

The 2020 Annual Report of Sponsored Research is available in the below pages in this PDF format to provide Y/Y comparison and trends. This report encompasses the greatest accuracy.

We are currently reconciling discrepancies in Kuali Research for 2020 to ensure that the ad hoc reports in Kuali Research are aligned with the official PDF report of record for 2020. When reconciled to match the PDF report, you will have access to generate ad hoc reports for 2020.

Please let me know if you have any questions and/or concerns.

Thank you,

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2020 Annual Report of Sponsored Research

Research
Administration
Office

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Preface

This report covers January 1, 2020 to December 31, 2020.

Included are a number of activities that are carried out by the Research Administration Office (RAO), previously known as Office of Research & Creative Activities (ORCA).

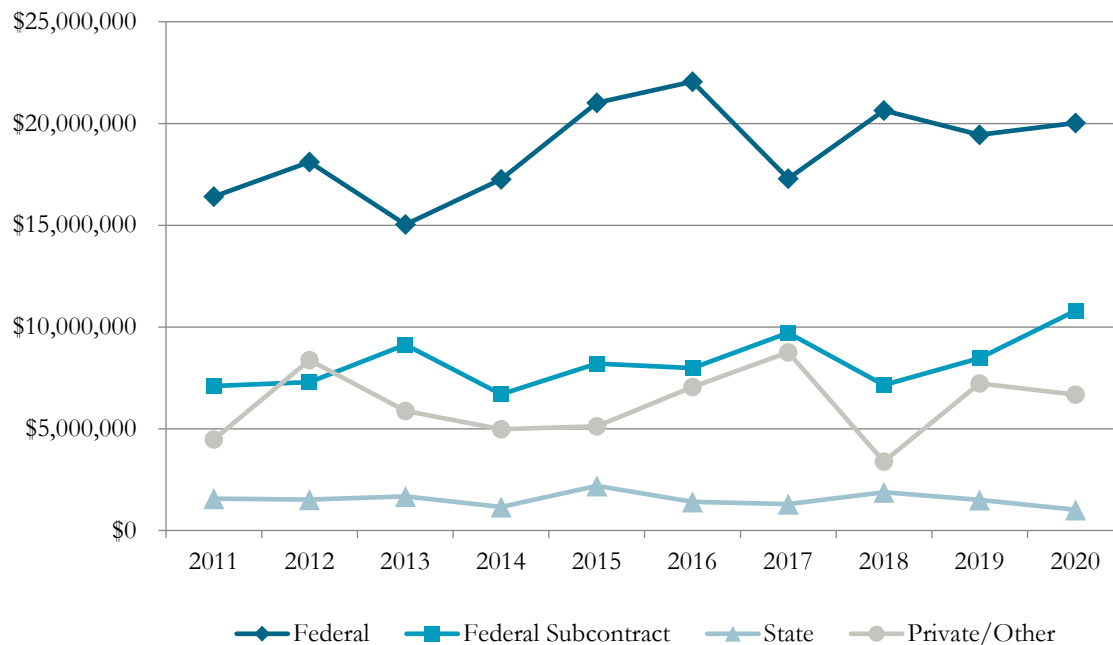
- ***Reports of Sponsored Projects:*** Sponsored projects at BYU are those funded by external sources through RAO. They are largely research projects, but many include programs that are designed to develop or support instructional or service activities. Support for creative activities such as performance, artistic creations, etc., may also come through RAO.
- ***Administrative Activities in Support of Research and Creative Activities:*** RAO supports three university committees which oversee compliance with university, state, and federal regulations.

The University



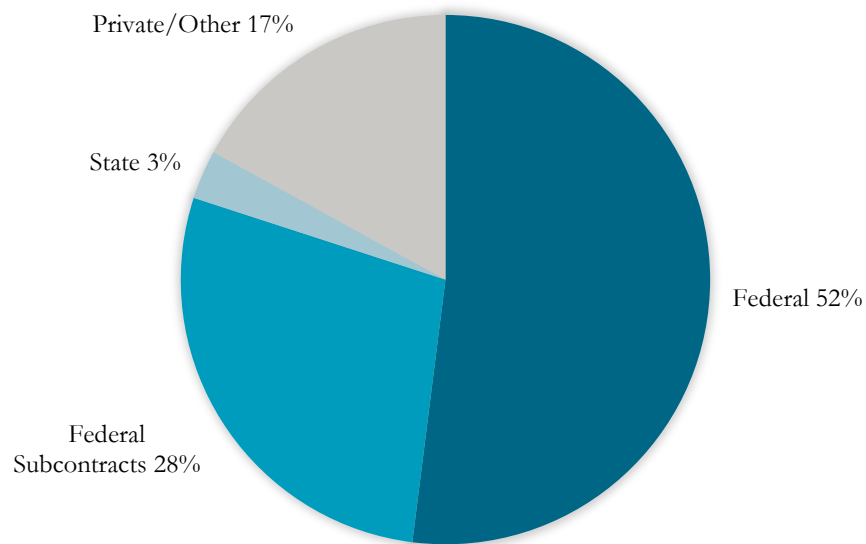
External Research Funding

Grants/Contracts						
Year	Federal	Federal Subcontract	State	Private/Other	Total	%Federal
2011	\$16,415,455	\$7,097,675	\$1,572,162	\$4,471,211	\$29,556,503	80%
2012	\$18,110,757	\$7,282,203	\$1,523,034	\$8,379,690	\$35,295,684	72%
2013	\$15,034,387	\$9,126,548	\$1,679,472	\$5,871,718	\$31,712,125	76%
2014	\$17,260,137	\$6,693,946	\$1,151,886	\$4,984,448	\$30,090,417	79%
2015	\$21,015,987	\$8,205,836	\$2,192,841	\$5,115,501	\$36,433,016	80%
2016	\$22,056,396	\$7,987,588	\$1,411,764	\$7,051,367	\$38,507,115	78%
2017	\$17,293,839	\$9,715,815	\$1,290,090	\$8,756,281	\$37,056,025	73%
2018	\$20,636,221	\$7,147,550	\$1,876,552	\$3,386,457	\$33,046,780	84%
2019	\$19,445,058	\$8,469,044	\$1,502,620	\$7,231,977	\$36,648,699	76%
2020	\$20,024,907	\$10,794,493	\$1,020,133	\$6,672,388	\$38,511,921	80%



