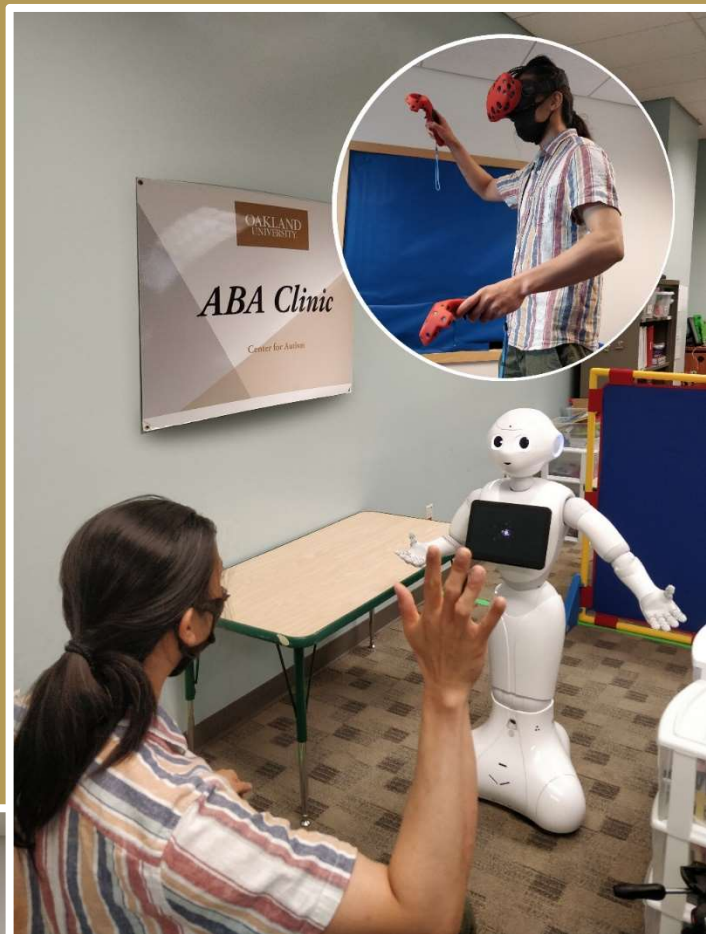


OAKLAND UNIVERSITY RESEARCH REPORT

FY20



THE RESEARCH OFFICE
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Oakland University

Research Report

Fiscal Year 2020

Cover Art

Bottom picture: Setting up a new research lab during the COVID-19 pandemic. New CAS faculty Dr. Elizabeth Delorme-Axford, Assistant Professor in Biological Sciences.

Top picture: Professor Jessica Korneder, Department of Human Development and Child Studies, and Professor Wing-Yue Geoffrey Louie, Department of Electrical and Computer Engineering) have been working together for the last three years to develop educational programs and technology for socially assistive robots to deliver therapies to children with autism spectrum disorder. They hope that robot-mediated interventions can assist with maintaining social distancing, while delivering effective treatment, by having a therapist remotely control a robot to deliver therapies. The PIs would like to thank all the researchers (Roman Kulikovskiy, Megan Sochanski, Ala'aldin Hijaz, Cristyn Pawluk, Ibrahim Abbas, Rachel Prescott, Julie Kopp, and Rachel Lai) and staff that have assisted with this work.

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Preface

The Research Office is proud to present the Fiscal Year (FY) 2020 Annual Report describing external funding at Oakland University (OU). This report gives readers a comprehensive overview of the nature and extent of external funding provided to faculty and staff to support their research, instructional, public service, and creative activities. Detailed data are also provided for proposals that were submitted in FY 2019.

We always warn against making direct comparisons of numbers or trends from one year to another. As FY 2020 was in no way a normal year for research at OU, that caution is particularly warranted this year – and possibly for the next several years as well. The COVID-19 pandemic forced us to suspend almost all in-person research involving human subjects indefinitely, and to shut down laboratories and research facilities for nearly three months, from March until June. These facts are likely to influence the number and types of proposals submitted by OU investigators in the coming years.

Nevertheless, there is much to celebrate about FY 2020 in terms of research and sponsored programs. We received our first prestigious CAREER award from the National Science Foundation since 2017 (Wei Zhang, Physics). Two of our three Major Research Instrumentation proposals to NSF were funded. Sixteen faculty and one professional staff member submitted their first proposals as a Principal Investigator (PI), and fourteen faculty and one professional staff member received their first awards as PIs. The trend over the last three fiscal years is encouraging: since FY 2017, the number of awards received has increased by approximately 25%, the number of research awards has increased by 22%, and the number of proposals submitted has increased by nearly 16%.

During FY 2020, OU attracted just under \$10 million in external funding for sponsored projects in the areas of research, instruction, and other activities. We also received \$13.7 million in COVID-19 relief funding through the federal CARES Act, which skews many of the statistics on the following pages, as you will note from the asterisks next to some of the numbers. As experts and leaders in their fields, OU faculty and staff continue to secure external funding for a broad range of robust research programs, many of which promote strong collaborations with other universities and research institutes, private industry, and regional organizations. These collaborations are vital in a funding climate emphasizing cross-disciplinary collaboration and public-private partnerships for addressing complex societal needs.

Moreover, these sponsored programs support OU's mission to be a student-centered public research university, providing experiential learning opportunities that position our students to become the next generation of scientists, engineers, educators, and performers, while also advancing society through the creation and mobilization of knowledge.

The Research Office deeply appreciates the efforts of the OU faculty and staff who submitted grant and contract proposals during FY 2020, and we extend our warmest congratulations to those who obtained external funding this year.

Technical Notes and Definitions

Annual Report Reporting Period

The **fiscal year (FY)** for OU is July 1 to June 30. This report includes data for all awards and proposals processed through the Research Office for FY 2020. An award is considered processed by the Research Office when it has been reviewed, institutionally endorsed (if necessary), and transferred to Accounting for account set up. A proposal is considered processed through the Research Office after the institutional review and sign off process is complete.

Definition of Award

An **award** is a funded project for which OU has received an official notice of award or executed contract from a sponsor requiring the university to undertake a particular activity and for which a deliverable is expected. Awards that provide full funding in the first year of a multi-year project are included in the fiscal year the award was made. Award dollars received from sponsors that provide funding for specific budget periods within a multi-year project (i.e. incremental awards) are included in the fiscal year for which funding is received. Consequently, funding can fluctuate for a department or college depending on how a project is funded. **Direct year-by-year comparisons should always be made with caution.**

Definition of Proposal

A **proposal** is a request for financial support for a particular sponsored activity that is routed through the Research Office. It is important to recognize that there is no correlation between the proposals and awards discussed in this report, as many of the proposals submitted for the previous year are still pending with the sponsors.

Intellectual Credit

Proposals and awards are credited to the lead principal investigator (PI) and his/her home unit or center, whether academic or otherwise. For proposals or awards that also include co-PIs, the total amount proposed or awarded is credited to the lead PI and his/her home unit. However, the participation of each co-PI named on the project is indicated with a notation under the co-PI's home academic unit or center.

Sponsor Types

The Research Office recognizes four categories of **sponsors**: federal, state, corporate, and public/nonprofit. Federal sponsors for proposals and awards include direct federal funding as well as flow-through funding when federal dollars come to OU through a non-federal entity (e.g. state agency or other university). Public/nonprofit sponsors include non-Michigan institutions of higher education, municipalities, civic organizations, as well as nonprofit and non-governmental organizations.

Report Layout

This report has seven (7) sections. The first section, award overview, provides a summary of all sponsored awards received by OU through the Research Office for the previous fiscal year. The ensuing three sections include award information separated according to the following activity types: 1) research, 2) instruction, and 3) other sponsored activities. The fifth section of the report details proposal submissions for the previous fiscal year. The final sections of the report include listings of the winners of the 2019 Research, Innovation, and Engagement Town Hall and the PI Academy for Research and Engagement Class of 2020.

Research

A project is classified as research when it involves a systematic study to gain an understanding of a phenomenon. Research culminates in new knowledge and may be either fundamental or applied. A project that funds the maintenance or creation of research facilities, disseminates project findings, or trains individuals in research techniques or methods would also be classified as research.

Instruction

A project is classified as instruction when it incorporates the teaching and training activities of the institution (with the exception of research training, as mentioned above). These projects are intended to elicit some measure of educational change in learners. Instruction includes all teaching and training activities, credit or non-credit.

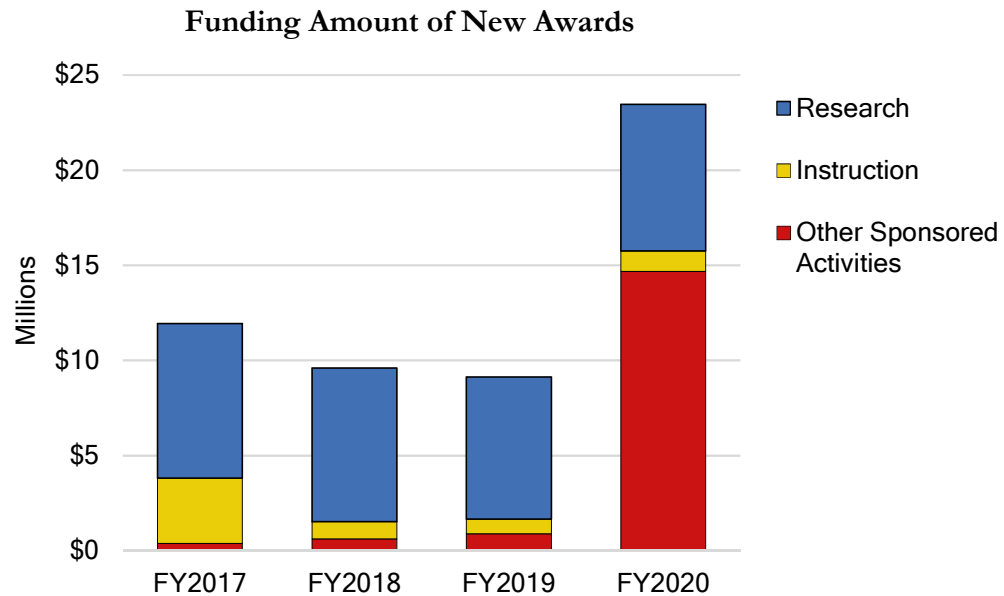
Other Sponsored Activities

A project is classified as “Other Sponsored Activity” when it is neither research nor instruction. These projects include public service that engages OU resources to meet local, regional, national, or international needs. Other activities include student support programs, testing and evaluation, joint appointment agreements, and some workshop or travel grants.

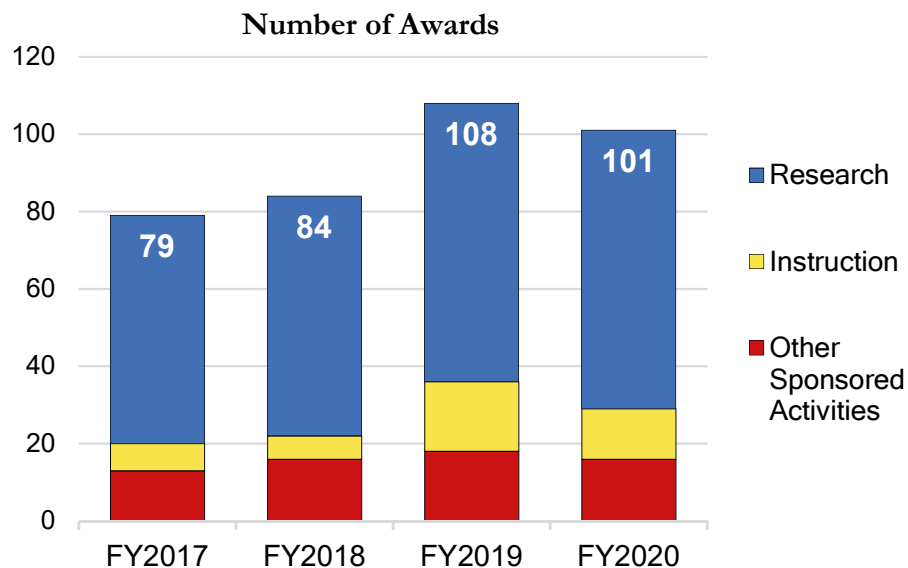
“Other” Academic Unit

The term “Other” is used for sponsored activities that fall outside the formal academic unit structure. This includes, but is not limited to, campus areas such as Academic Affairs Office, Athletics Administration, Campus Police, Campus Recreation, Center for Multicultural Initiatives, Facilities Management, Financial Aid, Macomb-OU Incubator, OU INC, Pre-College Programs, the Research Office, Student Affairs, and Upward Bound.

