090	RAPs-mediated post-transcriptional control in Apicomplexan parasites	93.855	94,349	-
Total for University of California-Riverside				94,349	-
Pennsylvania State University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	S003298-DHHS	SCH: AI-Enhanced Multimodal Sensor-on-a-chip for Alzheimer's Disease Detection	93.866	155,090	-
Total for Pennsylvania State University				155,090	-
Enson, Inc.					
DEPARTMENT OF HEALTH & HUMAN SERVICES	STTR EFFECTIVE 06/16/2020	Magnetic Levitation Motor for Pediatric Cardiac and Cardiopulmonary Therapies	93.837	9,289	-
Total for Enson, Inc.				9,289	-
University of Massachusetts Medical School					

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DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB00000327 / PO# WA01556352	Microneedle patches for monitoring autoimmune skin disease	93.855	3,665	-
Total for University of Massachusetts Medical School				3,665	-
University of Rochester					
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB00000634/URFAO:GR53 3986	Neural circuit control of fluid and solute clearance during sleep	93.853	809,385	-
Total for University of Rochester				809,385	-
Rutgers University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB00002858	Synthesizability-constrained expansion and multi-objective evolution of antitubercular compounds	93.855	103,578	-
Total for Rutgers University				103,578	-
Princeton University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUB0000762	Mechanisms of neural circuit dynamics in working memory and decision making	93.853	5,692	-
Total for Princeton University				5,692	-
Cleveland Clinic Foundation					
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUBAWARD # CCF23922443	Genetic Dissection of Stress Responses in Shwachman-Diamond Syndrome	93.847	16,630	-
Total for Cleveland Clinic Foundation				16,630	-
Portland State University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUBAWARD 100254	7-deazaguanines in DNA: mechanism and structure of complex genome modification	93.859	69,651	-
Total for Portland State University				69,651	-
Massachusetts Eye and Ear Infirmary					
DEPARTMENT OF HEALTH & HUMAN SERVICES	SUBAWARD NO. 530673	Implantable Microphones for Fully Implantable Hearing Prosthetics	93.173	70,968	-
Total for Massachusetts Eye and Ear Infirmary				70,968	-
University of Glasgow					
DEPARTMENT OF HEALTH & HUMAN SERVICES	U21088 / 322645	Integrating reaction databases and LLM based AI approaches into a chemical programming language for automated synthesis execution	93.350	50,000	-
Total for University of Glasgow				50,000	-
Mbarara University of Science and Technology					

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DEPARTMENT OF HEALTH & HUMAN SERVICES	U54TW012043	From medical images to healthcare practice: data science for improved clinical outcomes and impact across sub-Saharan Africa	93.310	147,776	-
Total for Mbarara University of Science and Technology				147,776	-
University of Texas Health Science Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	UTH210987	Digital biomarkers for a low cost ambulatory test for early detection of Alzheimer's disease	93.866	104,413	-
Total for University of Texas Health Science Center				104,413	-
University of Washington					
DEPARTMENT OF HEALTH & HUMAN SERVICES	UWSC11889 / PO#48380	Genetic, Metabolic and Regulatory Control of MIC and Relapse in M. tuberculosis	93.855	89,290	-
DEPARTMENT OF HEALTH & HUMAN SERVICES	UWSC12292 BPO: 51861	Optogenetics to improve hand function after spinal cord injury	93.853	110,104	-
Total for University of Washington				199,394	-
Vanderbilt University Medical Center					
DEPARTMENT OF HEALTH & HUMAN SERVICES	VUMC113726	Interactions Between the Microbiota and Helicobacter pylori in Gastric Carcinogenesis	93.396	210,962	-
Total for Vanderbilt University Medical Center				210,962	-
Vanderbilt University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	VUMC77355	The role of distinct cancer stem cell populations in colorectal cancer	93.397	72,274	-
Total for Vanderbilt University				72,274	-
Washington University					
DEPARTMENT OF HEALTH & HUMAN SERVICES	WU-21-57	Multiscale models of fibrous interface mechanics	93.846	37,114	-
Total for Washington University				37,114	-
TOTAL for Department of Health & Human Services				31,362,725	-

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DEPARTMENT OF HOMELAND SECURITY					
Pennsylvania State University					
DEPARTMENT OF HOMELAND SECURITY	SA23-20	Large Area, Wide Band Gap, Highly Sensitive Polycrystalline Radiation Detectors Fabricated by Novel Field Assisted Sintering Technology (FAST) and Manufacturing	97.077	174,048	-
Total for Pennsylvania State University				174,048	-
TOTAL for Department of Homeland Security				174,048	-

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DEPARTMENT OF TRANSPORTATION					
University of Massachusetts					
DEPARTMENT OF TRANSPORTATION	017775-9080	UTC2022 Promoting Safety	20.701	160,880	-
		Total for University of Massachusetts		160,880	-
Utah Department of Transportation					
DEPARTMENT OF TRANSPORTATION	AGMT DTD 04/06/2022	Connected Traffic Signal Corridor Operations	20.RD	36,463	-
		Total for Utah Department of Transportation		36,463	-
Johns Hopkins University					
DEPARTMENT OF TRANSPORTATION	DTD 6/1/2023	Center for Climate-Smart Transportation	20.701	97,346	-
		Total for Johns Hopkins University		97,346	-
		TOTAL for Department of Transportation		294,689	-

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MISCELLANEOUS FEDERAL GOVT					
Battelle Memorial Institute					
MISCELLANEOUS FEDERAL GOVT	0000870102	Support the Defense Advanced Research Projects Agency (DARPA) BRACE program	12.RD	379,662	160,858
		Total for Battelle Memorial Institute		379,662	160,858
University of California-San Diego					
MISCELLANEOUS FEDERAL GOVT	111438341/ PO#S9002172	Nonequilibrium Order Parameter Optoelectronics for Quantum Information Processing (NOPO-QulP)	12.910	-1,557	-
		Total for University of California-San Diego		-1,557	-
Purdue University					
MISCELLANEOUS FEDERAL GOVT	15200066-022	MCOQA: Mechanically-driven, COherence-enhanced Quantum Angle	12.910	26,877	-
		Total for Purdue University		26,877	-
University of Tennessee					
MISCELLANEOUS FEDERAL GOVT	A24-0028-S001	CLEAR TNT: CLEaning And Reporting TNT	12.910	327,771	-
		Total for University of Tennessee		327,771	-
Revive & Restore					
MISCELLANEOUS FEDERAL GOVT	AGREEMENT DATED 8/1/23	VIP Ferrets	15.657	128,849	-
		Total for Revive & Restore		128,849	-
Southern California Earthquake Center					
MISCELLANEOUS FEDERAL GOVT	SCON-00005004	Comparing earthquake cycle simulations with discrete and continuum models of fault zone structure	15.807	19,957	-
		Total for Southern California Earthquake Center		19,957	-
University of Southern California					
MISCELLANEOUS FEDERAL GOVT	SCON-00006469	SCEC Research Collaboration at Massachusetts Institute of Technology	15.808	14,684	-
		Total for University of Southern California		14,684	-
Tufts University					
MISCELLANEOUS FEDERAL GOVT	104049-00001:AG0032;EP0210852	Integrated Approaches to Enhance Sustainability, Resiliency and Robustness in US Agri-Food Systems: Enabling cellular agriculture with cross-disciplinary approaches	10.310	87,448	-

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Total for Tufts University				87,448	-
RTI International					
MISCELLANEOUS FEDERAL GOVT	1-312-0217117-65876L	Economy-Wide Modeling of Energy/Environment Policy Scenarios	66.RD	83,969	-
Total for RTI International				83,969	-
Virginia Polytechnic Institute & State University					
MISCELLANEOUS FEDERAL GOVT	451767-19825	Enabling real-time, low-cost measurement of hazardous air pollutants	66.509	54,827	-
Total for Virginia Polytechnic Institute & State University				54,827	-
Tennessee Tech					
MISCELLANEOUS FEDERAL GOVT	BL180387815	Towards a repository of generative models of grid to aid digital twin like simulations	23.002	286,771	-
Total for Tennessee Tech				286,771	-
University of Michigan					
MISCELLANEOUS FEDERAL GOVT	SUBK00018687	Michigan Retirement and Disability Research Center (MRDRC)	96.007	39,100	-
Total for University of Michigan				39,100	-
TOTAL for Miscellaneous Federal Govt				1,448,358	160,858

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION					
Brown University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	00002386	Lunar Structure, Composition, and Processes for Exploration LunaSCOPE	43.003	10,079	-
Total for Brown University				10,079	-
University of Illinois-Urbana Champaign					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	097265-17589	Development of the Cryogenic Hydrogen-Energy Electric Transport Aircraft (CHEETA) Design Concept	43.002	6,457	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	109694-19065	Robust and Resilient Autonomy for Advanced Air Mobility	43.002	98,037	-
Total for University of Illinois-Urbana Champaign				104,494	-
Universities Space Research Association					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	10_0507	Feedback and the Gao & Solomon Relation seen through [CII] and HCN	43.001	147,866	-
Total for Universities Space Research Association				147,866	-
University of California, Los Angeles					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1000 G XD598	Shining Light on Supersonically Induced Gas Objects	43.001	962	-
Total for University of California, Los Angeles				962	-
Northern Arizona University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1005096-01	The MIT-Hawaii Near Earth Object Spectroscopic Survey	43.001	44,242	-
Total for Northern Arizona University				44,242	-
Purdue University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	12000414-018	The role of boreal wildfires in the global carbon budget: A process-based analysis using satellite-derived fire burn severity data	43.001	6,997	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	12000416-003	The evolution of planetary crusts through lunar gravity and topography	43.001	17,838	-
Total for Purdue University				24,835	-
University of Scranton					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	121625	Enabling Space Weather Research with Global Scale Amateur Radio Datasets	43.001	53,543	-