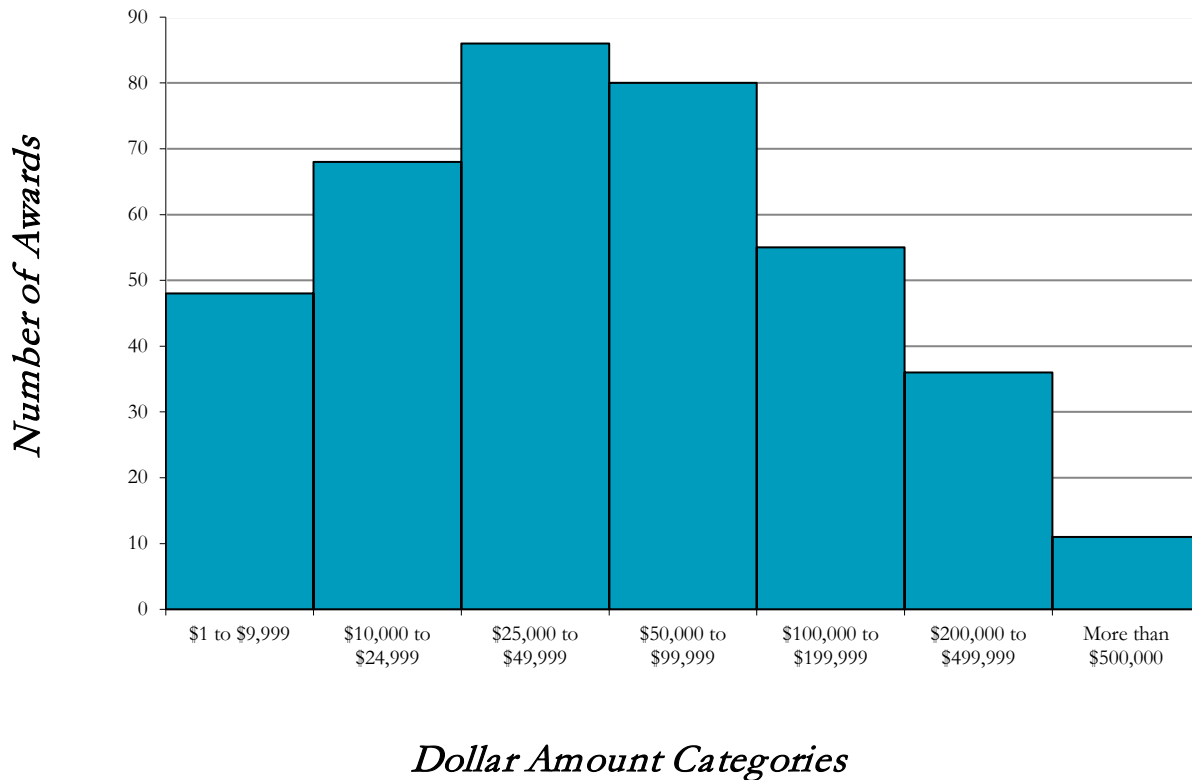
External Funds by Source-2020

Source	Amount	% of Total
Federal	\$20,024,907	52%
Federal Subcontracts	\$10,794,493	28%
State	\$1,020,133	3%
Private/Other	\$6,672,388	17%
<i>Total Funding</i>	<i>\$38,511,921</i>	<i>100%</i>