Amounts and Number of Awards by Purpose



Purpose of Funding	FY2017	FY2018	FY2019	FY2020	Total
Research	8,126,866	8,074,392	7,465,280	7,696,442	31,362,980
Instruction	3,438,237	910,416	762,032	1,080,497	6,191,182
Other Sponsored Activities	379,769	613,804	894,417	14,683,468*	16,571,458
Total	\$11,944,872	\$9,598,612	\$9,121,729	\$23,460,407	\$54,125,620

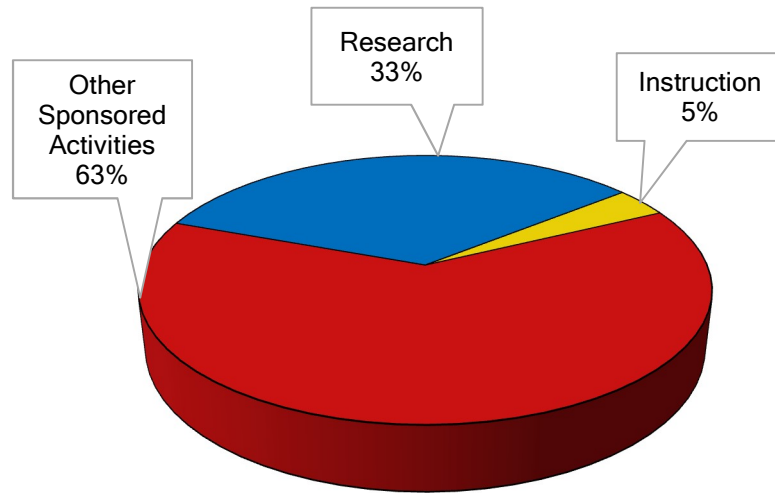


Purpose of Funding	FY2017	FY2018	FY2019	FY2020	Total
Research	59	62	72	72	265
Instruction	7	6	18	13	44
Other Sponsored Activities	13	16	18	16	63
Total	79	84	108	101	372

*Includes Government funding of \$13,796,824 as part of the CARES Act.

Percentages and Number of Awards by Purpose

FY2020 • Funding Amount Percentages

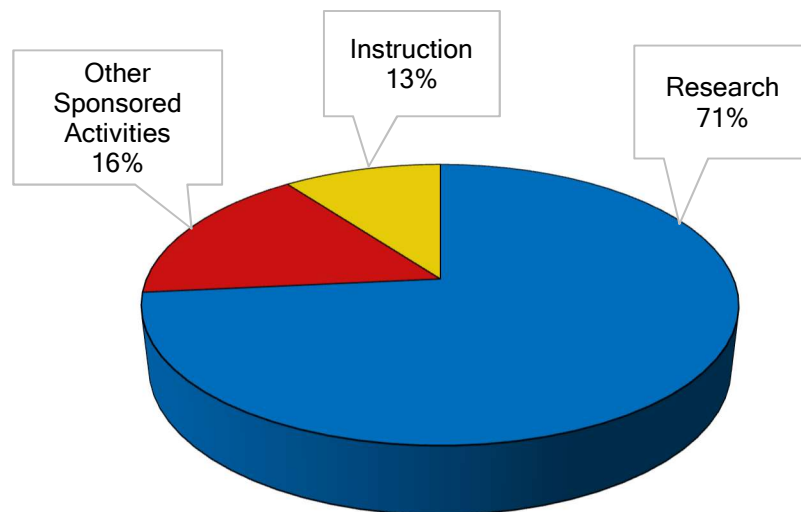


N = \$23,460,407

Purpose of Funding	Number of Awards	Total
Research	72	7,696,442
Instruction	13	1,080,497
Other Sponsored Activities	16	14,683,468*
Total	101	\$23,460,407

*Includes Government funding of \$13,796,824 as part of the CARES Act.

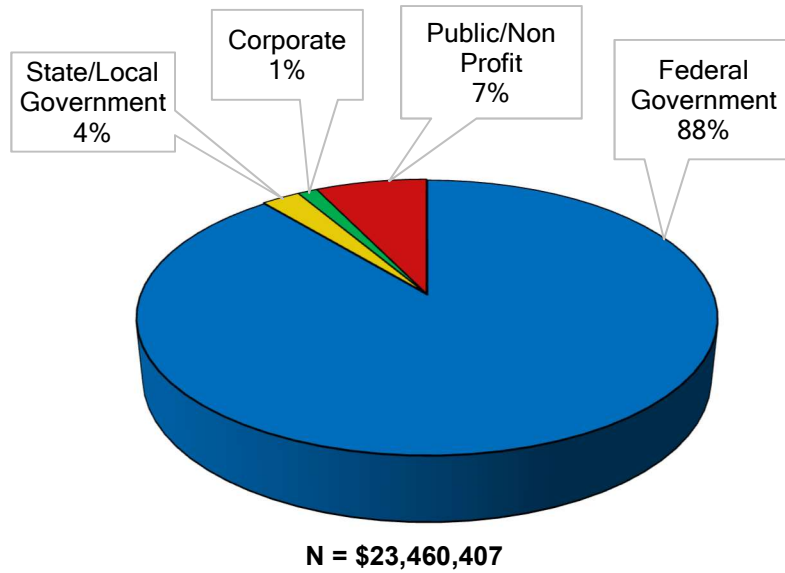
FY2020 • Number of Awards - Percentage by Purpose



N = 101

Percentages and Award Amounts by Source

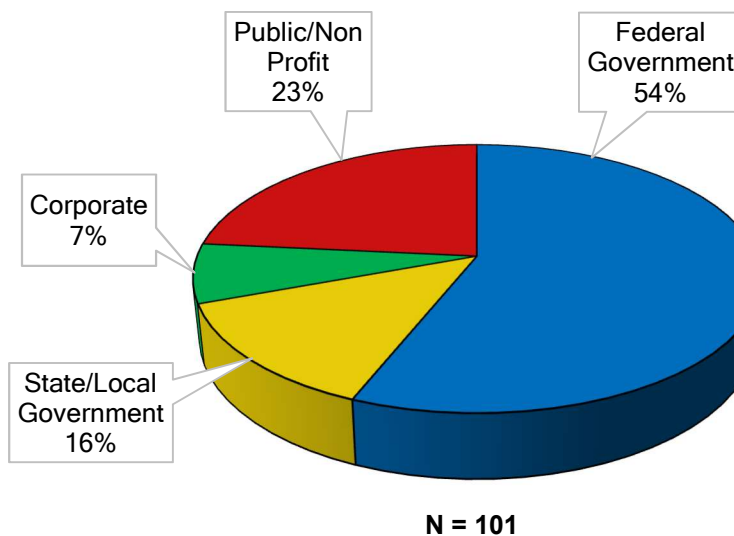
FY2020 • Funding Amount Percentages by Source



Source of Funding	Number of Awards	Total
Federal Government	55	20,623,177*
State/Local Government	16	836,071
Corporate Sponsors	7	301,693
Public/Nonprofit Sponsors	23	1,699,466
Total	101	\$23,460,407

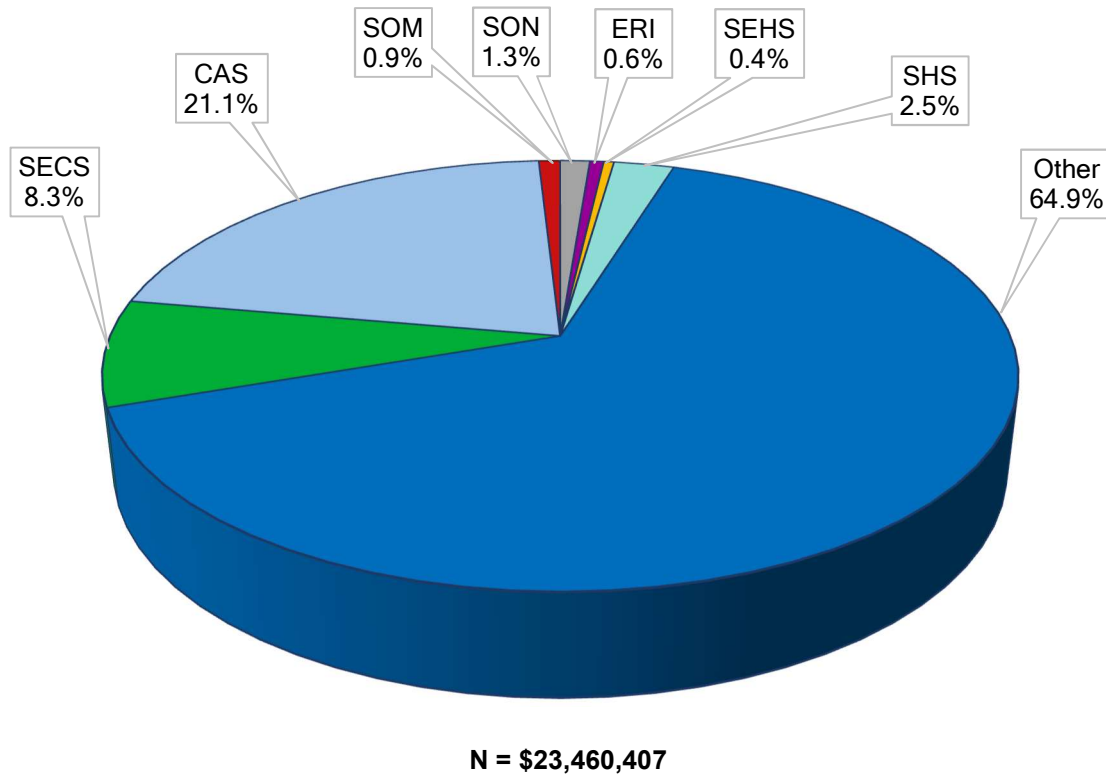
*Includes Government funding of \$13,796,824 as part of the CARES Act.

FY2020 • Number of Awards by Source



Percentages and Award Amounts by Academic Unit

FY2020 • Funding Amount Percentages by Academic Unit



Academic Unit	FY2017	FY2018	FY2019	FY2020	Total
College of Arts and Sciences	4,491,729	5,075,991	4,409,055	4,954,137	18,930,912
Eye Research Institute	0	63,677	37,500	134,997	236,174
School of Business Administration	0	16,350	6,420	0	22,770
School of Engineering and Computer Science	2,813,107	2,604,175	2,741,069	1,947,994	10,106,345
School of Education and Human Services	625,994	97,590	143,090	100,032	966,706
School of Health Sciences	197,346	522,524	599,529	588,977	1,908,376
School of Medicine	63,984	0	6,000	209,554	279,538
School of Nursing	20,450	62,304	236,354	290,606	609,714
Other	3,732,262	1,156,001	942,712	15,234,110*	21,065,085
Total	\$11,944,872	\$9,598,612	\$9,121,729	\$23,460,407	\$54,125,620

*Includes Government funding of \$13,796,824 as part of the CARES Act.