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Total for University of Scranton				53,543	-
CalTech - Jet Propulsion Lab					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1283622	Voyager Interstellar Mission (VIM) Plasma Science	43.RD	326,260	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1532689	EUROPA - MISE Co-I Subcontract	43.RD	34,111	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1686358	ECCO: Connecting NASA Ocean, Cryosphere, and Biogeochemistry Observations to Support National Climate Policy	43.001	57,153	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	CREI 1576768	Psyche - JPL	43.RD	550,648	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	CREI1628175	MIT-JPL EDU	43.001	-479	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUBCONTRACT NO. 1510842	Soil Moisture Science and Product Development	43.RD	249,787	-
Total for CalTech - Jet Propulsion Lab				1,217,480	-
Applied Physics Lab of Johns Hopkins					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	130359	Europa Imaging System (EIS)	43.RD	45,013	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	174756	Dragonfly	43.RD	51,433	-
Total for Applied Physics Lab of Johns Hopkins				96,446	-
University of California-San Diego					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	130808869 (S9002606)	Routes of the upper limb of the global overturning circulation	43.001	21,554	-
Total for University of California-San Diego				21,554	-
University of Colorado Boulder					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1561486 / PO 1001608250	Spatio-temporal evolution of thermospheric O/N2: Its drivers and impacts	43.001	43,194	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1561997; PO# 1001641238	Development of the Space Ultraviolet Multi-object Observatory (SUMO) Concept and Spectrograph	43.001	7,670	-
Total for University of Colorado Boulder				50,864	-
Planetary Science Institute					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1780-MIT	Studying small-body atmospheres through stellar occultations	43.001	37,070	-

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1890-MIT	Investigating the Geophysical Control of 67P/Churyumov-Gerasimenko's Outburst Plumes	43.001	86,271	-
Total for Planetary Science Institute				123,341	-
Columbia University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	2(GG016372-01)	The GAPS Experiment: A Search for Dark Matter Using Low-Energy Antiparticles	43.001	29,779	-
Total for Columbia University				29,779	-
University of Texas at Arlington					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	2021GC2752	Study of multi-scale forcing impact on the Ionosphere-Thermosphere system: Support from physical models and observations	43.001	63,548	-
Total for University of Texas at Arlington				63,548	-
San Jose State University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	21-1509-6693-MIT	Closing the carbon cycle loop: Quantifying land-to-sea carbon fluxes	43.001	28,044	-
Total for San Jose State University				28,044	-
Trustees of Boston University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	4500003542	Our Heliospheric Shield	43.001	41	-
Total for Trustees of Boston University				41	-
Boston University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	4500004476	Our Heliospheric Shield	43.001	149,868	-
Total for Boston University				149,868	-
Boston College					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	5115361-4	Space Weather Research and Technology Applications (SPARTA) Center of Excellence	43.001	56,738	-
Total for Boston College				56,738	-
Space Telescope Science Institute					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	51787	JWST Telescope Scientist Investigations - 2	43.001	148,882	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-AR-17551.001-A	Unlocking the Stellar Treasure Trove: A Legacy Library of Stellar Hosts' Heterogeneities, Activity, and Spectral Contributions from HST Exoplanet Data	43.001	4,038	-

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-14766.004-A	ACS Imaging of the Ultra-Faint Dwarf Galaxy Reticulum II: Age-Dating a Unique Nucleosynthetic Event (HST-GO-14766)	43.RD	1,883	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-15085.001-A	Galaxies in the Diffuse Baryon Field Approaching Reionization: A Joint Study with JWST, HST, and Large Telescopes (HST 15085)	43.RD	-6,861	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-15163.011-A	COS Ultraviolet Baryon Survey (CUBS) (HST 15163)	43.RD	15,023	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-15661.001-A	Testing the Limits of AGN Feedback in Starburst and QSO Central Cluster Galaxies (HST-GO-15661)	43.RD	3	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-15861.005-A	Cepheid Masses: STIS and Gaia Discovery Space (HST-GO-15861)	43.RD	13,453	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-15888.001-A	A pure-parallel search for faint stuff in star forming regions (HST-GO-15888)	43.RD	40,348	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-16233.002-A	Jets and disk scattering - Spatially resolved optical and FUV observations of AA Tau (HST 16233)	43.RD	19,949	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-16655.008-A	Betelgeuse: An Iconic and Surprising Red Supergiant	43.RD	10,572	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-16689.001-A	Using STIS ultraviolet spectroscopy to understand the physical properties, evolution, and structure of white dwarfs in sixteen newly discovered ultracompact binaries (HST-GO-16689)	43.001	24,001	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-16756.001-A	Quasars with small proximity zones: gravitationally lensed or exceptionally young? (HST-GO-16756)	43.RD	26,502	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-16875.002-A	Reconnaissance Transmission Spectroscopy of the BEST Temperate Mini-Neptune for Atmospheric Characterisation	43.RD	26,400	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-GO-17166.005-A	Fission of Transuranic Nuclei: A Potential Observational Signature in Metal-Poor Stars (HST-GO-17166)	43.RD	13,819	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-HF2-51477.001-A	Unveiling the local stellar graveyard (HST-HF2-51477; Postdoc Fellow Kishalay De)	43.001	103,468	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-HF2-51533.001-A	Towards a Robust, Multi-Wavelength View of Cosmic Dawn: New Bayesian Tools for a Systematics-Robust 21 cm Detection and Cross-Correlation (HST-HF2-51533; Fellow: Nick Kern)	43.001	86,575	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-AR-03593.001-A	Towards Solving the Stellar Inhomogeneity Contamination of Exoplanet Transmission Spectra Problem with Star Spot and Faculae Spectra	43.RD	12,394	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-02092.002-A	Unveiling stellar birth in a cosmologically common cradle	43.RD	34,864	-

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-02153.035-A	ARRA - Detecting a Young 2 Jupiter Mass Planet Embedded in the Disk of HD 163296	43.RD	31,659	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-02439.001-A	Resolving the Cooling Flow at the Center of the Phoenix Cluster (JWST GO-02439)	43.RD	88,730	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-02507.010-A	Thermal Emission from the First Planet Transiting a White Dwarf(JWST GO-02507)	43.RD	14,644	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-03117.001-A	Mapping Quasar Light Echoes with Lyman-alpha Forest Tomography during the Epoch of Reionization (JWST-GO-03117)	43.001	86,035	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-03615.002-A	Exploring the boundary between rocky and gaseous planets with WASP-47 e (JWST-GO-03615)	43.001	13,623	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-03696.011-A	A population of hidden tidal disruptions in the local universe: Revealing the energetics of the most luminous infrared transients with JWST (JWST-GO-03696)	43.001	68,105	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	JWST-GO-04554.019-A	Revealing the progenitor of the dirty fireball gamma-ray burst AT 2023lcr through its supernova component (JWST-GO-04554)	43.001	559	-
Total for Space Telescope Science Institute				878,668	-
Stanford University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	62467927-176172	Safe Aviation Autonomy with Learning-Enabled Components in the Loop	43.002	108,691	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	62785990-214339	Next-generation event characterization for X-ray imaging observatories	43.001	126,180	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	63043778-249824	X-Ray Speed-Reading: Integrated Readout Technology for Fast, Very Low-Noise, Megapixel X-Ray Imaging Detectors	43.001	90,666	-
Total for Stanford University				325,537	-
University of Arizona					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	656500	Alien Earths: Which Nearby Planetary Systems are Likely to Host Habitable Worlds and Life?	43.001	117,439	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	679907	Origin of Lunar Crustal Magnetic Anomalies	43.001	49,463	-
Total for University of Arizona				166,902	-
Combustion Research & Flow Technology, Inc.					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	80NSSC21C0619/C841	Development and Implementation of Sub-grid Boiling Models into NASA Commercial Codes	43.RD	69,560	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	80NSSC23CA206/C890	Phase III - Flow Boiling Experiments in Microgravity with Liquid Nitrogen	43.001	92,980	-

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SBIR UNDER 80NSSC20C00195/C805	Simulation of chilldown Process with a Sub-Grid Boiling Model - Phase II and II-E	43.RD	48,945	-
Total for Combustion Research & Flow Technology, Inc.				211,485	-
Woods Hole Oceanographic Institution					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	A101469	Exploring Ocean Worlds: Ocean System Science to Support the Search for Life	43.001	128,374	-
Total for Woods Hole Oceanographic Institution				128,374	-
ESPACE					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AGMT DTD 1/26/2021	Bimodal Ion-Chemical Thruster System	43.RD	115,145	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	ESP-8-31-23	Precision Ion Nano-Thruster (PINT)	43.RD	39,869	-
Total for ESPACE				155,014	-
Systems Technology, Incorporated					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AGMT DTD 8/1/23	Certification and Safety of In-Flight Multi-Objective Decision Making Algorithm Techniques (CERTIFICATE)	43.RD	14,951	-
Total for Systems Technology, Incorporated				14,951	-
Cross Trac Engineering, Inc.					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AGMT DTD 8/5/2021	Optical Intersatellite Communications for CubeSat Swarms	43.RD	-4,000	-
Total for Cross Trac Engineering, Inc.				-4,000	-
Applied NanoFemto Technologies, LLC					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AGMT DTD 9/14/2021	Photonics integrated circuits enabled miniature on-chip urine test system	43.RD	158,386	-
Total for Applied NanoFemto Technologies, LLC				158,386	-
Little Prairie Services					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AGMT DTD. 04/26/2022	NTR Fuel Testing in MIT Reactor Facilities	43.RD	63,668	-
Total for Little Prairie Services				63,668	-
LyteChip, Inc					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AGREEMENT DATED 11/1/2022	High-Performance On-chip Spectrometer for Space Applications	43.RD	125,305	-
Total for LyteChip, Inc				125,305	-