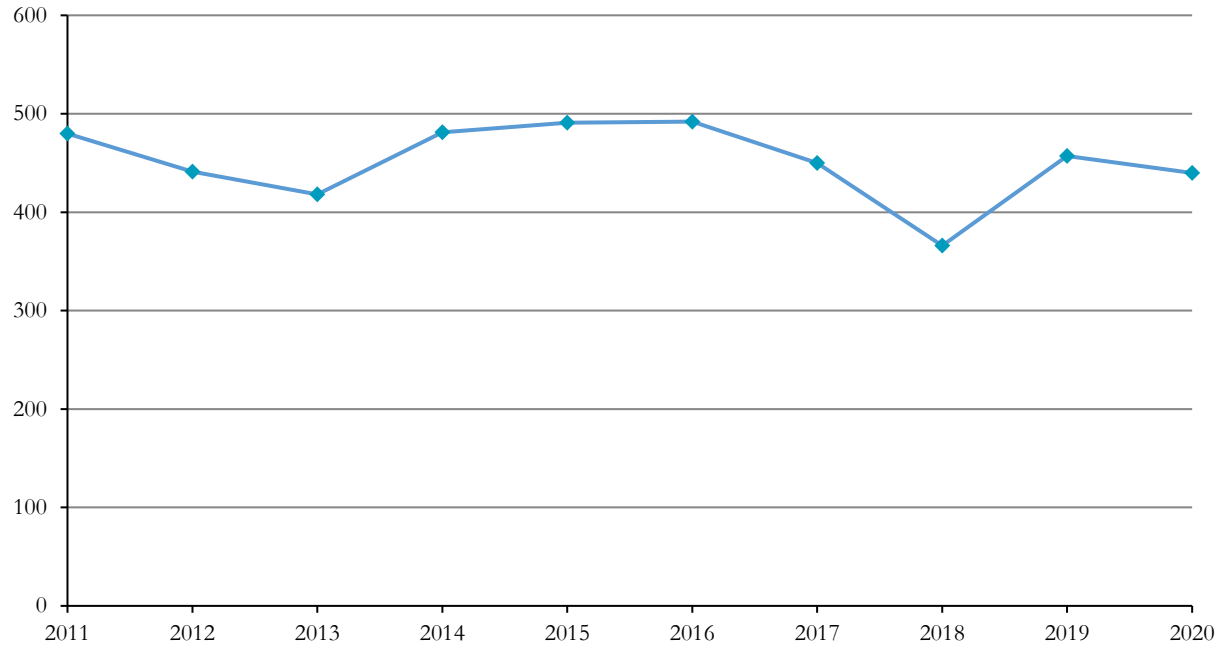


Awards by Amount-2020

Dollar Amount Categories	# of Awards	% of Total Awards by #	\$ Awards	% of Total Awards by \$ Amount
\$1 to \$9,999	48	12%	\$209,822	1%
\$10,000 to \$24,999	68	18%	\$1,194,464	3%
\$25,000 to \$49,999	86	23%	\$3,134,753	8%
\$50,000 to \$99,999	80	21%	\$5,900,556	15%
\$100,000 to \$199,999	55	14%	\$7,411,451	19%
\$200,000 to \$499,999	36	9%	\$11,524,750	30%
More than \$500,000	11	3%	\$9,136,125	24%
Totals	384	100%	\$38,511,921	100%