FY 2020 Department Rankings

	Department/Unit	Dollars	Parent Unit
1	Physics	2,582,665	College of Arts and Sciences
2	Chemistry	1,313,163	College of Arts and Sciences
3	Biological Sciences	1,005,699	College of Arts and Sciences
4	Computer Science and Engineering	925,247	College of Engineering & Computer Science
5	Electrical and Computer Engineering	592,063	College of Engineering & Computer Science

FY 2020 Non-Academic and Other Unit Rankings

	Department/Unit	Dollars
1	Research Office	503,397
2	International Education	433,793
3	Environmental Health and Safety	174,430
4	Center for Multicultural Initiatives	100,483
5	OU Incubator	80,000

Comparison of FY 2019 and FY 2020

Amounts Awarded by Academic Unit and Other Administrative Units

College of Arts and Sciences	FY2019 Awards	FY2020 Awards
Art and Art History	10,000	20,290
Biological Sciences	1,337,469	1,005,699
Chemistry	1,210,223	1,313,163
Mathematics and Statistics	108,215	0
Philosophy	8,297	0
Physics	973,735	2,582,665
Political Science	0	4,000
Psychology	651,028	28,320
Sociology, Anthropology, Social Work and Criminal Justice	110,088	0
CAS Total	\$4,409,055	\$4,954,137

Eye Research Institute	FY2019 Awards	FY2020 Awards
ERI Total	\$37,500	134,997

School of Business Administration	FY2019 Awards	FY2020 Awards
SBA Total	\$6,420	0

Comparison of FY2019 and FY2020, *continued*

School of Engineering and Computer Science	FY2019 Awards	FY2020 Awards
Computer Science and Engineering	907,604	925,247
Electrical and Computer Engineering	530,342	592,063
Industrial and Systems Engineering	202,012	79,852
Mechanical Engineering	1,101,111	350,832
SECS Total	2,741,069	\$1,947,994

School of Education and Human Services	FY2019 Awards	FY2020 Awards
Human Development and Child Studies	139,515	50,290
Organizational Leadership	1,500	39,418
Reading and Language Arts	2,075	10,324
SEHS Total	\$143,090	\$100,032

School of Health Sciences	FY2019 Awards	FY2020 Awards
Human Movement Science	221,558	0
Interdisciplinary Health Sciences	278,909	522,818
Public and Environmental Wellness	99,062	66,159
SHS Total	\$599,529	\$588,977

School of Medicine	FY2019 Awards	FY2020 Awards
SOM Total	\$6,000	\$209,554

School of Nursing	FY2019 Awards	FY2020 Awards
SON Total	\$236,354	\$290,606

Comparison of FY2019 and FY2020, *continued*

Other	FY2019 Awards	FY2020 Awards
Center for Multicultural Initiatives	100,483	100,483
Diversity, Equity and Inclusion	16,355	49,890
Environmental Health and Safety	0	174,430
Finance and Administration	0	13,796,824*
Graduate Study and Lifelong Learning	104,772	0
International Education	0	433,793
Library	0	9,943
Macomb-OU Incubator	197,995	30,000
OU Incubator	34,000	80,000
Pre-College Programs	212,812	55,350
Research Office	162,360	503,397
Upward Bound	113,935	0
Other Total	\$942,712	\$15,234,110

* Government funding as part of the CARES Act.

Oakland University Total	FY2019 Awards	FY2020 Awards
Grand Total	\$9,121,729	\$23,460,407

FY 2020 Amount Awarded by Unit and Purpose

College of Arts and Sciences	Research	Instruction	Other Sponsored Activities
Art and Art History	0	0	20,290
Biological Sciences	1,005,699	0	0
Chemistry	1,313,163	0	0
Political Science	0	0	4,000
Physics	2,582,665	0	0
Psychology	8,320	0	20,000
CAS Total	\$4,909,847	\$0	\$44,290

Eye Research Institute	Research	Instruction	Other Sponsored Activities
ERI Total	\$134,997	\$0	\$0

School of Engineering and Computer Science	Research	Instruction	Other Sponsored Activities
Computer Science and Engineering	825,255	99,992	0
Electrical and Computer Engineering	512,251	79,812	0
Industrial and Systems Engineering	79,852	0	0
Mechanical Engineering	260,097	90,735	0
SECS Total	\$1,677,455	\$270,539	\$0

School of Education and Human Services	Research	Instruction	Other Sponsored Activities
Human Development and Child Studies	30,000	14,200	6,090
Organizational Leadership	39,418	0	0
Reading and Language Arts	0	10,324	0
SEHS Total	\$69,418	\$24,524	\$6,090

School of Health Sciences	Research	Instruction	Other Sponsored Activities
Interdisciplinary Health Sciences	522,818	0	0
Public and Environmental Wellness	62,959	3,200	0
SHS Total	\$585,777	\$3,200	\$0

FY 2020 Amount Awarded by Unit and Purpose, *continued*

School of Medicine	Research	Instruction	Other Sponsored Activities
SOM Total	\$209,554	\$0	\$0

School of Nursing	Research	Instruction	Other Sponsored Activities
SON Total	\$73,000	\$217,606	\$0

Other	Research	Instruction	Other Sponsored Activities
Center for Multicultural Initiatives	0	100,483	0
Diversity, Equity and Inclusion	0	0	49,890
Environmental Health and Safety	0	0	174,430
Finance and Administration	0	0	13,796,824*
International Education	24,998	408,795	0
Kresge Library	0	0	9,943
Macomb-OU Incubator	0	0	30,000
OU Incubator	0	0	80,000
Pre-College Programs	0	55,350	0
Research Office	11,396	0	492,001
Other Total	\$36,394	\$564,628	\$14,633,088

*Government funding as part of the CARES Act.

Oakland University Total	Research	Instruction	Other Sponsored Activities
Grand Total	\$7,696,442	\$1,080,497	\$14,683,468*

*Includes Government funding of \$13,796,824 as part of the CARES Act.

FY 2020 Amount Awarded by Unit and Source

College of Arts and Sciences	Federal	State/Local	Corporate	Public/Nonprofit
Art and Art History	0	7,500	0	12,790
Biological Sciences	995,699	4,000	0	6,000
Chemistry	499,411	3,130	64,905	745,717
Physics	2,559,610	0	0	23,055
Political Science	0	4,000	0	0
Psychology	0	0	0	28,320
CAS Total	\$4,054,720	\$18,630	\$64,905	\$815,882

Eye Research Institute	Federal	State/Local	Corporate	Public/Nonprofit
ERI Total	\$134,997	\$0	\$0	\$0

School of Engineering and Computer Science	Federal	State/Local	Corporate	Public/Nonprofit
Computer Science and Engineering	878,383	0	46,864	0
Electrical and Computer Engineering	508,251	0	83,812	0
Industrial and Systems Engineering	79,852	0	0	0
Mechanical Engineering	145,985	88,735	106,112	10,000
SECS Total	\$1,612,471	\$88,735	\$236,788	\$10,000

School of Education and Human Services	Federal	State/Local	Corporate	Public/Nonprofit
Human Development & Child Studies	0	20,290	0	30,000
Organizational Leadership	39,418	0	0	0
Reading and Language Arts	0	0	0	10,324
SEHS Total	\$39,418	\$20,290	\$0	\$40,324

School of Health Sciences	Federal	State/Local	Corporate	Public/Nonprofit
Interdisciplinary Health Sciences	0	7,000	0	515,818
Public and Environmental Wellness	13,200	0	0	52,959
SHS Total	\$13,200	\$7,000	\$0	\$568,777

FY 2020 Amount Awarded by Unit and Source, *continued*

School of Medicine	Federal	State/Local	Corporate	Public/ Nonprofit
SOM Total	\$18,071	\$0	\$0	\$191,483

School of Nursing	Federal	State/Local	Corporate	Public/ Nonprofit
SON Total	\$217,606	\$0	\$0	\$73,000

Other	Federal	State/Local	Corporate	Public/ Nonprofit
Center of Multicultural Initiatives	0	100,483	0	0
Diversity, Equity and Inclusion	0	49,890	0	0
Environmental Health and Safety	174,430	0	0	0
Finance and Administration	13,796,824*	0	0	0
International Education	433,793	0	0	0
Kresge Library	9,943	0	0	0
Macomb-OU Incubator	0	30,000	0	0
OU Incubator	0	80,000	0	0
Pre-College Programs	0	55,350	0	0
Research Office	117,704	385,693	0	0
Other Total	\$14,532,694	\$701,416	\$0	\$0

Oakland University Total	Federal	State/Local	Corporate	Public/ Nonprofit
Grand Total	\$20,623,177*	\$836,071	\$301,693	\$1,699,466

*Includes Government funding of \$13,796,824 as part of the CARES Act.

Amount Awarded by Federal Agency *

Agency/Sponsor	FY2017	FY2018	FY2019	FY2020
Army Educational Outreach Program	0	4,000	0	0
Binational Science Foundation	0	0	0	320,000
Centers for Disease Control and Prevention	0	455,524	0	0
Cooperative Invasive Species Management	0	0	0	1,767
Environmental Protection Agency	0	90,544	0	0
Health Resources and Services Administration	0	26,992	224,233	217,606
HighScope Research Foundation	560,994	0	0	0
Los Alamos National Laboratory	69,957	2,700	0	0
Michigan Council for Arts & Cultural Affairs	0	0	10,000	0
Michigan Department of Labor/Economic Growth	196,023	0	0	0
Michigan Department of Natural Resources	191,888	0	0	0
USAID	0	56,844	0	0
National Advanced Mobility Consortium	0	0	75,000	0
National Aeronautics and Space Administration	52,500	41,500	70,000	72,488
National Center for Manufacturing Sciences	105,107	853,372	0	0
National Endowment for the Humanities	0	6,410	0	9,943
National Institutes of Health	1,277,018	3,003,797	1,494,402	855,562
National Network of Libraries of Medicine	0	0	0	18,071
National Science Foundation	3,840,486	994,350	3,289,388	2,140,022
National Security Agency	100,000	200,000	97,050	99,992
National Writing Project	15,000	0	0	0
NIDILRR-Rehabilitation Research & Training Centers	55,428	0	0	0
Pacific Northwest National Laboratory	82,999	78,085	0	174,430
Partners of Americas Foundation	0	0	0	24,998
United States Air Force	0	0	0	1,375,547
United States Army-TACOM	30,000	0	0	0
United States Army-TARDEC	0	0	79,550	0
United States Army	4,000	0	2,000	2,000
United States Council for Automotive Research	80,086	0	0	5,391
United States Department of Agriculture	0	0	83,281	0
United States Department of Commerce	0	0	0	117,704
United States Department of Defense	0	749,803	678,039	938,837
United States Department of Education	3,075,850	0	113,935	13,796,824*
United States Department of Energy	0	0	234,621	40,000
United States Department of Labor	0	0	0	3,200
United States Department of State	0	0	0	408,795
University of Iowa	9,984	0	0	0
University of Michigan	17,000	320,535	0	0
Veterans Affairs	6,813	0	0	0
Virginia Polytechnic Institute & State University	0	240,000	0	0
Oakland University Grand Total	\$9,771,133	\$7,124,456	\$6,451,499	\$20,623,177*

*Includes Government funding of \$13,796,824 as part of the CARES Act.