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Smithsonian Inst. - Astrophysical Observatory					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AR2-23001X	Investigating the Role of X-ray Photoevaporation and Absorption in Spatially-resolved Circumstellar Disks (Chandra 23200443)	43.001	31,289	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AR3-24001X	Stellar activity with TESS and Chandra (Chandra 24200155)	43.001	4,294	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	DD0-21125X	Investigating the vertical structure of the disc wind in Her X-1 (Chandra 21408743)	43.001	9,068	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	DD1-22134X	Chandra grating observations of a newly launched outflow from a supermassive black hole during an outburst (Chandra 22708788)	43.001	22,598	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	DD2-23138X	Disk winds in IGR J17091-3624 in the exotic variability state (Chandra 23408847 DDT)	43.001	9,403	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO0-21011X	Did RW Aur just swallow an iron-rich planet? (Chandra 21200280)	43.001	5,402	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO0-21015A	THE TRUE NATURE OF X-RAYS FROM THE ORION TRAPEZIUM (Chandra 21200414)	43.001	-7	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO0-21114A	STUDYING AGN FEEDING AND FEEDBACK IN THE MOST QUENCHED COOL CORE CLUSTER (Chandra 21800206)	43.001	15,786	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO1-22007X	The power of space: Simultaneous X-ray and UV monitoring of an accretion low-mass star (Chandra 22200086)	43.001	70,590	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO1-22011X	Did RW Aur just swallow an iron-rich planet? (Chandra 22200232)	43.001	17,534	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO1-22033A	The stellar wind of the B supergiant V662 Cas: smooth and cool. (Chandra 22400297)	43.001	1,036	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO1-22116X	Mapping Gas Flows in AGNs by Reverberation (Chandra 22700634)	43.001	12,473	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO1-22130A	UNVEILING THE INTRA-CLUSTER MEDIUM PROPERTIES OF THE MOST MASSIVE GALAXY CLUSTERS AT $z > 0.9$ (Chandra 22800459)	43.001	49,216	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO1-22131A	Building a Legacy Progenitor-Selected Cluster Sample at $z > 1$ (Chandra 22800462)	43.001	14,023	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO2-23008A	Young Massive Stars and Cores in the Trifid Nebula Center (Chandra 23200124)	43.RD	7,230	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO2-23117X	A Low- z Anchor Sample for Cluster Evolutionary Studies (Chandra 23800272)	43.001	-2,519	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO2-23124X	The X-Ray Gas-to-Dust Abundance Ratio of Silicon towards the Galactic Bulge (Chandra 23910179)	43.001	10,482	-

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO3-24002A	Probing Plasmas in the Colliding Wind Binary WR 25 (Chandra 24200045)	43.001	21,738	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO3-24111B	Chandra and XMM-Newton Observations of the Most Extreme $z > 1.25$ ACTPol Survey Clusters (Chandra 24800278)	43.001	27,269	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO3-24116A	Studying a Co-Evolving Cluster Population over 9 Gyr with Chandra (Chandra 24800375)	43.001	23,504	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO4-25089X	Exploring the virial radius of a cool-core cluster, Abell 3112 (Chandra 25800307)	43.001	421	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GO9-20117A	Studying the Progenitors of Our Favorite Clusters at $z > 1$ (Chandra 20800438)	43.001	47,639	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SV0-09008	Readying X-ray Gratings and Optics for Space Applications: Manufacturability & Alignment	43.001	11,571	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SV0-09018	Technology Development of High Speed CMOS Detectors and Multilayer Mirrors for Dynamic Solar Soft X-ray Spectral Imaging	43.001	18,508	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SV1-31007	Fabrication and testing of the x-ray reflection grating for the COronal OverLapogram - Ancillary Imaging Diagnostics (COOL-AID) instrument on the High-resolution Coronal Imager (Hi-C) sounding rocket	43.001	-3	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SV2-82023	ACIS Science Support for the Chandra Program	43.RD	289,868	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SV3-73016	Support of the Chandra X-Ray Center (CXC)	43.RD	3,378,532	-
Total for Smithsonian Inst. - Astrophysical Observatory				4,096,945	-
Georgia Institute of Technology					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AWD-003322-G1	Electronic Life-detection Instrument for Enceladus/Europa (ELIE)	43.001	31,148	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	AWD-003577-G5	Lowering Emissions and Environmental Impact from Civil Supersonic Transport	43.002	198,582	-
Total for Georgia Institute of Technology				229,730	-
Center for the Advancement of Science in Space					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GA-2020-1071	Active Deployment of first Aerospace Electronic Textile	43.007	1,900	-
Total for Center for the Advancement of Science in Space				1,900	-
Center for Advancement of Science in Space					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GA-2021-8463	Next Generation Zero Robotics Educational Programs with Astrobee	43.007	-2,004	-

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Total for Center for Advancement of Science in Space				-2,004	-
Embry-Riddle Aeronautical University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	GC61559-S6	Sporadic-E ElectroDynamics	43.001	43,515	-
Total for Embry-Riddle Aeronautical University				43,515	-
Southwest Research Institute					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	K99059JRG	Lucy Phase B	43.RD	108,636	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	N99069EH	Wave-mean interaction in Pluto's atmosphere	43.001	29	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	N99074DS	Delivering Stratospheric Ices to Titan's Surface through Methane Rain and Their Effects on Surface Albedo Changes	43.001	7,432	-
Total for Southwest Research Institute				116,097	-
Atmospheric and Environmental Research, Incorporated					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	P2588-01	Profiling Temperature and Water Vapor in the Planetary Boundary Layer using GNSS RO in Data Assimilation	43.001	76,245	-
Total for Atmospheric and Environmental Research, Incorporated				76,245	-
Baylor College of Medicine					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	P700000498	Transitional Research Institute	43.003	476,977	302,211
Total for Baylor College of Medicine				476,977	302,211
Michigan State University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	RC114560MIT	Development of Global High-Resolution Soil Moisture Using a Data-Driven Approach for the NISAR Mission	43.001	7,480	-
Total for Michigan State University				7,480	-
Analytical Mechanics Associates, Inc.					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	RS-00148	Reconfigurable filters based on phase change materials for aerospace applications	43.RD	66,938	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	RSES-MIT / PO RS-00187	System-Wide Predictive Analytics for In-time Aviation Safety Management Systems (IASMS)	43.RD	69,689	-
Total for Analytical Mechanics Associates, Inc.				136,627	-
Pennsylvania State University					

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	S001534-NASA	MIT Participation in a U.S. Contribution to the ATHENA Wide-field Imager	43.001	116,441	-
Total for Pennsylvania State University				116,441	-
LongWave Photonics LLC					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SBIR DATED 8/3/2023	High-Efficiency Terahertz Source	43.RD	39,558	-
Total for LongWave Photonics LLC				39,558	-
Southern California Earthquake Center					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SCON-00005737	Introducing Community Geodetic Model Version 2: moving beyond Ridgecrest	43.001	18,937	-
Total for Southern California Earthquake Center				18,937	-
Photon Spot, Inc.					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	STTR UNDER 80NSSC21C0126	Integrated Photonics for Quantum Information Processing	43.RD	-5,416	-
Total for Photon Spot, Inc.				-5,416	-
Michigan Technological University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUB 1607060Z6 / PO P0100197	Institute for Ultra-Strong Composites By Computational Design (US-COMP)	43.012	2,715	-
Total for Michigan Technological University				2,715	-
University of Florida					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUB00003179	Direct Modeling of Interstellar Dust in a Cosmological Framework	43.001	50,261	-
Total for University of Florida				50,261	-
Princeton University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUB0000318	MIT Participation in NASA's Interstellar Mapping and Acceleration Probe (IMAP) project (Bridge/Phase B)	43.RD	23,495	-
Total for Princeton University				23,495	-
Massachusetts General Hospital					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUBAWARD 238399	Personalized Performance Optimization Platform (P-POP)	43.003	112,067	-
Total for Massachusetts General Hospital				112,067	-
Navajo Technical University					

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUBAWARD NTU-42535-01	Broadening Participation in Engineering, Robotics and Computer Science using Zero Robotics on Astrobee	43.008	110,064	-
Total for Navajo Technical University				110,064	-
Univ. Corporation For Atmos. Research					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUBAWD003027 / PO P2019470	Solar Driven Upper Atmosphere Climatology Under the Influence of the Secular Change of Earth's Magnetic Field and Anthropogenic Forcing	43.001	45,707	-
Total for Univ. Corporation For Atmos. Research				45,707	-
Arizona State University					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUBCONTRACT NO. 17-257	Psyche: Journey to a Metal World (ASU)	43.RD	343,810	-
Total for Arizona State University				343,810	-
University of Michigan					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUBK00011438/3005617618	Europa Clipper Facility Magnetometer Phases C&D	43.001	72,108	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SUBK00012276	Responsive multimodal human-automation communication for augmenting human situation awareness in nominal and off-nominal scenarios	43.001	38,078	-
Total for University of Michigan				110,186	-
University of Texas - Austin					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	UTAUS-SUB00000715	Autonomous Aerial Cargo Operations at Scale	43.001	187,783	-
Total for University of Texas - Austin				187,783	-
TOTAL for National Aeronautics and Space Administration				10,787,134	302,211