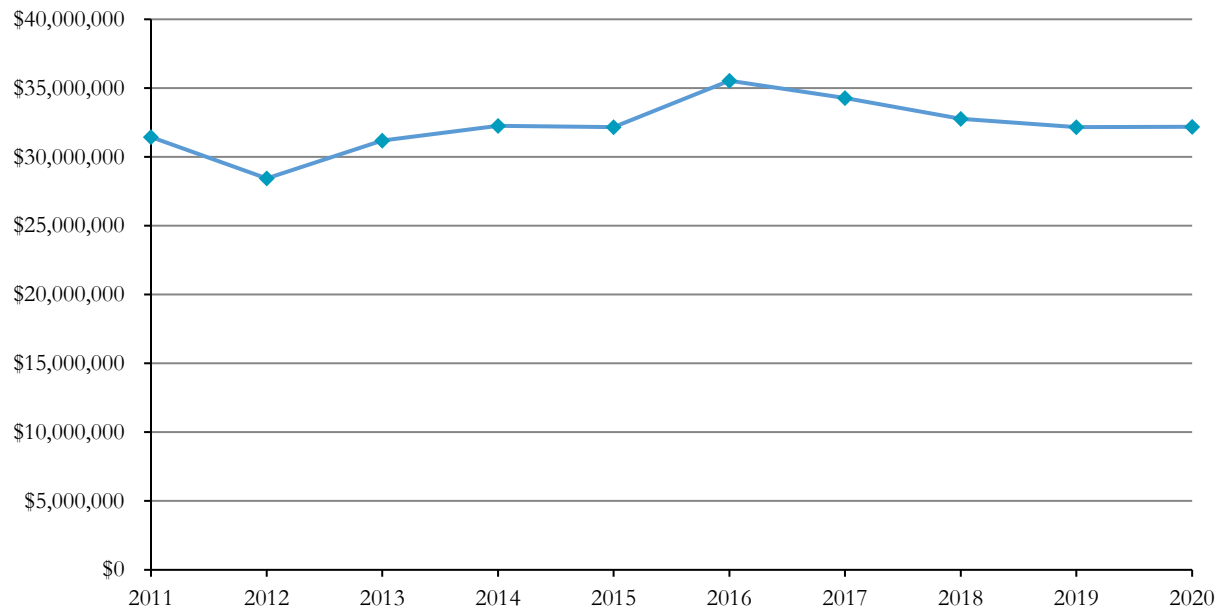


Proposals Submitted



Total Award Expenditures

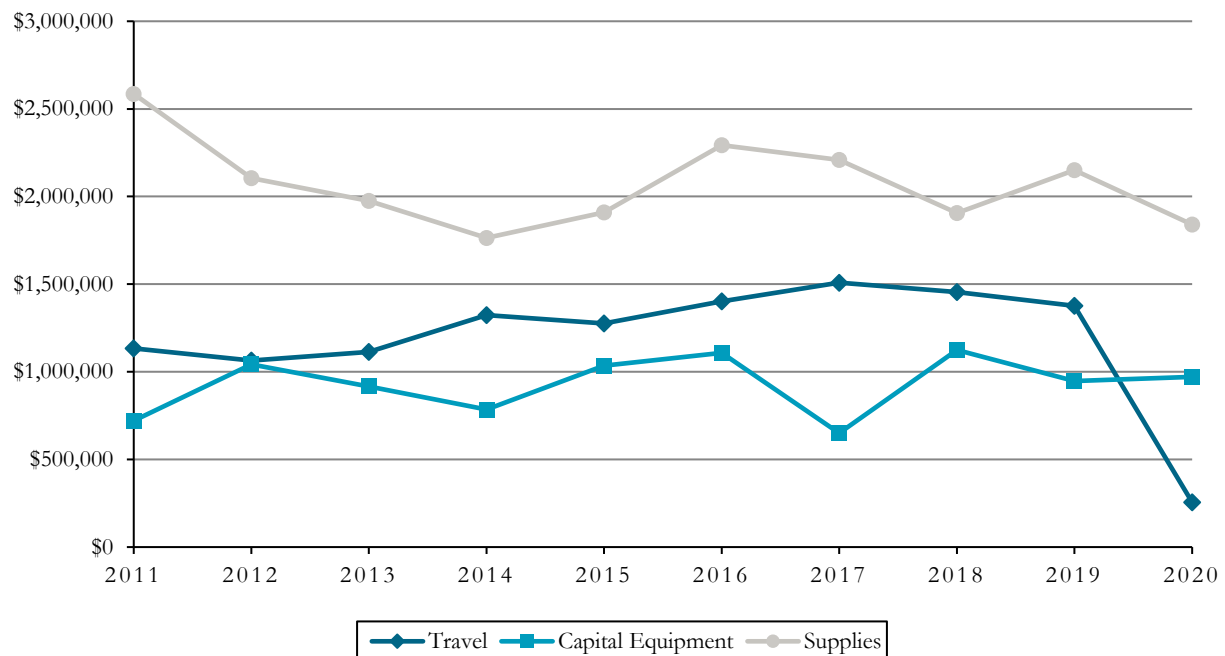
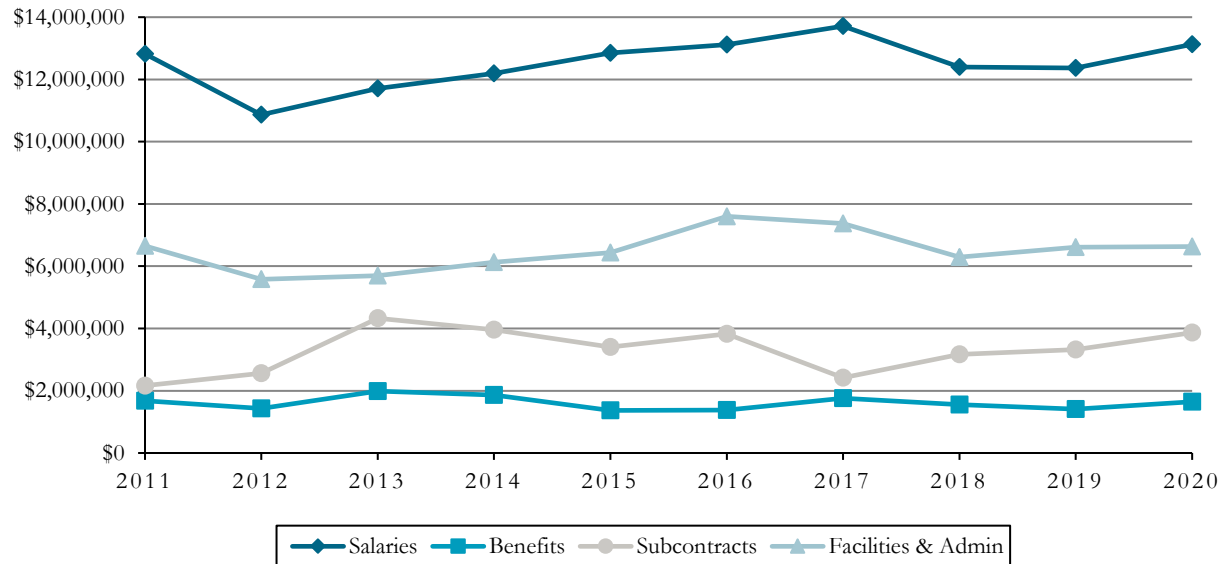
Year	Total Expenditures
2011	\$31,443,918
2012	\$28,438,600
2013	\$31,184,980
2014	\$32,258,073
2015	\$32,177,342
2016	\$35,537,915
2017	\$34,278,900
2018	\$32,772,780
2019	\$32,177,733
2020	\$32,182,706