Amount Awarded by State/Local Agency

Agency/Sponsor	FY2017	FY2018	FY2019	FY2020
Advancing Macomb	0	0	0	4,000
Department of State, Oakland County	0	0	0	7,000
Grand Valley State University	85,000	0	84,000	110,000
Macomb County Public Works	0	0	0	3,130
Macomb Intermediate School District	0	65,090	67,347	20,290
Michigan Council for Arts and Cultural Affairs	18,000	0	0	7,500
Michigan Department of Education	0	0	22,168	0
Michigan Department of Environmental Quality	158,314	0	0	0
Michigan Department of Health & Human Services	88,300	32,500	50,000	0
Michigan Department of Labor and Economic	0	62,680	17,600	0
Michigan Economic Development Corporation	25,000	442,521	310,355	374,297
Michigan State Police	0	0	16,355	49,890
Michigan Technological University	0	10,000	0	0
Oakland County Health Division	5,487	6,000	7,000	0
Oakland Parks and Recreation	56,800	0	0	4,000
State of Michigan	91,364	734,125	505,376	255,964
Oakland University Grand Total	\$528,265	\$1,352,916	1,080,201	836,071

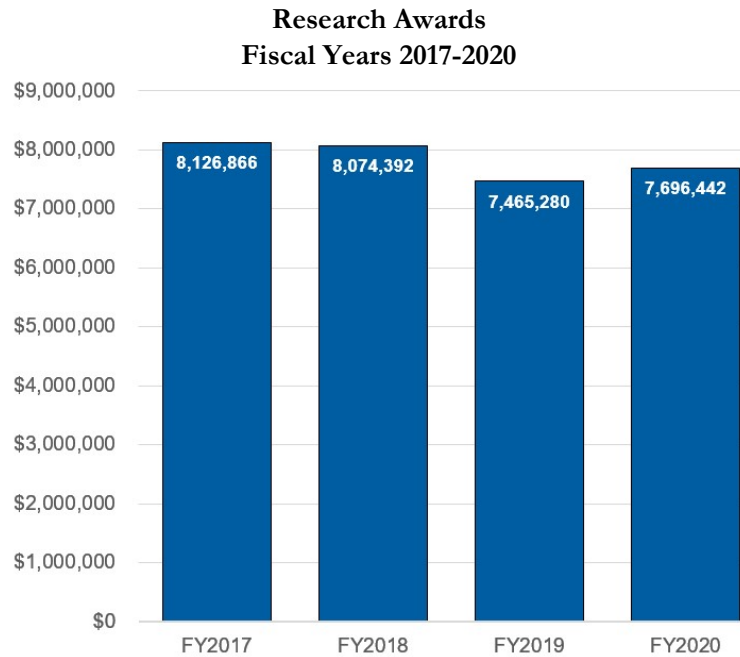
Amount Awarded by Corporations

Agency/Sponsor	FY2017	FY2018	FY2019	FY2020
Balance Tracking Systems	0	0	20,000	0
BetaCae Systems	63,900	0	0	0
Comcast Innovation Fund	0	50,000	0	0
Consumers Energy	0	54,000	0	0
Continental Automotive Systems, Inc.	0	0	41,775	0
Data Speed, Inc.	0	0	0	79,812
Dura Automotive, LLC	0	0	132,312	0
Eaton Corporation	0	46,000	0	46,000
Electric Power Research Institute, Inc.	0	0	25,000	0
Fiat Chrysler Automobiles	312,861	317,264	310,528	0
Fortinet	0	0	0	46,864
General Motors	0	0	0	4,000
HBM Prensca, LLC	0	0	0	18,800
Hitachi America, Ltd.	0	16,350	6,420	0
Hyundai Mobis Company	0	60,000	0	0
Lab Systems, LLC	0	0	0	64,905
Light Weight Innovations	0	0	0	41,312
Molex, LLC	0	0	56,348	0
PPG Industries, Inc.	74,550	0	0	0
X-wave Innovations	0	20,000	0	0
Oakland University Grand Total	\$451,311	\$563,614	592,383	\$301,693

Amount Awarded by Public/Nonprofit Sponsors

Agency/Sponsor	FY2017	FY2018	FY2019	FY2020
Alliance of Coalitions for Healthy	0	16,500	0	8,320
Alpha Foundation	0	175,000	0	745,717
American Association of Anatomists	50,000	0	0	0
American Cancer Society	20,000	0	0	0
American Educational Research Association	0	0	2,075	0
American Heart Association	305,031	0	375,942	180,983
American Psychological Association	1,000	0	0	0
American Sociological Association	0	7,999	0	0
American Society of Hematology	0	0	0	6,000
Arnold P. Gold Foundation	2,000	0	0	5,500
Art Bridges	0	0	0	12,790
Association of American Medical Colleges	0	0	0	5,000
Beaumont Research Institute	10,143	0	0	0
Blue Cross Blue Shield of Michigan	64,000	85,312	6,000	70,000
Brain Aneurysm Foundation	0	0	40,000	0
CARE House of Oakland County	0	0	0	30,000
Chicago Assoc for Research and Education in	8,518	0	0	0
Community Foundation for Southeastern	149,025	0	0	0
Comprehensive Early Autism Services	32,760	0	0	0
Educas AS	0	23,744	0	0
Eversight	0	15,000	0	0
Forging Foundation (FIERF)	0	0	0	10,000
Foundation for Food and Agriculture	421,236	0	0	0
George Washington University	0	0	25,119	9,000
Golf Ball Divers Alliance	0	2,500	0	0
Harvard University	0	0	0	52,959
Helping Hand for Relief and Development	0	38,222	0	0
Henry Ford Health System	0	59,976	0	23,055
Jonas Center for Nursing Excellence	10,000	0	0	0
Judson Center, Inc.	0	0	51,526	0
Kresge Foundation	100,000	0	0	0
Michigan Council for Arts and Cultural	0	0	0	0
Michigan Health Endowment Fund	0	0	301,558	484,418
Michigan Swimmer's Itch Partnership	0	0	29,558	0
Midwest Interprofessional Practice Education	0	0	0	1,000
National Council of Teachers of English	10,000	0	0	0
National League of Nursing	10,450	0	0	0
National Student Affairs in Higher Education	0	0	1,500	0
Neilsen Foundation	0	0	0	22,400
Sheriff PAL/United Way	0	0	15,000	0
Sigma Theta Tau	0	0	0	2,000
Sociologists for Women in Society	0	133,373	110,088	0
Southeast Michigan Health Association	0	0	8,297	0
United Way	0	0	0	20,000
University of Buffalo/Spencer	0	0	0	10,324
University of Michigan	0	0	30,983	0
Grand Total	\$1,194,163	\$557,626	\$997,646	\$1,699,466

Amounts and Number of Research Awards



Purpose of Funding: Research

College/School	FY2017	FY2018	FY2019	FY2020
College of Arts and Sciences	4,425,969	4,942,618	4,288,967	4,909,847
Eye Research Institute	0	63,677	37,500	134,997
School of Business Administration	0	16,350	0	0
School of Engineering and Computer Science	2,813,107	2,493,911	2,533,284	1,677,455
School of Education and Human Services	625,994	0	0	69,418
School of Health Sciences	197,346	522,524	599,529	585,777
School of Medicine	54,000	0	6,000	209,554
School of Nursing	10,450	35,312	0	73,000
Other	0	0	0	36,394
Total	\$8,126,866	\$8,074,392	\$7,465,280	7,696,442

FY 2020 Research Awards by Source

Source	Amount	Amount Percentage	Number of Awards	Number Percentage
Federal	5,792,683	75.3%	42	58.3%
State/Local	25,526	0.3%	4	5.6%
Corporate	221,881	2.9%	6	8.3%
Public/Nonprofit	1,656,352	21.5%	20	27.8%
Total	\$7,696,442	100.0%	72	100.0%

Research Awards by Department

Fiscal Years 2017 - 2020

College of Arts and Sciences	FY2017	FY2018	FY2019	FY2020
Biological Sciences	2,578,789	2,067,691	1,345,469	1,005,699
Chemistry	313,845	1,163,000	1,210,223	1,313,163
Mathematics and Statistics	0	0	108,215	0
Philosophy	0	0	8,297	0
Physics	675,829	1,395,296	965,735	2,582,665
Psychology	797,506	251,788	651,028	8,320
Sociology and Anthropology	50,000	64,843	0	0
Writing and Rhetoric	10,000	0	0	0
CAS Total	\$4,425,969	\$4,942,618	4,288,967	4,909,847

Eye Research Institute	FY2017	FY2018	FY2019	FY2020
ERI Total	\$0	\$63,677	\$37,500	134,997

School of Business Administration	FY2017	FY2018	FY2019	FY2020
Management and Marketing	0	16,350	0	0
SBA Total	\$0	\$16,350	\$0	\$0

School of Engineering and Computer Science	FY2017	FY2018	FY2019	FY2020
Computer Science and Engineering	1,183,780	342,222	810,554	825,255
Electrical and Computer Engineering	999,299	426,018	530,342	512,251
Industrial and Systems Engineering	55,000	23,744	202,012	79,852
Mechanical Engineering	575,028	1,701,927	990,376	260,097
SECS Total	\$2,813,107	\$2,493,911	\$2,533,284	\$1,677,455

School of Education and Human Services	FY2017	FY2018	FY2019	FY2020
Human Development and Child Studies	625,994	0	0	30,000
Organizational Leadership	0	0	0	39,418
SEHS Total	\$625,994	\$0	\$0	\$69,418

Research Awards by Department, continued

Fiscal Years 2017 – 2020

School of Health Sciences	FY2017	FY2018	FY2019	FY2020
Human Movement Science	23,300	1,000	221,558	0
Interdisciplinary Health Sciences	174,046	521,524	278,909	522,818
Public and Environmental Wellness	0	0	99,062	62,959
SHS Total	\$197,346	\$522,524	\$599,529	\$585,777

School of Medicine	FY2017	FY2018	FY2019	FY2020
SOM Total	\$54,000	\$0	\$6,000	\$209,554

School of Nursing	FY2017	FY2018	FY2019	FY2020
SON Total	\$10,450	\$35,312	\$0	\$73,000

Other	FY2017	FY2018	FY2019	FY2020
International Education	0	0	0	24,998
Research Office	0	0	0	11,396
Other Total	\$0	\$0	\$0	\$36,394

Oakland University Total	FY2017	FY2018	FY2019	FY2020
Grand Total Research	\$8,126,866	\$8,074,392	\$7,465,280	\$7,696,442
Grand Total Funding	\$11,944,872	\$9,598,612	\$9,121,729	\$23,460,407*

*Includes Government funding of \$13,796,824 as part of the CARES Act.