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US AGENCY FOR INTERNATIONAL DEVELOPMENT					
Harvard Kennedy School of Government					
US AGENCY FOR INTERNATIONAL DEVELOPMENT	100890-5119584	Kartu Prakerja Impact Evaluation	98.001	50,446	-
Total for Harvard Kennedy School of Government				50,446	-
RTI International					
US AGENCY FOR INTERNATIONAL DEVELOPMENT	1-330-0219186-67389L	USAID/Philippines' New Higher Education Activity	98.001	87,994	-
Total for RTI International				87,994	-
Middle East Desalination Research Center					
US AGENCY FOR INTERNATIONAL DEVELOPMENT	PROJ# 21-HC-002	Low-Cost, Family-Sized, Point-Of-Use Desalination System for Treatment of Brackish Water at High Recovery	98.001	59,685	-
Total for Middle East Desalination Research Center				59,685	-
Unilab Foundation, Inc					
US AGENCY FOR INTERNATIONAL DEVELOPMENT	SUBAWARD DATED 12-15-2022	Advanced Manufacturing Workforce Development Alliance	98.001	235,619	-
Total for Unilab Foundation, Inc				235,619	-
TOTAL for US Agency for International Development				433,744	-

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NATIONAL SCIENCE FOUNDATION					
University of Wisconsin					
NATIONAL SCIENCE FOUNDATION	0000002374	ECO-CBET: Modular Electrochemical Processes for Simultaneous Nitrogen Recovery and Carbon Dioxide Mitigation	47.041	137,005	-
Total for University of Wisconsin				137,005	-
University of California - Berkeley					
NATIONAL SCIENCE FOUNDATION	00010001/ PO BB01599241	HERA: Unveiling the Cosmic Dawn	47.049	121,134	-
NATIONAL SCIENCE FOUNDATION	00010434	QLCI - CL: Present and Future Quantum Computation	47.049	195,114	-
NATIONAL SCIENCE FOUNDATION	00010462	Collaboration on the Theoretical Foundations of Deep Learning.	47.049	149,005	-
NATIONAL SCIENCE FOUNDATION	00010799	EFRI E3P: Program plastic lifecycle by rationally design enzyme-containing plastics	47.041	130,482	-
NATIONAL SCIENCE FOUNDATION	10462	Collaboration on the Theoretical Foundations of Deep Learning.	47.079	282,252	-
NATIONAL SCIENCE FOUNDATION	SUB 00011488; PO# BB01810184	POSE: Phase II: Building an Open-Source Ecosystem for Deep-Learning Hardware-Software Co-Design	47.084	63,825	-
NATIONAL SCIENCE FOUNDATION	SUBAWARD NO. 00011292	FuSe-TG: Electronic-Photonic Systems-on-Chip for Computation, Communication and Sensing	47.041	30,471	-
Total for University of California - Berkeley				972,283	-
University of Illinois-Urbana Champaign					
NATIONAL SCIENCE FOUNDATION	087442-18809	AM Res-Q: Enabling community-wide, data-driven process parameter development for selective laser melting.	47.041	28,920	-
NATIONAL SCIENCE FOUNDATION	092992-17667	Collaborative Research: A Search for the Electric Dipole Moment of the Neutron	47.049	45,097	-
Total for University of Illinois-Urbana Champaign				74,017	-
University of Texas - San Antonio					
NATIONAL SCIENCE FOUNDATION	1000005005	Track 1 EFRI DCL: Planning Grant for Development of Hypersonics Research Collaborations	47.041	14,370	-
Total for University of Texas - San Antonio				14,370	-
Harvard Kennedy School of Government					
NATIONAL SCIENCE FOUNDATION	100886-5117755	Optimal Public Transportation Networks: Theory and Evidence from Jakarta's Public Bus System	47.075	11,210	-
Total for Harvard Kennedy School of Government				11,210	-

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University of Maryland - College Park					
NATIONAL SCIENCE FOUNDATION	104990-Z3811201	NSF Convergence Accelerator - Track C: Quantum Networks to Connect Quantum Technology (QuanNeCQT)	47.083	359,420	-
Total for University of Maryland - College Park				359,420	-
Carnegie-Mellon University					
NATIONAL SCIENCE FOUNDATION	1123649-463156	A National Network for Critical Technology Assessment: A First-Year Pilot	47.084	74,772	-
NATIONAL SCIENCE FOUNDATION	1123649-465946	A National Network for Critical Technology Assessment: A First-Year Pilot	47.084	20,090	-
Total for Carnegie-Mellon University				94,862	-
Harvard University					
NATIONAL SCIENCE FOUNDATION	123826-5056263	Center for Integrated Quantum Materials	47.049	420,024	-
NATIONAL SCIENCE FOUNDATION	124189-5112398	DMREF: Hydrogel-actuated cellular soft robotic materials with programmable mechanical properties	47.049	24,138	-
NATIONAL SCIENCE FOUNDATION	124381-5119999	QuIC-TAQS: Integrated Lithium Niobate Quantum Photonics Platform	47.049	138,571	-
NATIONAL SCIENCE FOUNDATION	134421-5126442	QuSeC-TAQS: Quantum Sensor Networks for Metrology, Chemistry and Astrophysics	47.049	28,515	-
Total for Harvard University				611,248	-
University of Texas at Dallas					
NATIONAL SCIENCE FOUNDATION	2008652 / PO S316006	Innovating Developmental Science with an Online, Scalable Meta-Science Platform for Investigating Cognitive Development During Early Childhood	47.075	230	-
Total for University of Texas at Dallas				230	-
University of Oregon					
NATIONAL SCIENCE FOUNDATION	2016V0A	CCI Phase I: Center for Interfacial Ionics	47.049	167,224	-
Total for University of Oregon				167,224	-
University of Oklahoma (Norman, OK)					
NATIONAL SCIENCE FOUNDATION	2019-46	TIME (Thwaites Interdisciplinary Margin Evolution) - The Role of Shear Margin Dynamics in the Future Evolution of Thwaites Drainage Basin	47.050	91,346	-
Total for University of Oklahoma (Norman, OK)				91,346	-
Computing Research Association					

Appendix A3
Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION	2021CIF-MIT-08	COVID-19: Statistics and dynamics of extreme events in fluid turbulence: high-performance exact computations and data-driven modelling	47.070	26,410	-
NATIONAL SCIENCE FOUNDATION	2021CIF-MIT-41	COVID-19: Computing Innovation Fellows 2021 Project	47.070	133,019	-
NATIONAL SCIENCE FOUNDATION	CIF2020-MIT-17	Computing Innovation Fellows 2020 Project	47.070	-5,403	-
NATIONAL SCIENCE FOUNDATION	CIF2020YEAR3-MIT-17	Computing Innovation Fellows 2020 Project	47.070	22,294	-
NATIONAL SCIENCE FOUNDATION	CIF2020YEAR3-MIT-48	Computing Innovation Fellows 2020 Project	47.070	23,123	-
NATIONAL SCIENCE FOUNDATION	G-1B-018	Computer and Information Science and Engineering Graduate Fellowships (CSGrad4US)	47.070	46,833	-
NATIONAL SCIENCE FOUNDATION	G-2A-037	Computer and Information Science and Engineering Graduate Fellowships (CSGrad4US)	47.070	3,083	-
NATIONAL SCIENCE FOUNDATION	YEAR3-2021CIF-MIT-KHURSHID	Computing Innovation Fellows 2021 Project	47.070	80,658	-
Total for Computing Research Association				330,017	-
Research Foundation of SUNY Polytechnic Institute					
NATIONAL SCIENCE FOUNDATION	2023-13	Northeast Consortium for Advanced Integrated Silicon Technologies	47.076	13,765	9,105
Total for Research Foundation of SUNY Polytechnic Institute				13,765	9,105
University of Puerto Rico					
NATIONAL SCIENCE FOUNDATION	2024-000239	PARTNER: Innovating AI for efficient and insightful data transformation	47.049	4,687	-
NATIONAL SCIENCE FOUNDATION	GOALI001	GOALI: Novel Plug flow Continuous Crystallizer with Diaphragm-Driven Suspension Transfer	47.041	64,492	-
Total for University of Puerto Rico				69,179	-
University of Notre Dame					
NATIONAL SCIENCE FOUNDATION	204303MIT	SII-Center: SpectrumX - An NSF Spectrum Innovation Center	47.049	420,644	-
NATIONAL SCIENCE FOUNDATION	204512MIT	NSF Center for Computer Assisted Synthesis	47.049	286,968	-
Total for University of Notre Dame				707,612	-
West Virginia University					
NATIONAL SCIENCE FOUNDATION	20-494-MIT / PO MM000350453	MRI: Development of a CHIME Outrigger Telescope	47.049	-30,143	-
Total for West Virginia University				-30,143	-
East Bay Educational Collaborative of Rhode Island					