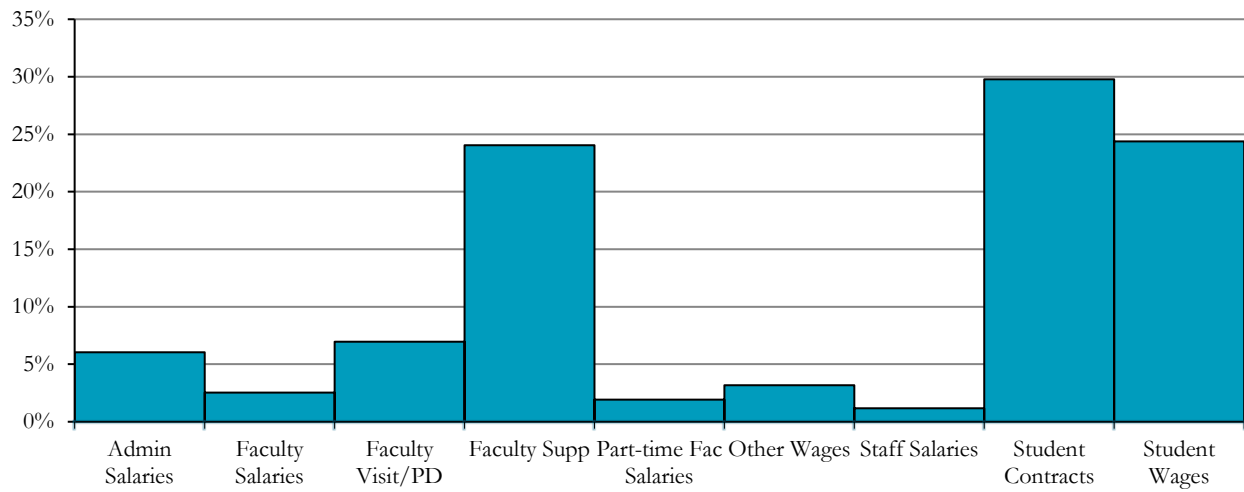
2020 Award Expenditures by Category

<i>Personnel Costs</i>	<i>Amount</i>
<i>Salaries & Wages</i>	
Admin Salaries	\$ 725,399
Faculty Salaries	116,959
Faculty Sal-Visit-Health Ben	1,004,628
Faculty Supplemental	3,087,573
Other Wages	445,845
Part-time Faculty Salaries	465,443
Staff Salaries	104,104
Student Contracts	3,910,882
Student Wages	3,267,848
<i>Total Salaries & Wages</i>	<i>\$ 13,128,681</i>
Fringe Benefits	\$ 1,645,986
<i>Total Personnel Cost</i>	<i>\$ 14,774,668</i>
<i>Other</i>	
Access Equipment	\$ 2,715
Capital Equipment	970,814
Computer Serv-Campus-Contract	376
Conference & Symposium Costs	23,117
Consultants	341,657
Contract Services	1,059,596
Employee Development/Training	13,298
Equipment Maintenance	44,493
Facilities & Administration	6,635,180
Facilities Maintenance	668
Hosting, Food, Entertainment	5,139
Non-Capital Equipment	72,308
Participant Stipends	160,529
Postage and Mailing	8,921
Printing and Copying	4,109
Program Income	(17,228)
Purchase Discounts Earned	(13)
Rental Expense	95,395
Research Fellowships	64,008
Research Publications Costs	17,490
Software Acquisitions/Support	14,253
Software Maintenance	4,325
Student Aid	1,919,269
SubContracts	3,864,312
Supplies	1,840,177
Telecommunications	7,441
Travel	255,689
<i>Total Other Expenditures</i>	<i>\$ 17,408,039</i>
<i>Total Research Expenditures</i>	<i>\$ 32,182,706</i>