FY 2020 Research Awards by Unit, Department, and Principal Investigator

College of Arts and Sciences

Biological Sciences

Jamieson, Mary; Pollinator Surveys and Outreach; Charter Township of Oakland Parks and Recreation, \$4,000

Villa Diaz, Luis; MRI: Acquisition of a Flow Cytometer Cell Sorter for Multidisciplinary Studies at Oakland University; National Science Foundation, \$445,521

Villa Diaz, Luis; Regulation of Self-Renewal of Pluripotent Stem Cells by Internal Signaling; National Science Foundation, \$550,178

Westrick, Randal; Platelet Transcriptomic Survey of Pregnant Mice; American Society of Hematology, \$6,000

Chemistry

Avery, Adam; Molecular and Cellular Mechanisms of Spinocerebellar Ataxia Type 5; National Institutes of Health, \$398,006

Avery, Adam; Drug Discovery for Spinocerebellar Ataxia, Using Novel Fluorescence Technology Targeting Beta-III-Spectrin; National Institutes of Health, \$84,150

Newlin, Donald; Invasive Species Mapping; Cooperative Invasive Species Management Area/MDNR, \$1,767

Newlin, Donald; Invasive Species Mapping; Macomb County Public Works/MDNR, \$3,130

Wu, Colin; Assessing the Late Effects of Microgravity on Human Health, Michigan Space Grant Consortium, University of Michigan, \$4,988

Wu, Colin; Fellowship: Evaluating the Delayed Effects of Microgravity on Human Health, Michigan Space Grant Consortium, University of Michigan, \$5,500

Yang, Ziming; Examining Mineral Controls on Amide Bond Formation under Hydrothermal Conditions; Michigan Space Grant Consortium, University of Michigan, \$5,000

Zeng, Xiangqun; Miniaturized and Low Cost Electrochemical Particulate Matter (PM) Sensor for Mine Dust Exposure Assessment; Alpha Foundation, \$745,717

Zeng, Xiangqun; Post-CMOS Ionic Liquid Electrochemical Gas Sensors; National Science Foundation, \$64,905

Physics

Roth, Bradley; Graduate Student Support for Medical Physics Research at Henry Ford Hospital; Henry Ford Health System, \$8,055

Roth, Bradley; Graduate Student Support for Medical Physics Research at Henry Ford Hospital; Henry Ford Health System, \$15,000

Slavin, Andrei; Terahertz Spintronics with Antiferromagnetic Insulators; Air Force Office of Scientific Research/University of Central Florida, \$877,749

Slavin, Andrei; EFRI NewLAW: Non-Reciprocal Spin Waves in Chiral Magnetic Systems; National Science Foundation, \$129,999

Srinivasan, Gopalan; Electric Field Control of Magnetism in Ferrites for Sub-THz Electronics; United States Air Force, \$423,798

Xia, Yang; Investigation of Microstructure of Neuronal and Collagenous Tissues by NMR and MRI Techniques, Binational Science Foundation, \$320,000

Zhang, Wei; Microwave Excitation of Nitrogen-Vacancy Centers in Diamond, Department of Energy / Argonne National Laboratory, \$40,000

Zhang, Wei; Tailoring Terahertz Emissions in Ultrafast multi-functional Devices; National Science Foundation, \$194,064

Zhang, Wei; CAREER: Quantum Spintronic Device Building Blocks with Magnetically Ordered Materials; National Science Foundation, \$500,000

Zhang, Wei; THz Spintronics with Antiferromagnetic Heterostructures; United States Air Force, \$74,000

Psychology

Parkhill Purdie, Michele; Social Norms Intervention Assessment; Alliance of Coalitions for Healthy Communities; \$8,320

Eye Research Institute

Mitton, Kenneth; Noregen, a Regenerative Medicine Ocular Therapeutic, National Institutes of Health, \$134,997

School of Engineering and Computer Science

Computer Science and Engineering

Malik, Khalid Mahmood; Forensic Examiner: Testbed for Benchmarking Digital Audio Forensic Algorithms; National Science Foundation, \$16,000

Malik, Khalid Mahmood; Towards Development of Deepfake Detection Framework; Michigan Space Grant Consortium, University of Michigan, \$3,000

Rrush, Julian; Signature-Based Detector of Network Attacks on Industrial Control Systems; Fortinet, \$46,864

Rrush, Julian; Reverse Engineering Attacker Cognition through Malware Analysis; Michigan Space Grant Consortium, University of Michigan, \$5,000

Rrush, Julian; A Quest for the Physics of Cyberspace; United States Department of Defense/DARPA, \$754,391

Electrical and Computer Engineering

Alawneh, Shadi; Gabor Transform for SAR Image Compression; Michigan Space Grant Consortium, University of Michigan, \$5,000

Aloi, Daniel; RF Channel Modeling and Antenna Optimization; General Motors Corporation, \$4,000

Arefifar, Seyed Ali; Electric Vehicles Penetration for Minimizing Power System Upgrades; Michigan Space Grant Consortium, University of Michigan, \$5,000

Cheok, KaC; LED Matrix Panel Color Calibration; National Science Foundation, \$89,959

Louie, Wing-Yue; CRII: CHS: Healthcare Professionals Teaching Robots Communication Strategies for Effective Intervention Delivery; National Science Foundation, \$174,883

Louie, Wing-Yue; Robots Learning Tasks from Human Virtual Reality Based Demonstrations; Michigan Space Grant Consortium, University of Michigan, \$5,000

Tang, Jing; Dose Reduction in Pediatric/Adolescent Brain PET Imaging through Artificial Neural Networks; National Institutes of Health, \$228,409

Industrial and Systems Engineering

Nezamoddini, Nasim; Fell: Using Markov Decision Processes for Autonomous Spacecraft; Michigan Space Grant Consortium, University of Michigan, \$3,000

Pandey, Vijitashwa; A Decision Based Mobility Model for Semi and Fully Autonomous Vehicles; United States Department of Defense, \$76,852

Mechanical Engineering

Barber, Gary; Tribological Performance of Busway Coatings; Eaton Corporation, \$46,000

Cooley, Christopher; Finite Element/Contact Mechanisms Modeling and Experimental Correlation of the OH-58 Transmission; United States Department of Defense, \$29,498

DeVescovo, Daniel; Investigating the Thermodynamic Merit of the Jones Engine Concept; LightWeight Innovations, \$41,312

Golovashchenko, Sergey; U-Bend Testing for Phase 3 of USCAR Al Die Wear Project-DOE; United States Council for Automotive Research, LLC, \$5,391

Golovashchenko, Sergey; Method of Measuring Friction Conditions in Production Forging Dies; Forging Foundation (FIERF), \$10,000

Guessous, Laila; Michigan Space Grant Consortium-Administration; Michigan Space Grant Consortium, University of Michigan, \$1,500

Guessous, Laila; MSGC Affiliate Operating Award MSGC; Michigan Space Grant Consortium, University of Michigan, \$1,500

Kobus, Krzysztof; Earth Science STEM Camps, Outreach and Teacher Training; Michigan Space Grant Consortium, University of Michigan, \$20,000

Maisonneuve, Jonathan; Energy from Fertilizer: Water Filtration and Power Generation in Space-Based Plant Cultivation; Michigan Space Grant Consortium, University of Michigan, \$5,000

Maisonneuve, Jonathan; Researching Strategic Energy Management for the Oakland University Campus; Michigan Space Grant Consortium, University of Michigan, \$3,000

Mourelatos, Zissimos; Probability of Mobility for Mission Planning of Autonomous Ground Vehicles at "High Stress" Environment; United States Department of Defense, \$38,095

Mourelatos, Zissimos; Probability of Mobility for Mission Planning of Autonomous Ground Vehicles at "High Stress" Environment; United States Department of Defense, \$40,001

Mourelatos, Zissimos; Development of a Physics-based Model for Deformation Analysis of Lock Gates; HBM Prenscia, LLC, \$18,800

School of Education and Human Services

Human Development and Child Studies

Wakabayashi, Tomoko; Creating Sustainable Relationship - CARE House of Oakland County Needs Assessment Proposal; CARE House of Oakland County, \$30,000

Organizational Leadership

Sule, Venice Thandi; IGE: Mentoring for Life: Enhancing STEM Graduate Student Well-Being; National Science Foundation, \$39,418

School of Health Sciences

Interdisciplinary Health Sciences

Lucarelli, Jennifer; Wellness Evaluation Project – NPC; Oakland County, \$7,000

Papadimitriou, Christina; No One Listens to Me - Understanding Recovery When Patients Cannot Speak for Themselves; George Washington University, \$9,000

Rohn, Edward; Phenomenology of Chronic Pain after Spinal Cord Injury: Experience, Adaptation and Quality of Life; University of Michigan/Neilsen Foundation, \$22,400

Stevenson, Laurel; Prescription for a Healthy Pontiac; Michigan Health Endowment Fund, \$484,418

Public and Environmental Wellness

Dallo, Florence; Stress (Early Childhood and Politically-Related) and Health; Harvard University, \$52,959

Rajaei, Mozghon; Identifying and Addressing Contaminant Risks in Fish Tissue in the Cape Fear River; National Institutes of Health, \$10,000

School of Medicine

Roach, Victoria; Text2StayOnTrack: Improving Diabetes Self-Management through Personalized Text Messages in Uninsured Patients at a Free Clinic; Arnold P. Gold Foundation, \$2,000

Swanberg, Stephanie; Creating Ready-Made Health Education Toolkits-Expanding a Pilot Program into a Sustainable Outreach Partnership with a Public Library; National Network of Libraries of Medicine, \$18,071

Swor, Robert; Michigan Resuscitation Innovation and Science Enterprise; American Heart Association/University of Michigan, \$16,452

Swor, Robert; Michigan Resuscitation Innovation and Science Enterprise; American Heart Association/University of Michigan, \$164,531

Taylor, Tracey; Evaluation of the Use of Artificial Intelligence to Map Medical Education Assessment Alignment; Association of American Medical Colleges (AAMC), \$5,000

Wasserman, Jason; Humanism in Health and Healthcare: Development of a Free, For-Credit, Internationally Available Course on Humanism Delivered on the NextGenU Platform; Arnold P. Gold Foundation, \$3,500

School of Nursing

Fouladbakhsh, Judith; Effects of Yoga Therapy and Qigong on the Self-management of Pain among ER Positive Breast Cancer Survivors; Blue Cross Blue Shield of Michigan Foundation, \$70,000

Fouladbakhsh, Judith; Self Treatment of Symptoms Affecting Quality of Life of Older Adults: A Community Based Survey; Sigma Theta Tau, \$1,000

Hernandez, Joanna; Assessing the Effect of Cross-Disciplinary Learning for Healthcare Students; Midwest Interprofessional Practice Education and Research Center, \$1,000

Pittiglio, Laura; The Use of Simulation to Enhance LGBTQ Care Competencies of Oakland University Nursing Students; Sigma Theta Tau, \$1,000

Other

International Education

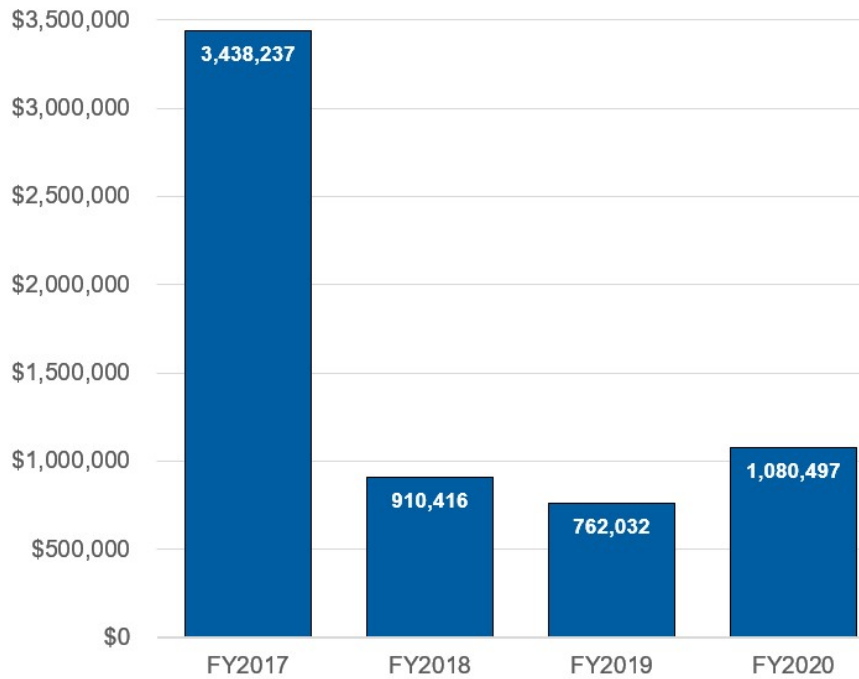
Zimmerman, Alex; Freshwater Ecology in the Great Lakes and Guatemala: Promoting Sustainability in an Era of Global Change; Partners of the Americas Foundation, \$24,998