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Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION	2148451-2	ITEST: Engineering a Hive Learning Ecosystem for Rapidly Evolving Technologies: Investigating Impact on High School Student Knowledge, Skill-Building and Interest in STEM Careers	47.076	47,555	-
Total for East Bay Educational Collaborative of Rhode Island				47,555	-
Texas Tech University					
NATIONAL SCIENCE FOUNDATION	21P735-04	NSF Engineering Research Center for Advancing Sustainable and Distributed Fertilizer Production (CASFER)	47.041	297,789	-
Total for Texas Tech University				297,789	-
University of Massachusetts - Amherst					
NATIONAL SCIENCE FOUNDATION	23-017262 A 00	MCA-PFI Price and Lead Time Quotation for Made-to-Order Products and Services with Contingent Demand and Demand Learning	47.084	30,538	-
Total for University of Massachusetts - Amherst				30,538	-
Cornell University					
NATIONAL SCIENCE FOUNDATION	232099	MFB: Continuous evolution of RNAs with novel functions in mammalian cells	47.049	55,321	-
Total for Cornell University				55,321	-
University of Nebraska					
NATIONAL SCIENCE FOUNDATION	25-0521-0244-007	U.S. CMS Operations at the Large Hadron Collider	47.RD	840,790	-
Total for University of Nebraska				840,790	-
North Carolina Agriculture & Technology State University					
NATIONAL SCIENCE FOUNDATION	260473A	Bootstrap Embedding for Quantum Chemistry and Quantum Simulation	47.049	1,816	-
Total for North Carolina Agriculture & Technology State University				1,816	-
Gulf of Maine Research Institute					
NATIONAL SCIENCE FOUNDATION	30-CS4ALL-MIT	Broadening Access to CT-STEM: Leveraging lived experiences and hybrid language practices of K-5 Mainers for computational sensemaking	47.076	29,862	-
Total for Gulf of Maine Research Institute				29,862	-
Duke University					
NATIONAL SCIENCE FOUNDATION	333-000196	PIF: Software-Tailored Architecture for Quantum Co-Design (STAQ)	47.049	33,329	-

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FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION	333-2457	STAQ: Software-Tailored Architecture for Quantum co-design	47.049	333,220	-
NATIONAL SCIENCE FOUNDATION	333-2765	NSF Center for Molecularly Optimized Networks	47.049	687,343	-
NATIONAL SCIENCE FOUNDATION	333-2824	AI Institute: Athena: AI-Driven Next-generation Networks at the Edge	47.070	69,270	-
Total for Duke University				1,123,162	-
Spectral Sciences, Incorporated					
NATIONAL SCIENCE FOUNDATION	3710-001-3026	Constraining Titan's Seasonal Tropospheric Haze Distribution Period of Performance	47.049	5,765	-
Total for Spectral Sciences, Incorporated				5,765	-
University of Rochester					
NATIONAL SCIENCE FOUNDATION	417873-G / UR FAO GR511147	Center for Matter at Atomic Pressures	47.049	83,293	-
Total for University of Rochester				83,293	-
Boston University					
NATIONAL SCIENCE FOUNDATION	4500004398	SaTC: Small: Core: Using Markets to Address Manipulated Information Online	47.075	26,146	-
Total for Boston University				26,146	-
Virginia Polytechnic Institute & State University					
NATIONAL SCIENCE FOUNDATION	480718-19825	Development of a software package for high-throughput screening of excited state electronic properties in chromophore aggregates using quantum and classical mechanical tools	47.049	50,433	-
NATIONAL SCIENCE FOUNDATION	480718-19825A	ASKCOS v2 - A Microservice-based Open-source Software Suite for Advancing Computer-aided Synthesis Planning	47.049	67,210	-
NATIONAL SCIENCE FOUNDATION	480949-19825	RAISE:IHBEM Mathematical and Algorithmic Formulation of Change in Human Behavior in Epidemic Models	47.049	14,893	-
Total for Virginia Polytechnic Institute & State University				132,536	-
Northwestern University					
NATIONAL SCIENCE FOUNDATION	60060082 MIT	URoL:EN: Towards a unified theory of regulatory functions and networks across biological and social systems	47.074	23,343	-
NATIONAL SCIENCE FOUNDATION	60061817 MIT	RINGS: Robust and Resilient Wireless Networks using Next Generation Spectrum	47.070	41,422	-

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Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Total for Northwestern University				64,765	-
Ohio State University					
NATIONAL SCIENCE FOUNDATION	60079175	SenSE: Multimodal Biosensors and Data driven Methods for Explainable Analyticsfor a Proactive approach to Heart Failure	47.041	-191	-
NATIONAL SCIENCE FOUNDATION	GR125504/SPC-1000006637	QII – TAQS: Solid state Integration of molecular qubits	47.049	110,205	-
NATIONAL SCIENCE FOUNDATION	SPC-1000012393 / GR133509	Global Centers Track 1: Global Center on AI and Biodiversity Change	47.079	43,295	-
Total for Ohio State University				153,309	-
University of California-San Diego					
NATIONAL SCIENCE FOUNDATION	704703	FMRG: Dry Manufacturing of Solid-State Batteries for Large Energy Storage Systems	47.041	94,527	-
NATIONAL SCIENCE FOUNDATION	KR 704702	AI Institute: TILOS: The Institute for Learning-enabled Optimization at Scale	47.070	333,251	-
NATIONAL SCIENCE FOUNDATION	KR 704800	Mid-scale RI-1 (M1:DP): Designing a global measurement infrastructure to improve Internet security	47.070	220,929	-
Total for University of California-San Diego				648,707	-
American Society/Engineering Education					
NATIONAL SCIENCE FOUNDATION	769-2053	Engineering Fellows Postdoctoral Fellowship Program	47.041	24,452	-
Total for American Society/Engineering Education				24,452	-
University of Maryland					
NATIONAL SCIENCE FOUNDATION	81350-Z3438201	QII-TAQS:Quantum machine learning with photonics	47.049	173,145	-
Total for University of Maryland				173,145	-
University of Southern California					
NATIONAL SCIENCE FOUNDATION	91255352 / PO10614338	SCEC5 Research Collaboration with the Massachusetts Institute of Technology: Development of merged GPS time series for the Community Geodetic Model	47.050	219	-
Total for University of Southern California				219	-
Kansas State University					
NATIONAL SCIENCE FOUNDATION	A00-0361-S002	PIRE: High Temperature Ceramic Fibers: Polymer-Based Manufacturing, Nanostructure, and Performance	47.079	-13,513	-
Total for Kansas State University				-13,513	-
Woods Hole Oceanographic Institution					

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Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION	A101550	Center for Chemical Currencies of a Microbial Planet (C-COMP)	47.050	99,829	-
		Total for Woods Hole Oceanographic Institution		99,829	-
University of California - Santa Cruz					
NATIONAL SCIENCE FOUNDATION	A22-0844-S001	Collaborative Research: SZ4D Planning Proposal	47.049	23,970	-
		Total for University of California - Santa Cruz		23,970	-
University of Tennessee					
NATIONAL SCIENCE FOUNDATION	A23-0007-S004	PIPP Phase I: Predicting Emergence in Multidisciplinary Pandemic Tipping-points (PREEMPT)	47.070	24,495	-
		Total for University of Tennessee		24,495	-
Form Finding Studio LLC					
NATIONAL SCIENCE FOUNDATION	AGMT 9/1/23	Computer Aided Design and Simulation Software for Origami	47.084	86,705	-
		Total for Form Finding Studio LLC		86,705	-
American Political Science Association					
NATIONAL SCIENCE FOUNDATION	AGMT EFF 1/1/24	Political Control in the Workplace: How Autocrats Use Private Firms to Control Citizens	47.075	10,227	-
NATIONAL SCIENCE FOUNDATION	AGMT. DTD. 09/15/2021	Dilemmas of Accommodation	47.075	4,500	-
NATIONAL SCIENCE FOUNDATION	AGMT. DTD. 09/15/2021	Enlisting the Market: Trade Policy as Industrial Policy in Post-WTO China	47.075	50	-
NATIONAL SCIENCE FOUNDATION	AWD. LTR. DTD. 9/30/2022	Urbanization, Privatization, and the Social Contract	47.075	3,631	-
		Total for American Political Science Association		18,408	-
Cache DNA LLC					
NATIONAL SCIENCE FOUNDATION	AGMT EFF 2/15/22	Novel room-temperature archival storage of nucleic acids in synthetic polymer packets	47.RD	-4,732	-
		Total for Cache DNA LLC		-4,732	-
NEROC					
NATIONAL SCIENCE FOUNDATION	AGS-1726377	MRI Collaborative: Development of Monitors for Alaskan and Canadian Auroral Weather in Space (MACAWS)	47.050	64,495	64,495
NATIONAL SCIENCE FOUNDATION	AST-2034306	The Event Horizon Telescope: Resolving Black Holes in Time and Space	47.049	2,607,615	1,912,546
		Total for NEROC		2,672,110	1,977,041
Arizona State University					