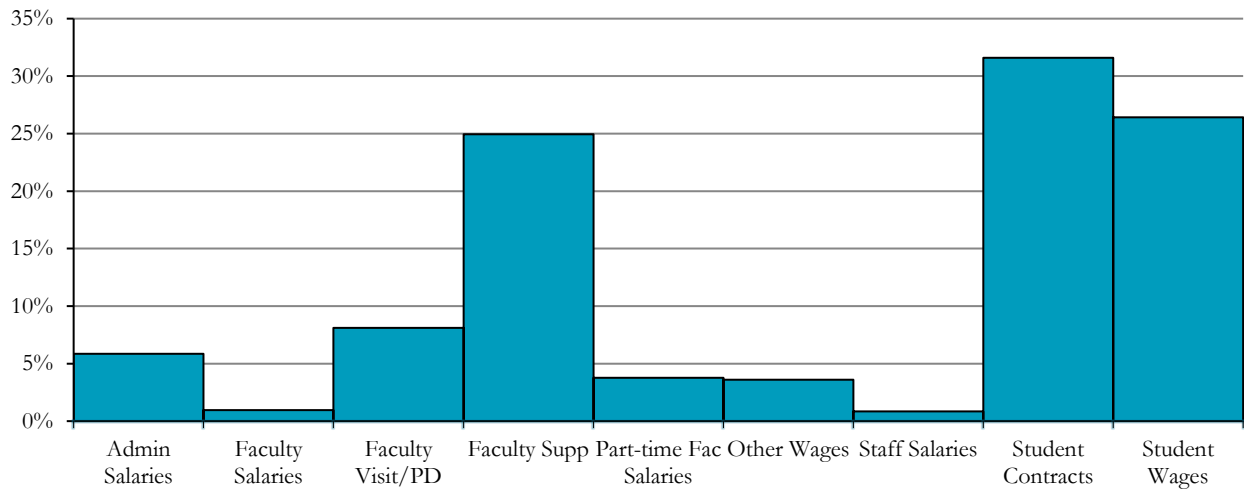
Award Dollars Expended



2019 Salaries and Wages Expenditures
Total: \$12,372,740



2020 Salaries and Wages Expenditures
Total: \$13,128,621

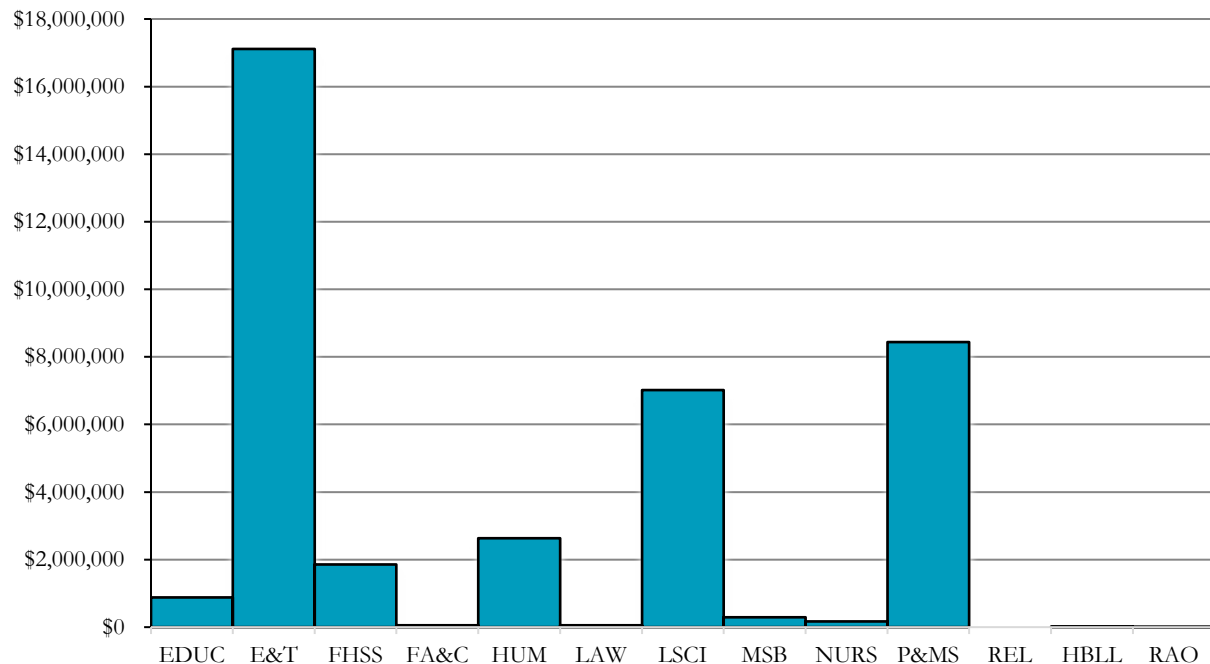


Information by College or School

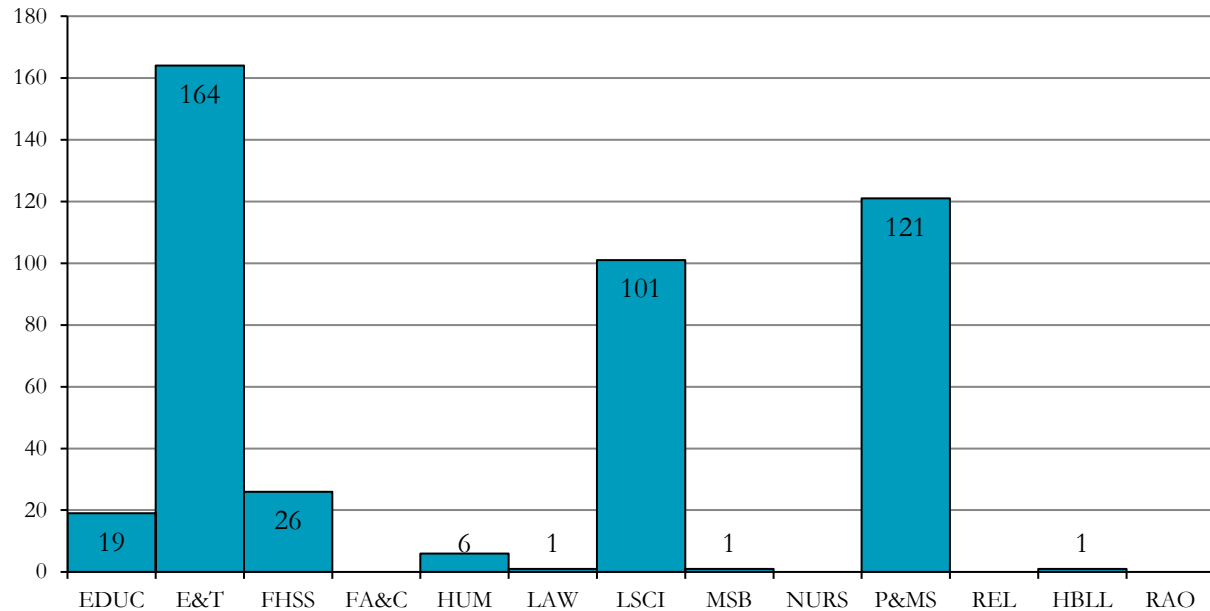
KARL G MAESER
MEMORIAL

Total Awards by College

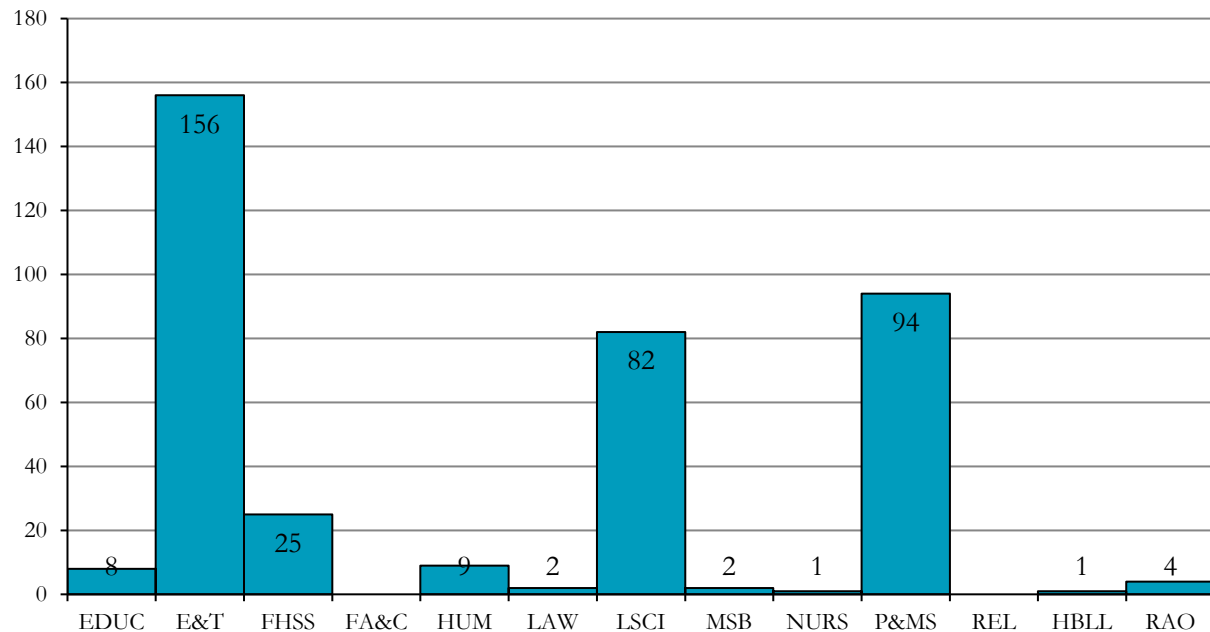
<i>College or School</i>	<i>Total</i>
David O. McKay School of Education	\$875,541
Ira A. Fulton College of Engineering	\$17,111,855
College of Family, Home & Social Sciences	\$1,858,660
College of Fine Arts & Communications	\$51,938
College of Humanities	\$2,629,438
J. Reuben Clark Law School	\$51,568
College of Life Sciences	\$7,016,228
Marriot School of Business	\$291,750
College of Nursing	\$167,500
College of Physical & Mathematical Sciences	\$8,436,871
Religious Education	\$0
Harold B. Lee Library	\$20,000
RAO	\$572
University Total	\$38,511,921



Number of Proposals-2020



Number of Awards-2020



Total Awards by College and Department

<i>College and Department</i>	<i>Amount</i>
<u>David O. McKay School of Education</u>	
Center for Improvement of Teacher Education & Schooling	\$187,500
Communication Disorders	\$576,304
Counseling, Psychology, & Special Education	\$33,119
Education Leadership & Foundations	\$0
Instructional Psychology	\$78,618
Teacher Education	\$0
TOTAL	\$875,541
 <u>Ira A. Fulton College of Engineering</u>	
Chemical Engineering	\$6,170,808
Civil & Environmental Engineering	\$1,964,396
Electrical & Computer Engineering	\$3,403,558
Manufacturing Engineering	\$666,985
Mechanical Engineering	\$4,640,453
School of Technology	\$265,655
TOTAL	\$17,111,855
 <u>College of Family, Home, & Social Sciences</u>	
Anthropology	\$46,000
Economics	\$202,760
Geography	\$0
History	\$519,561