Research Office

Stone, David; SWIK Patient Use Study-Phase 1; State of Michigan/Saliva Management Systems, \$11,396

Instruction Awards

Instruction Awards
Fiscal Years 2017-2020



Academic Unit Comparison

Academic Unit	FY2017	FY2018	FY2019	FY2020
College of Arts and Sciences	15,000	0	0	0
School of Business Administration	0	0	6,420	0
School of Engineering and Computer Science	0	110,264	207,785	270,539
School of Education and Human Services	0	65,090	24,243	24,524
School of Health Sciences	0	0	0	3,200
School of Medicine	10,000	0	0	0
School of Nursing	0	26,992	236,354	217,606
Other	3,413,237	708,070	287,230	564,628
Total	\$3,438,237	\$910,416	\$762,032	\$1,080,497

FY 2020 Instruction Awards by Source

Source	Amount	Amount Percentage	Number of Awards	Number Percentage
Federal	731,593	67.7%	7	53.8%
State/Local	258,768	23.9%	4	30.8%
Corporate	79,812	7.4%	1	7.7%
Public/Nonprofit	10,324	1.0%	1	7.7%
Total	\$1,080,497	100.0%	13	100.0%

Instruction Awards by Department

Fiscal Years 2017 – 2020

<i>College of Arts and Sciences</i>	FY2017	FY2018	FY2019	FY2020
<i>Writing and Rhetoric</i>	15,000	0	0	0
<i>CAS Total</i>	\$15,000	\$0	\$0	\$0

<i>School of Business Administration</i>	FY2017	FY2018	FY2019	FY2020
<i>Management and Marketing</i>	0	0	6,420	0
<i>SBA Total</i>	\$0	\$0	\$6,420	\$0

<i>School of Engineering and Computer Science</i>	FY2017	FY2018	FY2019	FY2020
<i>Computer Science and Engineering</i>	0	0	97,050	99,992
<i>Electrical and Computer Engineering</i>	0	0	0	79,812
<i>Mechanical Engineering</i>	0	110,264	110,735	90,735
<i>SECS Total</i>	\$0	\$110,264	\$207,785	270,539

<i>School of Education and Human Services</i>	FY2017	FY2018	FY2019	FY2020
<i>Human Development and Child Studies</i>	0	65,090	22,168	14,200
<i>Reading and Language Arts</i>	0	0	2,075	10,324
<i>SEHS Total</i>	\$0	\$65,090	\$24,243	\$24,524

<i>School of Health Sciences</i>	FY2017	FY2018	FY2019	FY2020
<i>Public and Environmental Wellness</i>	0	0	0	3,200
<i>SEHS Total</i>	\$0	\$0	\$0	\$3,200

<i>School of Nursing</i>	FY2017	FY2018	FY2019	FY2020
<i>SON Total</i>	\$10,000	\$26,992	\$236,354	\$217,606

<i>Other</i>	FY2017	FY2018	FY2019	FY2020
<i>Center for Multicultural Initiatives</i>	91,364	645,390	100,483	100,483
<i>International Education</i>	0	0	0	408,795
<i>Pre-College Programs</i>	196,023	62,680	72,812	55,350
<i>Student Affairs</i>	50,000	0	0	0
<i>Upward Bound</i>	3,075,850	0	113,935	0
<i>CAS Total</i>	\$3,413,237	\$708,070	\$287,230	\$564,628

<i>Oakland University Total</i>	FY2017	FY2018	FY2019	FY2020
<i>Grand Total Instruction</i>	\$3,438,237	\$910,416	\$762,032	\$1,080,497
<i>Grand Total Funding</i>	\$11,944,872	\$9,598,612	9,121,729	\$23,460,407

FY 2020 Instruction Awards by Unit, Department and Principal Investigator

School of Engineering and Computer Science

Computer Science and Engineering

Fu, Huirong; Oakland University GenCyber Student Program-Entry Level; National Security Agency
\$99,992

Electrical and Computer Engineering

Hanna, Darrin; Supporting an Embedded Intelligence Lab at Oakland University; DataSpeed Inc.,
\$79,812

Mechanical Engineering

Kobus, Krzysztof; REAP Summer Research Experience; United States Army, \$2,000

Kobus, Krzysztof; MICUP-HTech Jobs of the Future Program; State of Michigan, \$88,735

School of Education and Human Services

Human Development and Child Studies

Korneder, Jessica; Macomb Intermediate School District--Pilot Project: School-Based Analytic Services;
Macomb Intermediate School District, \$14,200

Reading and Language Arts

Christ, Tanya; Reading and (Re)writing the World: Exploring Critical Pedagogy of Place in Early Science
and Literacy Learning; University of Buffalo/Spencer, \$10,324

School of Health Sciences

Dallo, Florence; OSHA Med Rotation; United States Department of Labor, \$3,200

School of Nursing

Hranchook, Anne; Oakland University Nurse Anesthetist Traineeship Program; Health Resources and
Services Administration, \$32,185

Hays, Deana; Midwest Integration of the National HIV Curriculum; University of Illinois / Health
Resources and Services Administration, \$10,000

Harris, Margaret; Nurse Faculty Loan Program (NFLP); Health Resources & Services Administration
(HRSA), \$175,421

Other

Center for Multicultural Initiatives

Brown-El, Omar; Collectively Oakland Retains Everyone (CORE); State of Michigan, \$100,483

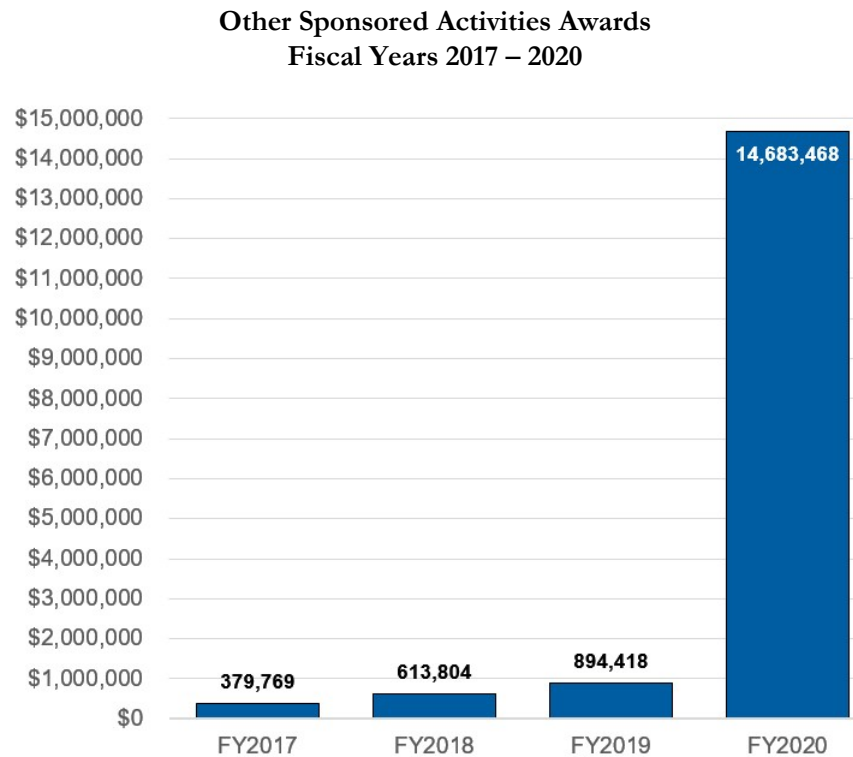
International Education

Max, Rosemary; Exchange for Pakistani Educators/Administrators (ESPA): Equity, Access and Learning
Disability in Secondary Schools in Pakistan; United States Department of State, \$408,795

Pre-College Programs

McCloud, Reginald; College Day; State of Michigan, \$55,350

Other Sponsored Activities Awards



*FY 2020 total includes Government funding of \$13,796,824 as part of the CARES Act.

Academic Unit Comparison

Academic Unit	FY2017	FY2018	FY2019	FY2020
College of Arts and Sciences	50,760	133,373	120,088	44,290
School of Education and Human Services	0	32,500	118,847	6,090
School of Medicine	9,984	0	0	0
Other	319,025	447,931	655,482	14,633,088*
Total	\$379,769	\$613,804	\$894,417	\$14,683,468*

*Includes Government funding of \$13,796,824 as part of the CARES Act.

FY 2020 Other Sponsored Activities Awards by Source

Source	Amount	Amount Percentage	Number of Awards	Number Percentage
Federal	14,098,901	96.0%	6	37.5%
State/Local	551,777	3.8%	8	50.0%
Public/Nonprofit	32,790	0.2%	2	12.5%
Total	\$14,683,468	100.0%	16	100.0%

Other Sponsored Activities by Department

Fiscal Years 2017 – 2020

<i>College of Arts and Sciences</i>	FY2017	FY2018	FY2019	FY2020
<i>Art and Art History</i>	18,000	0	10,000	20,290
<i>Political Science</i>	0	0	0	4,000
<i>Psychology</i>	32,760	0	0	20,000
<i>Sociology and Anthropology</i>	0	133,373	110,088	0
<i>CAS Total</i>	\$50,760	\$133,373	\$120,088	\$44,290

<i>School of Education and Human Services</i>	FY2017	FY2018	FY2019	FY20
<i>Human Development and Child Studies</i>	0	32,500	117,347	6,090
<i>Organizational Leadership</i>	0	0	1,500	0
<i>SEHS Total</i>	\$0	\$32,500	\$118,847	\$6,090

<i>School of Medicine</i>	FY2017	FY2018	FY2019	FY2020
<i>SOM Total</i>	\$9,984	\$0	\$0	\$0

<i>Other</i>	FY2017	FY2018	FY2019	FY2020
<i>Campus Recreation</i>	20,000	0	0	0
<i>Diversity, Equity and Inclusion</i>	0	0	16,355	49,890
<i>Environmental Health and Safety</i>	0	0	0	174,430
<i>Finance and Administration</i>	0	0	0	13,796,824*
<i>Graduate Study and Lifelong Learning</i>	0	0	104,772	0
<i>Library</i>	0	6,410	0	9,943
<i>Office of the Senior Associate Provost</i>	100,000	0	0	0
<i>Macomb-OU Incubator</i>	55,000	145,946	197,995	30,000
<i>OU Incubator</i>	119,025	45,950	34,000	80,000
<i>Pre-College Programs</i>	0	0	140,000	0
<i>Research Office</i>	25,000	249,625	162,360	492,001
<i>Other Total</i>	\$319,025	\$447,931	\$655,482	\$14,633,088*

<i>Oakland University Total</i>	FY2017	FY2018	FY2019	FY2020
<i>Grand Total Other Sponsored Activities</i>	\$379,769	\$613,804	\$894,417	\$14,683,468*
<i>Grand Total Funding</i>	\$11,944,872	\$9,598,612	\$9,121,729	\$23,460,407*

*Includes Government funding of \$13,796,824 as part of the CARES Act.