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Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION	ASUB00001318	Mid-Scale RI-2 Consortium: Compact X-ray Free-Electron Laser Project (CXFEL)	47.074	12,138	-
NATIONAL SCIENCE FOUNDATION	ASUB00001354	FuSe-TG: STAMPEDE: Scalable Technology And Manufacturing of Photonics for Extreme Information-Density	47.041	55,760	-
Total for Arizona State University				67,898	-
Georgia Institute of Technology					
NATIONAL SCIENCE FOUNDATION	AWD-001496-G1	A Hybrid Programmable Biological-Nanoelectric System	47.041	79	-
NATIONAL SCIENCE FOUNDATION	AWD-003829-G1/PO-5290605	PIPP Phase I: BEHIVE - BEHavioral Interaction and Viral Evolution for Pandemic Prevention and Prediction	47.070	132,416	-
NATIONAL SCIENCE FOUNDATION	AWD-005041-G1	URoL:ASC: Next-Generation Biological Security and Bio-Hackathon	47.074	106,175	-
Total for Georgia Institute of Technology				238,670	-
University of Chicago					
NATIONAL SCIENCE FOUNDATION	AWD101244 (SUB00000549)	Materials Research and Science Engineering Center - Renewal 02	47.049	42,018	-
NATIONAL SCIENCE FOUNDATION	AWD103173 (SUB00000693)	Collaborative Research: Framework: Garden: A FAIR Framework for Publishing and Applying AI Models for Translational Research in Science, Engineering, Education, and Industry	47.070	175,198	-
Total for University of Chicago				217,216	-
University of Massachusetts - Boston					
NATIONAL SCIENCE FOUNDATION	B001492959	ExpandQISE:Track2:EQUIP-UMB-Expand Quantum Information Programs at UMass Boston	47.049	8,198	-
Total for University of Massachusetts - Boston				8,198	-
AMERICAN MUSEUM OF NATURAL HISTORY					
NATIONAL SCIENCE FOUNDATION	B52-2021-1, PO# 118733	Developing and Testing Innovations [DTI]: SRMPmachine	47.076	106,694	-
Total for AMERICAN MUSEUM OF NATURAL HISTORY				106,694	-
New York University					
NATIONAL SCIENCE FOUNDATION	F2456-01	Justice-Centered STEM Education with Multilingual Learners to Address Pressing Societal Challenges	47.076	19,333	-
Total for New York University				19,333	-
University of California-Santa Barbara					

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Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION	KK2432	QuSeC-TAQS: Integrated Squeezed-Light Magneto-Optical Sensor	47.049	150,656	-
Total for University of California-Santa Barbara				150,656	-
Texas A & M					
NATIONAL SCIENCE FOUNDATION	M2201483	CCI Phase I: NSF Center for the Mechanical Control of Chemistry (CMCC)	47.049	62,533	-
NATIONAL SCIENCE FOUNDATION	M2304624	NSF Center for the Mechanical Control of Chemistry	47.049	158,739	-
Total for Texas A & M				221,272	-
EarthScope Consortium, Inc.					
NATIONAL SCIENCE FOUNDATION	MIT-SU24-EAR2314379-S1	GAGE Facility GNSS Data Analysis Center Coordinator	47.050	69,785	-
Total for EarthScope Consortium, Inc.				69,785	-
University of Colorado Boulder					
NATIONAL SCIENCE FOUNDATION	PO 1001483847	QLCI-CI: Enhanced Sensing and Distribution Using Quantum States	47.RD	95,936	-
Total for University of Colorado Boulder				95,936	-
Rutgers University					
NATIONAL SCIENCE FOUNDATION	PO 25066987; 1968	SCC-IRG Track 1: Socially Informed Services Conflict Governance through Specification, Detection, Resolution and Prevention	47.070	4,940	-
Total for Rutgers University				4,940	-
National Radio Astronomy Observatory					
NATIONAL SCIENCE FOUNDATION	PO 359999	Enabling New Science with the ALMA Phasing System "Phase 2"	47.049	167,050	-
NATIONAL SCIENCE FOUNDATION	PO 379499	TALON Frequency Slice Architecture Correlator/Beamformer for ALMA	47.049	20,748	-
NATIONAL SCIENCE FOUNDATION	PO#374975	Enabling New VLBI Science with the ALMA Phasing System - Phase 3	47.049	24,334	-
Total for National Radio Astronomy Observatory				212,132	-
Rice University					
NATIONAL SCIENCE FOUNDATION	R3K023	EFRI DChEM: Electrifying CO2 From Point Sources into Pure Liquid Fuels	47.041	171,836	-
Total for Rice University				171,836	-
Pennsylvania State University					

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Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL SCIENCE FOUNDATION	S001412-NSF	AI Institute: Planning: Institute for AI-Enabled Materials Discovery, Design, and Synthesis	47.049	29,453	-
Total for Pennsylvania State University				29,453	-
UNAVCO					
NATIONAL SCIENCE FOUNDATION	S18-EAR1724794-S2	National Geophysical Observatory for Geoscience Analysis Center Coordinator and GNSS Data Processing Support for the UNAVCO community	47.050	34,472	-
Total for UNAVCO				34,472	-
Oregon State University					
NATIONAL SCIENCE FOUNDATION	S2114A-C	The Circuit: A Platform for Increasing Access and Participation in Public Engagement in Science	47.076	2,202	-
Total for Oregon State University				2,202	-
University of Massachusetts-Lowell					
NATIONAL SCIENCE FOUNDATION	S52100000048202	FMNet: A Network for Rapid Execution for Scaling Production of Needed Designs (RESPOND)	47.075	12,253	-
Total for University of Massachusetts-Lowell				12,253	-
University of Washington					
NATIONAL SCIENCE FOUNDATION	SUB# UWSC13243 / BPO61724	HDR Institute: Accelerated AI Algorithms for Data-Driven Discovery	47.070	329,557	-
NATIONAL SCIENCE FOUNDATION	SUB# UWSC13243 / PO# 61724	HDR Institute: Accelerated AI Algorithms for Data-Driven Discovery	47.070	468,340	-
Total for University of Washington				797,897	-
Princeton University					
NATIONAL SCIENCE FOUNDATION	SUB0000276	Institute for Research and Innovation in Software for High Energy Physics (IRIS-HEP)	47.070	-2	-
Total for Princeton University				-2	-
Educational Testing Service					
NATIONAL SCIENCE FOUNDATION	SUB-AWARD #0901046/723	The Online Practice Suite: Practice Spaces, Simulations and Virtual Reality Environments for Preservice Teachers to Learn to Facilitate Argumentation Discussions in Mathematics and Science	47.076	63,449	-
Total for Educational Testing Service				63,449	-
Purdue University					
NATIONAL SCIENCE FOUNDATION	SUBAWARD #10000686-015	Emerging Frontiers of Science of Information	47.070	113	-

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Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
Total for Purdue University				113	-
University of Arizona					
NATIONAL SCIENCE FOUNDATION	SUBAWARD 586648	NSF Engineering Research Center for Quantum Networks (CQN)	47.041	1,142,493	-
Total for University of Arizona				1,142,493	-
California Institute of Technology					
NATIONAL SCIENCE FOUNDATION	SUBAWARD NO. S458042	LIGO Laboratory Operations and Maintenance 2024-2028 — Exploring the Gravitational-Wave Cosmos (CY24-28)	47.049	2,507,825	-
NATIONAL SCIENCE FOUNDATION	SUBAWARD NO. S458042	LIGO Operations FY19 through FY23	47.049	2,656,610	-
NATIONAL SCIENCE FOUNDATION	SUBAWARD NO. S638582	LIGO Laboratory Operations and Maintenance 2024-2028 — Exploring the Gravitational-Wave Cosmos (CY24-28)	47.049	4,738	-
Total for California Institute of Technology				5,169,173	-
University of Michigan					
NATIONAL SCIENCE FOUNDATION	SUBK00012431	Engineering Development for Establishing IsoDAR	47.049	13,624	-
NATIONAL SCIENCE FOUNDATION	SUBK00015726 / PO# 3006717538	NSF Convergence Accelerator Track F: Misinformation Judgments with Public Legitimacy	47.083	7,409	-
Total for University of Michigan				21,033	-
The Smithsonian Astrophysical Observatory					
NATIONAL SCIENCE FOUNDATION	SV0-09003	COVID-19: Mid-scale RI-1 (M1:DP): Next Generation Event Horizon Telescope Design	47.049	329,010	-
NATIONAL SCIENCE FOUNDATION	SV0-09003	Mid-scale RI-1 (M1:DP): Next Generation Event Horizon Telescope Design	47.049	197,484	-
Total for The Smithsonian Astrophysical Observatory				526,494	-
Wayne State University					
NATIONAL SCIENCE FOUNDATION	WSU20080; GRANT INDEX 301675	The X-SCAPE collaboration: The X-ion collision with a Statistically and Computationally Advanced Program Envelope collaboration	47.070	12,048	-
Total for Wayne State University				12,048	-
Washington University in St. Louis					
NATIONAL SCIENCE FOUNDATION	WU-24-0269 / ST00018312	Building predictive coarse-graining schemes for complex microbial ecosystems	47.049	82,576	-
Total for Washington University in St. Louis				82,576	-

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Federal Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
TOTAL for National Science Foundation				19,748,307	1,986,146
TOTAL Federal Research Support - Passthrough - On Campus				\$126,594,195	\$3,048,885

Appendix A4
Economic Development Cluster
Massachusetts Institute of Technology
On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
ECONOMIC DEVELOPMENT CLUSTER					
Berkshire Innovation Center					
DEPARTMENT OF COMMERCE	01- 79-15224	BIC Manufacturing Academy	11.307	257,159	-
Total for Berkshire Innovation Center				257,159	-
TOTAL for Department of Commerce				257,159	-
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TOTAL Economic Development Cluster - On Campus				\$257,159	-

**Appendix A5
TRIO Cluster
Massachusetts Institute of Technology
On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor**

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
TRIO CLUSTER					
U.S. Department of Education					
MISCELLANEOUS FEDERAL GOVT	P047A170618	MIT/Wellesley Upward Bound Program	84.047A	-21	-
		Total for U.S. Department of Education		-21	-
		TOTAL for Miscellaneous Federal Govt		-21	-
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		TOTAL TRIO Cluster - On Campus		-\$21	-