Museum of Peoples & Cultures	\$0
Office of Public Archaeology	\$4,500
Political Science	\$394,446
Psychology	\$225,460
School of Family Life	\$435,350
Social Work	\$18,385
Sociology	\$12,198
TOTAL	\$1,858,660
 <u>College of Humanities</u>	
Asian & Near East Languages	\$2,049,491
Comparative Arts & Letters	\$7,952
English	\$571,995
French & Italian	\$0
German & Russian	\$0
Linguistics & English Language	\$0
Philosophy	\$0
Spanish & Portuguese	\$0
TOTAL	\$2,629,438

<u>College of Fine Arts & Communications</u>		
Art		\$0
Communications		\$51,938
Dance		\$0
Design		\$0
School of Music		\$0
Theatre & Media Arts		\$0
	TOTAL	\$51,938
<u>J. Reuben Clark Law School</u>	TOTAL	\$51,568
<u>College of Life Sciences</u>		
Monte L. Bean Life Science Museum		\$34,000
Biology		\$1,905,489
Exercise Science		\$53,100
Public Health		\$300,319
Microbiology & Molecular Biology		\$492,001
Nutrition, Dietetics, & Food Science		\$512,457
Physiology & Developmental Biology		\$1,255,633
Plant & Wildlife Sciences		\$2,463,229
	TOTAL	\$7,016,228
<u>Marriott School of Business</u>		
School of Accountancy		\$6,750
Experience Design & Management		\$0
Finance & Managerial Economics		\$0
Global Management Center		\$142,500
Information Systems		
Management		\$0
Marketing & Global Supply Chain		\$142,500
Romney Institute of Public Management		\$0
	TOTAL	\$291,750
<u>College of Nursing</u>	TOTAL	\$167,500
<u>Research Administration Office</u>	TOTAL	\$572
<u>College of Physical & Mathematical Sciences</u>		
Chemistry & Biochemistry		\$3,973,025
Computer Science		\$728,705
Geology		\$557,716
Mathematics		\$233,131
Mathematics Education		\$42,500
Physics & Astronomy		\$2,696,276
Statistics		\$205,518
	TOTAL	\$8,436,871
<u>Religious Education</u>	TOTAL	\$0
<u>Harold B. Lee Library</u>	TOTAL	\$20,000
Grand Total		\$38,511,921