Other Sponsored Activities Awards by Unit, Department and Principal Investigator

College of Arts and Sciences

Art and Art History

Goody, Stephen; Your Very Own Paradise Exhibition; Michigan Council for Arts and Cultural Affairs, \$7,500

Goody, Stephen; Art Bridges Support; Art Bridges, \$12,790

Political Science

Carr, Douglas; Environmental Scan for Advancing Macomb; Advancing Macomb, \$4,000

Psychology

Corcoran, Kevin; United Way COVID-19 Pontiac; United Way, \$20,000

School of Education and Human Services

Human Development and Child Studies

Korneder, Jessica; MISD School-Based ABA Services; Macomb Intermediate School District, \$6,090

Other

Diversity, Equity and Inclusion

Martinez, Chad; FY20 Campus Sexual Assault Grant Program; Michigan State Police, \$49,890

Environmental Health and Safety

Luongo, Domenico; Office of Radiological Security Program (ORS): Security Enhancements at Oakland University; Pacific Northwest National Laboratory, \$28,695

Luongo, Domenico; Office of Radiological Security Program (ORS): Security Enhancements at Oakland University; Pacific Northwest National Laboratory, \$145,735

Finance and Administration

Beaghan, John; Oakland University Emergency Financial Aid Grants under the CARES Act-COVID-19; United States Education, \$6,898,412

Beaghan, John; Oakland University Emergency Institutional Grants; United States Education, \$6,898,412

Kresge Library

Daniel, Dominique; Improving the Storage Environment of Oakland University Archives and Special Collections; National Endowment for the Humanities, \$9,943

Macomb-OU Incubator

Herriman, Lawrence; Accelerator Development Funds-Discretionary; Grand Valley State University/MEDC, \$30,000

OU Incubator

Kent, Stephen; Accelerator Development Funds-Discretionary; Grand Valley State University/MEDC, \$30,000

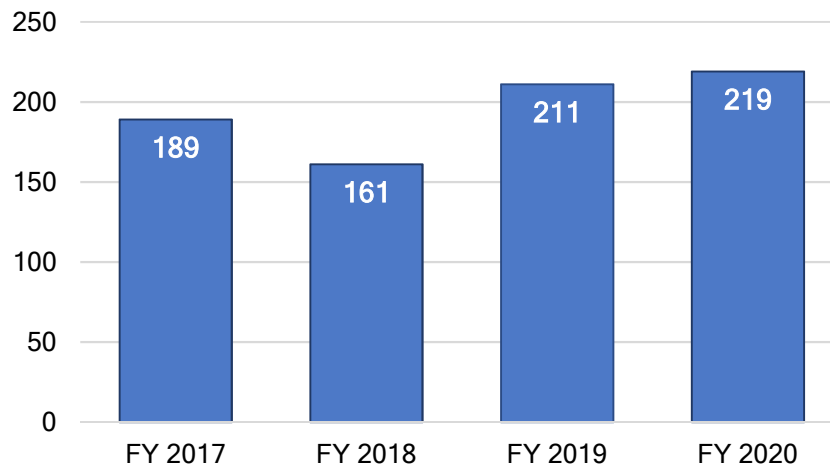
Kent, Stephen; Business Accelerator Fund-Client Engagement, Olive Biosciences COVID-19; Grand Valley State University/MEDC \$50,000

Research Office

Stone, David; Business Incubator Programs: Incubator Gatekeeper; Michigan Economic Development Corporation, \$374,297

Long, Michael; The City of Pontiac Small Business Support Center Feasibility Study; United States Commerce, \$117,704

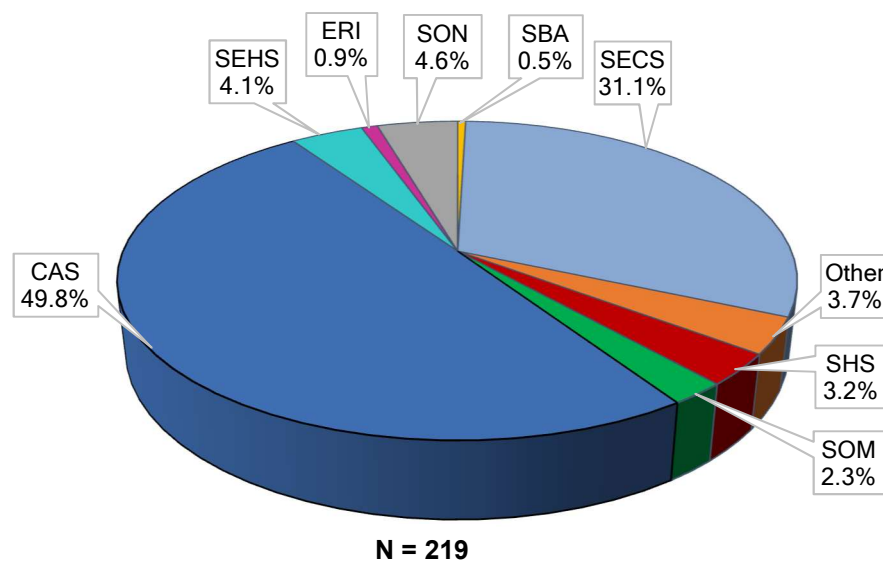
Number of Proposals Submitted, FY 2017-2020



Number of Proposals Submitted by Academic Unit, FY 2017-2020

Academic Unit	FY2017	FY2018	FY2019	FY2020	Grand Total
CAS	98	88	99	109	394
ERI	0	1	3	2	6
SBA	2	0	2	1	5
SECS	45	45	52	68	210
SEHS	5	9	13	9	36
SHS	14	8	20	7	49
SOM	6	3	6	5	20
SON	5	3	8	10	26
Other	14	4	8	8	34
Grand Total	189	161	211	219	780

FY 2020 Proposals Submitted by Academic Unit



FY 2020 Proposals Submitted by Academic Unit, continued

College of Arts and Sciences	FY2019	FY2020
Art and Art History	2	1
Biological Sciences	28	42
Chemistry	38	37
Mathematics and Statistics	2	3
Philosophy	2	1
Physics	24	19
Political Science (Pre-Law)	1	1
Psychology	2	4
Sociology and Anthropology	0	1
CAS Total	99	109

Eye Research Institute	FY2019	FY2020
ERI Total	3	2

School of Business Administration	FY2019	FY2020
Management and Marketing	2	1
SBA Total	2	1

School of Engineering and Computer Science	FY2019	FY2020
Computer Science and Engineering	22	27
Electrical and Computer Engineering	14	14
Industrial and Systems Engineering	6	8
Mechanical Engineering	10	19
SECS Total	52	68

School of Education and Human Services	FY2019	FY2020
Human Development and Child Studies	4	4
Reading and Language Arts	3	1
Teacher Development and Educational Studies	2	3
Organizational Leadership	4	1
SBA Total	13	9

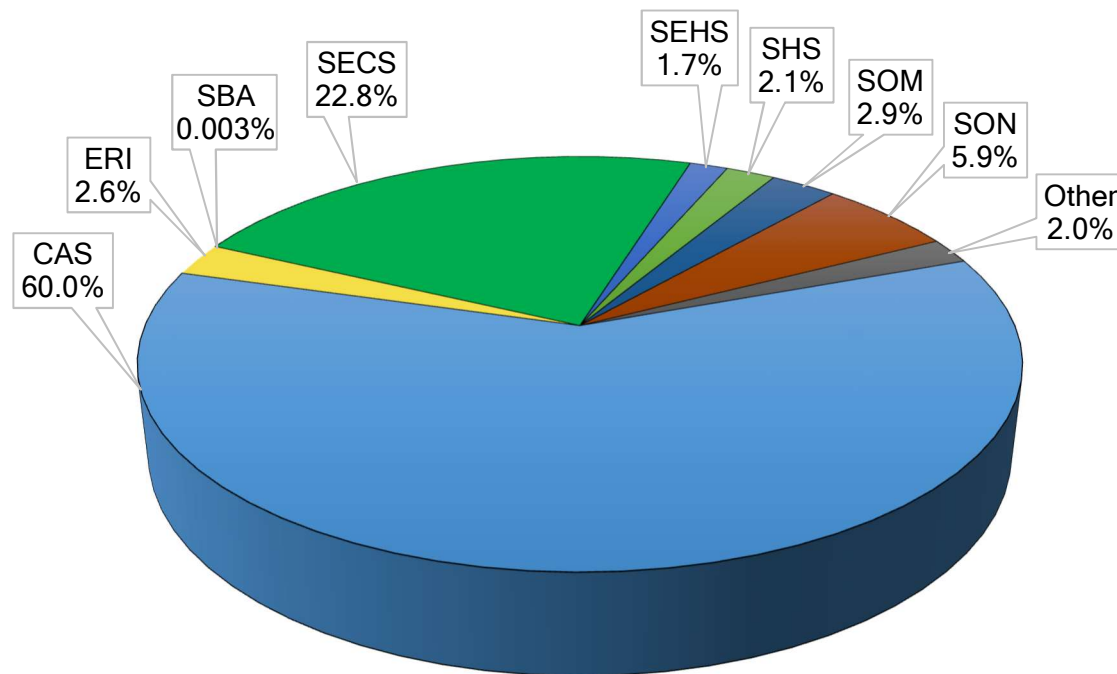
School of Health Science	FY2019	FY2020
Interdisciplinary Health Science	13	1
Human Movement Science	4	1
Public and Environmental Wellness	3	5
SHS Total	20	7

School of Medicine	FY2019	FY2020
SOM Total	6	5

School of Nursing	FY2019	FY2020
SON Total	8	10

Other	FY2019	FY2020
Academic Affairs	1	0
Center for Multicultural Initiatives	1	1
Diversity, Equity and Inclusion	1	0
International Education	0	2
Library	1	0
Plant Engineering	1	1
Pre-College Programs	2	0
Research Office	1	1
Student Affairs and Diversity	0	3
Other Total	8	8

Percentage and Amounts Requested by Academic Unit



N = \$89,350,575

Amount Requested by Academic Unit, FY 2017-2020

Academic Unit	FY2017	FY2018	FY2019	FY20	Grand Total
CAS	46,189,248	32,526,732	33,575,125	53,597,283	165,888,388
ERI	0	1,875,000	2,034,157	2,300,649	6,209,806
SBA	566,257	0	8,962	2,500	577,719
SECS	8,088,067	8,035,043	19,530,994	20,397,225	56,051,329
SEHS	2,379,048	2,991,058	1,917,226	1,481,871	8,769,203
SHS	1,043,560	739,423	7,881,792	1,920,229	11,585,004
SOM	116,632	10,250	424,193	2,581,784	3,132,859
SON	1,259,052	1,335,108	4,309,136	5,297,359	12,200,655
Other	4,984,757	982,570	1,304,571	1,771,675	9,043,573
Grand Total	\$64,626,621	\$48,495,184	\$70,986,156	\$89,350,575	\$273,458,536

Proposal Funding Requested by Academic Unit

College of Arts and Sciences	FY2019	FY2020
Art and Art History	25,000	10,000
Biological Sciences	17,915,867	34,264,494
Chemistry	9,112,615	12,862,729
Mathematics and Statistics	319,122	686,480
Philosophy	338,375	283,583
Physics	5,136,956	5,172,186
Political Science	17,999	17,999
Psychology	709,191	92,594
Sociology and Anthropology	0	207,218
CAS Total	\$33,575,125	\$53,597,283

Proposal Funding Requested by Academic Unit, continued

Eye Research Institute	FY2019	FY2020
ERI Total	\$12,034,157	\$2,300,649

School of Business Administration	FY2019	FY2020
Management and Marketing	8,962	2,500
SBA Total	\$8,962	\$2,500

School of Engineering & Computer Science	FY2019	FY2020
Computer Science and Engineering	9,876,590	6,944,070
Electrical and Computer Engineering	3,672,108	6,454,156
Industrial and Systems Engineering	1,830,501	3,382,096
Mechanical Engineering	4,151,795	3,616,903
SECS Total	\$19,530,994	\$20,397,225

School of Education and Human Services	FY2019	FY2020
Human Development and Child Studies	1,539,514	1,329,742
Organizational Leadership	67,630	39,419
Teacher Development and Educational Studies	94,926	102,710
Reading and Language Arts	215,156	10,000
SEHS Total	\$1,917,226	\$1,481,871