Appendix B
Massachusetts Institute of Technology
Federal Non-Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE					
Navy					
12.U60					
Navy	N00024-09-P-6631	MIT Composite Materials Research Related to Ship Construction	12.U60	13,008	-
		<i>Total for AL # 12.U60</i>		<i>13,008</i>	-
		Total for Navy		13,008	-
Other DOD					
12.900					
NSA	H98230-21-1-0052	Choose to Study Russian for Professional Needs	12.900	84,886	-
		<i>Total for AL # 12.900</i>		<i>84,886</i>	-
12.U05					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U05	-81	-
		<i>Total for AL # 12.U05</i>		<i>-81</i>	-
12.U10					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U10	66,225	-
		<i>Total for AL # 12.U10</i>		<i>66,225</i>	-
12.U11					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U11	-79	-
		<i>Total for AL # 12.U11</i>		<i>-79</i>	-
12.U12					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U12	8,185	-
		<i>Total for AL # 12.U12</i>		<i>8,185</i>	-
12.U13					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U13	8,336	-
		<i>Total for AL # 12.U13</i>		<i>8,336</i>	-

Appendix B
Massachusetts Institute of Technology
Federal Non-Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
12.U14					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U14	8,336	-
		<i>Total for AL # 12.U14</i>		8,336	-
12.U15					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U15	6,924	-
		<i>Total for AL # 12.U15</i>		6,924	-
12.U16					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U16	35,591	-
		<i>Total for AL # 12.U16</i>		35,591	-
12.U43					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U43	1,080	-
		<i>Total for AL # 12.U43</i>		1,080	-
12.U44					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U44	51,532	-
		<i>Total for AL # 12.U44</i>		51,532	-
12.U45					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U45	50,905	-
		<i>Total for AL # 12.U45</i>		50,905	-
12.U46					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U46	106,984	-
		<i>Total for AL # 12.U46</i>		106,984	-
12.U47					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U47	103,077	-
		<i>Total for AL # 12.U47</i>		103,077	-

Appendix B
Massachusetts Institute of Technology
Federal Non-Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
12.U48					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U48	101,521	-
		<i>Total for AL # 12.U48</i>		<i>101,521</i>	-
12.U49					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U49	71,363	-
		<i>Total for AL # 12.U49</i>		<i>71,363</i>	-
12.U61					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U61	-11	-
		<i>Total for AL # 12.U61</i>		<i>-11</i>	-
12.U62					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U62	5,984	-
		<i>Total for AL # 12.U62</i>		<i>5,984</i>	-
12.U64					
NSA	H98230-22-1-0139	Trusted Analytics 5G course	12.U64	516	-
		<i>Total for AL # 12.U64</i>		<i>516</i>	-
12.U65					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U65	10,746	-
		<i>Total for AL # 12.U65</i>		<i>10,746</i>	-
12.U67					
NSA	H98230-23-P-2064	Large Language Models: Opportunities, Challenges, and Guardrails	12.U67	181,117	-
		<i>Total for AL # 12.U67</i>		<i>181,117</i>	-
12.U68					
NSA	H98230-19-C-0292	MIT Center for Quantum Engineering (MIT-CQE)	12.U68	18,959	-
		<i>Total for AL # 12.U68</i>		<i>18,959</i>	-
		Total for Other DOD		922,096	-
		TOTAL for Department of Defense		935,104	-

Appendix B
Massachusetts Institute of Technology
Federal Non-Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF COMMERCE					
11.620					
DOC	60NANB23D033	Materials Genome Toolkit Workshop at the CALPHAD 50 conference	11.620	5,000	-
		<i>Total for AL # 11.620</i>		5,000	-
		Total for Department of Commerce		5,000	-
		TOTAL for Department of Commerce		5,000	-

Appendix B
Massachusetts Institute of Technology
Federal Non-Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF TRANSPORTATION					
20.215					
DOT	693JJ32345006	Dwight David Eisenhower Transportation Fellowship (DDETFP) - Parks	20.215	6,797	-
		<i>Total for AL # 20.215</i>		6,797	-
		Total for Department of Transportation		6,797	-
		TOTAL for Department of Transportation		6,797	-

Appendix B
Massachusetts Institute of Technology
Federal Non-Research Support - On Campus
FY 2024 Expenditures