School of Health Sciences	FY2019	FY2020
Human Movement Science	408,986	95,694
Interdisciplinary Health Sciences	6,309,273	149,080
Public and Environmental Wellness	1,163,533	1,675,455
SHS Total	\$7,881,792	\$1,920,229

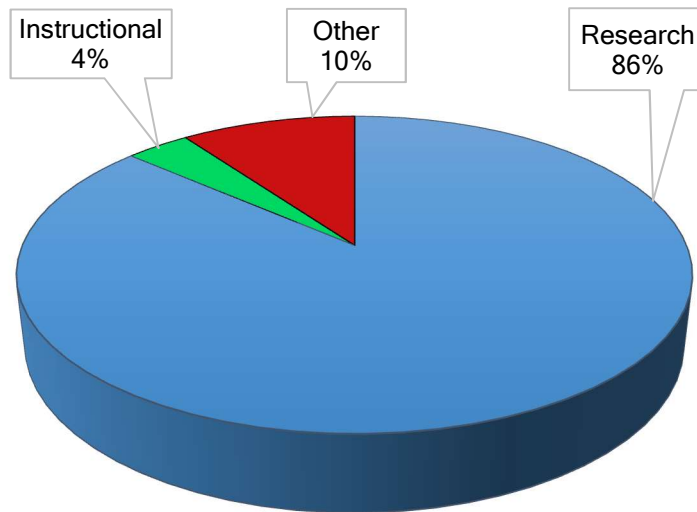
School of Medicine	FY2019	FY2020
SOM Total	\$424,193	\$2,581,784

School of Nursing	FY2019	FY2020
SON Total	\$4,309,136	\$5,297,359

Other	FY2019	FY2020
Academic Affairs	32,612	0
Center for Multicultural Initiatives	100,483	102,850
Diversity, Equity and Inclusion	31,655	304,211
Facilities Management	730,125	720,225
International Education	0	460,823
Library	9,943	0
Pre-College Programs	305,636	0
Research Office	94,117	183,566
Other Total	\$1,304,571	\$1,771,675

FY 2020 Proposal Funding Requested by Purpose

FY2020 • Amount Requested by Purpose



N = \$89,350,575

College of Arts and Sciences	Research	Instructional	Other Sponsored Activities
Art and Art History	10,000	0	0
Biological Sciences	31,714,494	2,550,000	0
Chemistry	12,857,729	0	5,000
Mathematics and Statistics	686,480	0	0
Philosophy	283,583	0	0
Physics	5,042,186	130,000	0
Political Science	0	0	17,999
Psychology	72,594	0	20,000
Sociology and Anthropology	207,218	0	0
CAS Total	\$50,874,284	\$2,680,000	\$42,999

Eye Research Institute	Research	Instructional	Other Sponsored Activities
ERI Total	\$2,300,649	\$0	\$0

School of Business Administration	Research	Instructional	Other Sponsored Activities
Management and Marketing	2,500	0	0
SEHS Total	\$2,500	\$0	\$0

FY 2020 Proposal Funding Requested by Purpose, continued

School of Engineering and Computer Science	Research	Instructional	Other Sponsored Activities
Computer Science and Engineering	6,744,070	200,000	0
Electrical and Computer Engineering	6,454,156	0	0
Industrial and Systems Engineering	3,382,096	0	0
Mechanical Engineering	3,528,168	88,735	0
SECS Total	\$20,108,490	\$288,735	\$0

School of Education and Human Services	Research	Instructional	Other Sponsored Activities
Human Development and Child Studies	829,871	0	499,871
Organizational Leadership	39,419	0	0
Reading and Language Arts	10,000	0	0
Teacher Development and Education	102,710	0	0
SEHS Total	\$982,000	\$0	\$499,871

School of Health Sciences	Research	Instructional	Other Sponsored Activities
Human Movement Science	95,694	0	0
Interdisciplinary Health Sciences	149,080	0	0
Public and Environmental Wellness	1,675,455	0	0
SEHS Total	\$1,920,229	\$0	\$0

School of Medicine	Research	Instructional	Other Sponsored Activities
SOM Total	\$21,784	\$0	\$2,560,000

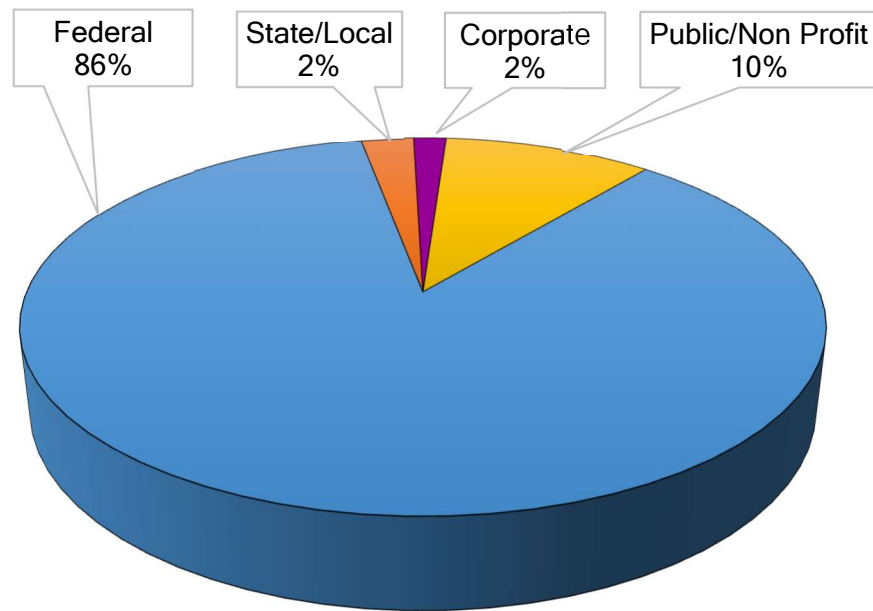
School of Nursing	Research	Instructional	Other Sponsored Activities
SON Total	\$226,859	\$185,500	\$4,885,000

Other	Research	Instructional	Other Sponsored Activities
Center for Multicultural Initiatives	0	102,850	0
Diversity, Equity and Inclusion	0	0	304,211
Facilities Management	720,225	0	0
International Education	24,998	0	435,825
Research Office	0	0	183,566
Other Total	\$745,223	\$102,850	\$923,602

Oakland University Total	Research	Instructional	Other Sponsored Activities
Grand Total	\$77,182,018	\$3,257,085	\$8,911,472

FY 2020 Proposal Funding Requested by Source

FY2020 • Amount Requested by Source



N = \$89,350,575

College of Arts & Sciences	Federal	State/Local	Corporate	Public/ Nonprofit
Art and Art History	10,000	0	0	0
Biological Sciences	32,217,153	194,690	0	1,852,651
Chemistry	9,002,068	0	134,627	3,726,034
Mathematics and Statistics	579,671	0	0	106,809
Philosophy	283,583	0	0	0
Physics	4,850,087	0	0	322,099
Political Science	0	0	0	17,999
Psychology	0	0	0	92,594
Sociology and Anthropology	207,218	0	0	0
CAS Total	\$47,149,780	\$194,690	\$134,627	\$6,118,186

Eye Research Institute	Federal	State/Local	Corporate	Public/ Nonprofit
ERI Total	\$2,240,697	\$0	\$59,952	\$0

School of Business Administration	Federal	State/Local	Corporate	Public/ Nonprofit
Management and Marketing	\$0	\$0	\$0	\$2,500
SBA Total	\$0	\$0	\$0	\$2,500

FY 2019 Proposal Funding Requested by Source, continued

School of Engineering and Computer Science	Federal	State/Local	Corporate	Public/Nonprofit
Computer Science and Engineering	6,399,439	0	235,686	308,945
Electrical and Computer Engineering	6,143,505	0	305,651	5,000
Industrial and Systems Engineering	2,822,316	380,005	99,923	79,852
Mechanical Engineering	2,924,914	88,735	461,260	141,994
SECS Total	\$18,290,174	\$468,740	\$1,102,520	\$535,791

School of Education and Human Services	Federal	State/Local	Corporate	Public/Nonprofit
Human Development and Child Studies	0	0	0	1,329,742
Organizational Leadership	0	0	0	39,419
Reading and Language Arts	0	0	0	10,000
Teacher Development and Education	0	0	0	102,710
SEHS Total	\$0	\$0	\$0	\$1,481,871

School of Health Sciences	Federal	State/Local	Corporate	Public/Nonprofit
Human Movement Science	0	0	95,694	0
Interdisciplinary Health Sciences	149,080	0	0	0
Public and Environmental Wellness	1,148,286	20,000	0	507,169
SHS Total	\$1,297,366	\$20,000	\$95,694	\$507,169

School of Medicine	Federal	State/Local	Corporate	Public/Nonprofit
SOM Total	\$2,560,000	\$0	\$0	\$21,784

School of Nursing	Federal	State/Local	Corporate	Public/Nonprofit
SON Total	\$5,059,500	\$0	\$0	\$237,859

Other	Federal	State/Local	Corporate	Public/Nonprofit
Center for Multicultural Initiatives	0	102,850	0	0
Facilities Management	0	720,225	0	0
International Education	0	435,825	0	24,998
Research Office	183,566	0	0	0
Diversity, Equity and Inclusion	0	304,211	0	0
Other Total	\$183,566	\$1,563,111	\$0	\$24,998

Oakland University Total	Federal	State/Local	Corporate	Public/Nonprofit
Grand Total	\$76,781,083	\$2,246,541	\$1,392,793	\$8,930,158

Research, Innovation, and Engagement Town Hall - 2019 Winners

Frank Giblin Lifetime Achievement Award

Dr. Sayed Nassar
Department of Mechanical Engineering, SECS

Researcher of the Year

Dr. Gopalan Srinivasan
Department of Physics, CAS

Most Research Active

Dr. Wei Zhang
Department of Physics, CAS

Most Active Grant Seeker

Dr. Xiangqun Zeng
Department of Chemistry, CAS

Outstanding Research Department

Biological Sciences, CAS

Outstanding Junior Investigator

Dr. Khalid Malik
Department of Computer Science and Engineering, SECS

Best Team Player

Dr. Jennifer Lucarelli
Department of Interdisciplinary Health Sciences, SHS

PI Academy for Research and Engagement, Class of 2020

Theresa Anasti, Social Work, CAS
Stefanie Attardi, Foundational Medical Studies, OUWB
Adam Avery, Chemistry, CAS
Ngong Kodiah Beyeh, Chemistry, CAS
Patricia Bills, Teacher Development and Educational Studies, SEHS
Patricia Cameron, Nursing, SON
Felicita Arzu Carmichael, Writing/Rhetoric, CAS
Jon Carroll, Anthropology, CAS
Eralda Caushaj, Decision and Information Sciences, SBA
Caress Dean, Public and Environmental Wellness, SHS
Elizabeth Eisenhauer, Nursing, SON
Brandon Gustafson, Marketing, SBA
Joshua Haworth, Human Movement Science, SHS
Deana Hays, Nursing, SON
Joanna Hernandez, Nursing, SON
Amanpreet Kaur, Electrical and Computer Engineering, SECS
Sung-eun Kim, Political Science, CAS
Serena Kuang, Foundational Medical Studies, OUWB
Danielle Ligocki, Teacher Development and Educational Studies, SEHS
Zexin Marsha Ma, Communication and Journalism, CAS
Ryan Monroe, Mechanical Engineering, SECS
Taras Oleksyk, Biological Sciences, CAS
Mozhgon Rajaei, Public and Environmental Wellness, SHS
Alexander Rusakov, Chemistry, CAS
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