Federal Agency	Government Contract Number	Master Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
MISCELLANEOUS FEDERAL GOVT					
Other Agencies					
19.040					
DOS	SBA30024GR0005	MIT IAP 2024- OFFCUT: CUTOFF Experimental and Novel Practices in Metalwork	19.040	13,893	-
		<i>Total for AL # 19.040</i>		13,893	-
		Total for Other Agencies		13,893	-
		TOTAL for Miscellaneous Federal Govt		13,893	-
<hr/>					
		TOTAL Federal Non-Research Support - On Campus		960,794	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE					
Lincoln Laboratory					
DEPARTMENT OF DEFENSE	PO 7000548674	Support of the MIT Security Studies Program	12.U63	3,182	-
DEPARTMENT OF DEFENSE	PO 7000583373	Support of the MIT Security Studies Program	12.U66	35,495	-
Total for Lincoln Laboratory				38,677	-
Massachusetts Technology Collaborative					
DEPARTMENT OF DEFENSE	AGREEMENT AND SOW 22584	MIT.nano NEMC Hub - Tool Installation	12.U74	4,057	-
DEPARTMENT OF DEFENSE	AGREEMENT AND SOW 22624	Northeast Microelectronics Internship Program	12.U75	169	-
Total for Massachusetts Technology Collaborative				4,226	-
NextFlex Learning Programs					
DEPARTMENT OF DEFENSE	716112	Expanding and Enhancing the Manufacturing Careers Platform	12.U73	84,861	-
DEPARTMENT OF DEFENSE	716112	Strengthening the Defense Innovation Base's Advanced Manufacturing Workforce	12.U69	55,065	-
DEPARTMENT OF DEFENSE	716112	Strengthening the Defense Innovation Base's Advanced Manufacturing Workforce	12.U70	175,527	-
DEPARTMENT OF DEFENSE	716112	Strengthening the Defense Innovation Base's Advanced Manufacturing Workforce	12.U72	481,555	-
DEPARTMENT OF DEFENSE	716205	Expanding and Enhancing the Manufacturing Careers Platform	12.U71	179,718	-
DEPARTMENT OF DEFENSE	ADP#62- MIT	Building an Advanced Manufacturing Workforce for the Defense Innovation Base.	12.U76	22,100	-
Total for NextFlex Learning Programs				998,826	-
National Center for the Advancement of STEM Education					
DEPARTMENT OF DEFENSE	P000	Support and Expansion of a Digital Learning Platform to Promote Manufacturing Careers in DoD Priority Areas	12.560	-43	-
Total for National Center for the Advancement of STEM Education				-43	-
Draper Laboratory Incorporated					
DEPARTMENT OF DEFENSE	PO001-0001061954	Draper Fellow Reporting Parent FY21/22	12.U03	-1,607	-
DEPARTMENT OF DEFENSE	PO001-0001069257	Draper Fellow Reporting Parent FY23/24	12.U17	77,636	-
DEPARTMENT OF DEFENSE	PO001-0001069300	Draper Fellow Reporting Parent FY23/24	12.U20	59,750	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF DEFENSE	PO001-0001069307	Draper Fellow Reporting Parent FY23/24	12.U19	52,400	-
DEPARTMENT OF DEFENSE	PO001-0001069318	Draper Fellow Reporting Parent FY23/24	12.U18	76,157	-
DEPARTMENT OF DEFENSE	PO001-0001069399	Draper Fellow Reporting Parent FY23/24	12.U21	59,750	-
DEPARTMENT OF DEFENSE	PO001-0001069410	Draper Fellow Reporting Parent FY23/24	12.U22	10,354	-
DEPARTMENT OF DEFENSE	PO001-0001069631	Draper Fellow Reporting Parent FY23/24	12.U23	80,609	-
DEPARTMENT OF DEFENSE	PO001-0001069713	Draper Fellow Reporting Parent FY23/24	12.U24	17,890	-
DEPARTMENT OF DEFENSE	PO001-0001069719	Draper Fellow Reporting Parent FY23/24	12.U26	75,451	-
DEPARTMENT OF DEFENSE	PO001-0001069725	Draper Fellow Reporting Parent FY23/24	12.U28	75,214	-
DEPARTMENT OF DEFENSE	PO001-0001069726	Draper Fellow Reporting Parent FY23/24	12.U27	75,450	-
DEPARTMENT OF DEFENSE	PO001-0001069733	Draper Fellow Reporting Parent FY23/24	12.U29	8,233	-
DEPARTMENT OF DEFENSE	PO001-0001069765	Draper Fellow Reporting Parent FY23/24	12.U39	59,750	-
DEPARTMENT OF DEFENSE	PO001-0001070291	Draper Fellow Reporting Parent FY23/24	12.U30	59,750	-
DEPARTMENT OF DEFENSE	PO001-0001070294	Draper Fellow Reporting Parent FY23/24	12.U50	60,156	-
DEPARTMENT OF DEFENSE	PO001-0001070315	Draper Fellow Reporting Parent FY23/24	12.U31	60,156	-
DEPARTMENT OF DEFENSE	PO001-0001070317	Draper Fellow Reporting Parent FY23/24	12.U34	68,136	-
DEPARTMENT OF DEFENSE	PO001-0001070347	Draper Fellow Reporting Parent FY23/24	12.U36	67,216	-
DEPARTMENT OF DEFENSE	PO001-0001070348	Draper Fellow Reporting Parent FY23/24	12.U33	64,567	-
DEPARTMENT OF DEFENSE	PO001-0001070378	Draper Fellow Reporting Parent FY23/24	12.U32	98,351	-
DEPARTMENT OF DEFENSE	PO001-0001070386	Draper Fellow Reporting Parent FY23/24	12.U35	63,012	-
DEPARTMENT OF DEFENSE	PO001-0001070575	Draper Fellow Reporting Parent FY23/24	12.U37	63,012	-
DEPARTMENT OF DEFENSE	PO001-0001070576	Draper Fellow Reporting Parent FY23/24	12.U38	63,012	-
DEPARTMENT OF DEFENSE	PO001-0001070633	Draper Fellow Reporting Parent FY23/24	12.U41	59,750	-
DEPARTMENT OF DEFENSE	PO001-0001070634	Draper Fellow Reporting Parent FY23/24	12.U42	59,750	-
DEPARTMENT OF DEFENSE	PO001-0001070728	Draper Fellow Reporting Parent FY23/24	12.U40	59,750	-
DEPARTMENT OF DEFENSE	PO001-0001073763	Draper Fellow Reporting Parent FY24/25	12.U51	4,549	-
DEPARTMENT OF DEFENSE	PO001-0001073764	Draper Fellow Reporting Parent FY24/25	12.U52	4,333	-
DEPARTMENT OF DEFENSE	PO001-0001073883	Draper Fellow Reporting Parent FY24/25	12.U53	4,549	-
DEPARTMENT OF DEFENSE	PO001-0001073887	Draper Fellow Reporting Parent FY24/25	12.U54	1,365	-
DEPARTMENT OF DEFENSE	PO001-0001073891	Draper Fellow Reporting Parent FY24/25	12.U55	4,549	-
DEPARTMENT OF DEFENSE	PO001-0001073892	Draper Fellow Reporting Parent FY24/25	12.U57	4,155	-
DEPARTMENT OF DEFENSE	PO001-0001073895	Draper Fellow Reporting Parent FY24/25	12.U56	4,155	-
DEPARTMENT OF DEFENSE	PO001-0001073905	Draper Fellow Reporting Parent FY24/25	12.U58	5,002	-
DEPARTMENT OF DEFENSE	PO001-0001073948	Draper Fellow Reporting Parent FY24/25	12.U59	4,890	-
DEPARTMENT OF DEFENSE	PO001-001069716A	Draper Fellow Reporting Parent FY23/24	12.U25	71,022	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
		Total for Draper Laboratory Incorporated		1,682,224	-
		TOTAL for Department of Defense		2,723,910	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF ENERGY					
Battelle Energy Alliance, LLC					
DEPARTMENT OF ENERGY	294144	MITR-3: A New High-Performance Research Reactor	81.U02	53,836	-
DEPARTMENT OF ENERGY	RELEASE 00003/CONTR 00112583	INL-NUC Collaboration Activities at Massachusetts Institute of Technology	81.U01	74,929	-
DEPARTMENT OF ENERGY	RELEASE 2/BMC 288889 - SOW 20858	INL NUC Activities with Massachusetts Institute of Technology - Release 2	81.U04	32,038	-
Total for Battelle Energy Alliance, LLC				160,803	-
Brookhaven National Laboratory					
DEPARTMENT OF ENERGY	443510	Annual US FCC Workshop FY24	81.U03	5,833	-
Total for Brookhaven National Laboratory				5,833	-
TOTAL for Department of Energy				166,636	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
DEPARTMENT OF HOMELAND SECURITY					
Massachusetts Emergency Management Agency					
DEPARTMENT OF HOMELAND SECURITY	CTFEMA4496MITEC011429	COVID-19: FEMA-4496-DR-MA MEMA PW 01429	97.036	28,371,184	-
DEPARTMENT OF HOMELAND SECURITY	CTFEMA4496MITEC01500	COVID-19: FEMA-4496-DR-MA MEMA PW 01500	97.036	309,225	-
DEPARTMENT OF HOMELAND SECURITY	CTFEMA4496MITEC01633	COVID-19: FEMA-4496-DR-MA MEMA PW 01633	97.036	1,146,545	-
DEPARTMENT OF HOMELAND SECURITY	CTFEMA4496MITEC01636	COVID-19: FEMA-4496-DR-MA MEMA PW 01636	97.036	2,703,197	-
DEPARTMENT OF HOMELAND SECURITY	CTFEMA4496MITEC02273	COVID-19: FEMA-4496-DR-MA MEMA PW 02273	97.036	867,980	-
DEPARTMENT OF HOMELAND SECURITY	CTFEMA4496MITEC02407	COVID-19: FEMA-4496-DR-MA MEMA PW 02047	97.036	4,505,401	-
Total for Massachusetts Emergency Management Agency				37,903,532	-
TOTAL for Department of Homeland Security				37,903,532	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
MISCELLANEOUS FEDERAL GOVT					
Clemson University					
MISCELLANEOUS FEDERAL GOVT	2654-210-2014955	Subaward: Mechatronics Textbook Dept. of Education funded Co-DREAM OER Project	84.116	13,466	-
MISCELLANEOUS FEDERAL GOVT	2654-210-2014955	Subaward: Mechatronics Textbook Dept. of Education funded Co-DREAM OER Project	84.116	1,428	-
Total for Clemson University				14,894	-
Institute of International Education, Inc.					
MISCELLANEOUS FEDERAL GOVT	3000228844	Hubert H. Humphrey Fellowship Program (SPURS) 2021-2022	19.010	-6,602	-
MISCELLANEOUS FEDERAL GOVT	3000259162	Hubert H. Humphrey Fellowship Program (SPURS) 2022-2023	19.010	34,191	-
MISCELLANEOUS FEDERAL GOVT	3000259162	Hubert H. Humphrey Fellowship Program (SPURS) 2022-2023	19.010	2,701	-
MISCELLANEOUS FEDERAL GOVT	3000303468	Hubert H. Humphrey Fellowship Program (SPURS) 2023-2024	19.010	175,912	-
MISCELLANEOUS FEDERAL GOVT	3000303468	Hubert H. Humphrey Fellowship Program (SPURS) 2023-2024	19.010	22,471	-
Total for Institute of International Education, Inc.				228,673	-
TOTAL for Miscellaneous Federal Govt				243,567	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION					
Space Telescope Science Institute					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-HF2-51499.001-A	The awakening of massive black holes (HST-HF2- 51499; Postdoc Fellow Riccardo Arcodia)	43.U04	90,213	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-HF2-51515.001-A	The First Glimpse of the First Galaxies: A Near & Far Approach (HST-HF2-51515; Fellow: Rohan Naidu)	43.U03	11,658	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	HST-HF2-51515.001-A	The First Glimpse of the First Galaxies: A Near & Far Approach (HST-HF2-51515; Fellow: Rohan Naidu)	43.U05	97,041	-
Total for Space Telescope Science Institute				198,912	-
TOTAL for National Aeronautics and Space Administration				198,912	-

Appendix C
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
FY 2024 Expenditures by Prime Sponsor and Sponsor

Prime Sponsor Name	Passthrough Number	WBS Project Name	Assistance Listing #	TOTAL \$ Amount Expended	\$ Amount Passed to Subrecipients
US AGENCY FOR INTERNATIONAL DEVELOPMENT					
PM Consulting Group					
US AGENCY FOR INTERNATIONAL DEVELOPMENT	TO IDS2022:38	PMCG master subcontract	98.U01	40,795	-
US AGENCY FOR INTERNATIONAL DEVELOPMENT	TO IDS2022:38	PMCG master subcontract	98.U02	4,146	16,440
Total for PM Consulting Group				44,941	16,440
TOTAL for US Agency for International Development				44,941	16,440
TOTAL Federal Non-Research Support - Passthrough - On Campus				\$41,281,498	\$16,440

SECTION III

REPORTS ON INTERNAL CONTROL AND COMPLIANCE AND SCHEDULE OF FINDINGS AND QUESTIONED COSTS

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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 Members of the Corporation of the Massachusetts Institute of Technology

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 the Massachusetts Institute of Technology and its subsidiaries (the “Institute”), which comprise the consolidated statement of financial position as of June 30, 2024, 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 11, 2024.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated financial statements, we considered the Institute’s internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Institute’s internal control. Accordingly, we do not express an opinion on the effectiveness of the Institute’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 consolidated 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 Institute’s consolidated financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the consolidated 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 Institute'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 Institute's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Princeton University

Boston, Massachusetts
October 11, 2024

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

To the Members of the Corporation of the Massachusetts Institute of Technology

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited the Massachusetts Institute of Technology and its subsidiaries' (the "Institute") 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 Institute's major federal programs for the year ended June 30, 2024. The Institute'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 Institute 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, 2024.

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

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.

Princeton University

Boston, Massachusetts
March 28, 2025

Massachusetts Institute of Technology

Schedule of Findings and Questioned Costs

Year Ended June 30, 2024

Section I Summary of Auditor's Results

Financial Statements

Type of auditors' report issued Unmodified opinion

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 auditors' report issued on compliance for major
programs Unmodified opinion

Any audit findings disclosed that are required to be
reported in accordance with 2 CFR 200.516(a)? ☐ Yes ☒ No

Identification of major programs

Assistance Listing Number

Name of Federal Program or Cluster

Various

Research & Development Cluster

97.036

Department of Homeland Security
Massachusetts Emergency Management
Agency (MEMA)

Dollar threshold used to distinguish between Type A
and Type B programs \$5,990,572

Auditee qualifies as a low-risk auditee? ☒ Yes ☐ No

Section II Financial Statement Findings

There are no matters to report.

Section III Federal Award Findings and Questioned Costs

There are no matters to report.

Massachusetts Institute of Technology
Summary Schedule of Prior Audit Findings and Status
Year Ended June 30, 2024

There are no findings from prior years that require an update in this report.