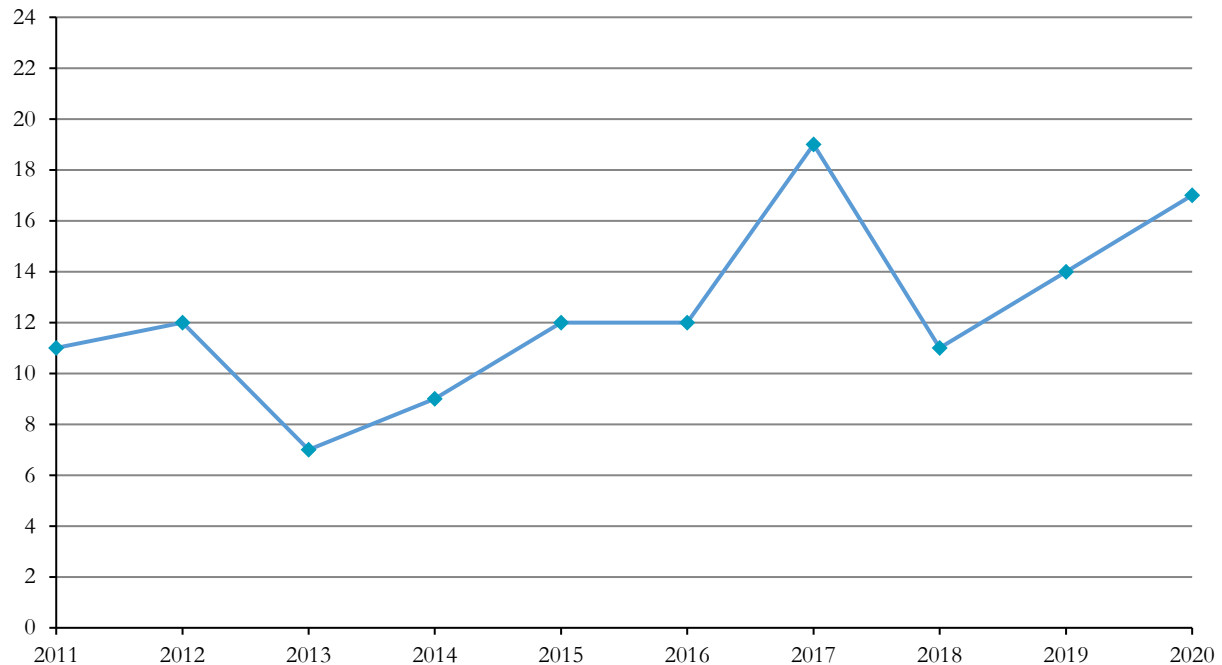
David O. McKay School of Education



Summary by Departments

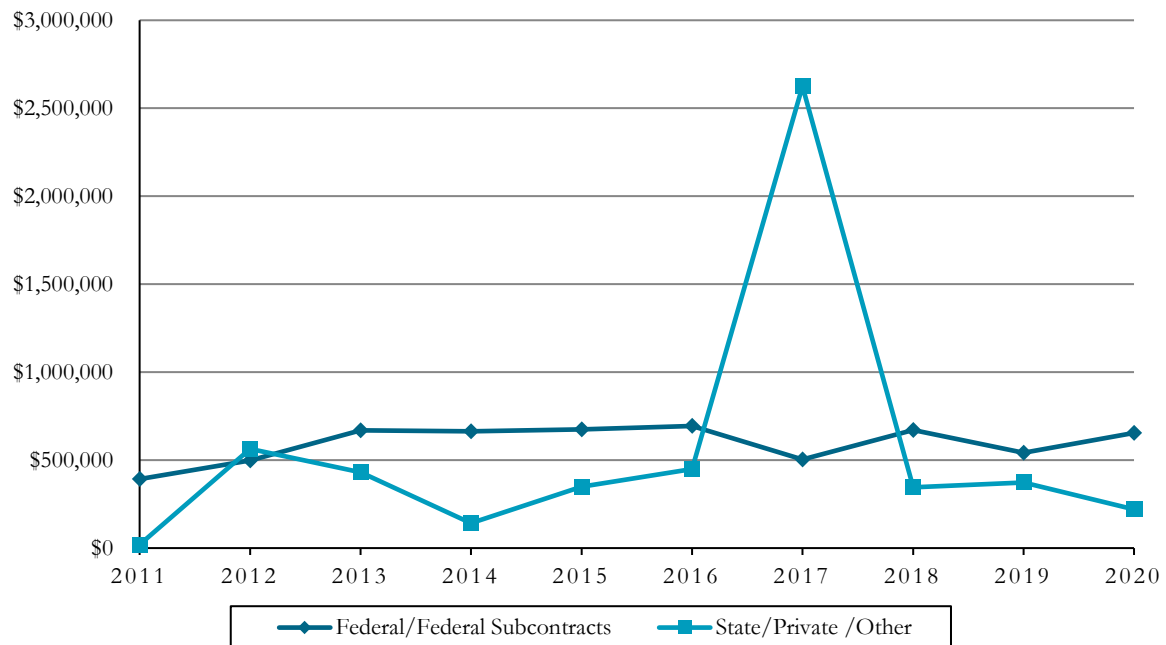
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Center for Improvement of Teacher Education & Schooling	2	4	2	\$187,500
Communication Disorders	1	1	4	\$576,304
Counseling, Psychology, & Special Education	2	2	1	\$33,119
Educational Leadership & Foundations	2	3	0	\$0
Instructional Psychology & Technology	3	1	1	\$78,618
Teacher Education	7	8	0	\$0
TOTALS	17	19	8	\$875,541

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$392,300	\$19,700	\$412,000
2012	\$498,499	\$564,185	\$1,062,684
2013	\$669,318	\$430,120	\$1,099,438
2014	\$663,944	\$141,000	\$804,944
2015	\$675,327	\$348,440	\$1,023,767
2016	\$693,993	\$449,966	\$1,143,959
2017	\$503,548	\$2,624,841	\$3,128,389
2018	\$671,011	\$345,902	\$1,016,913
2019	\$541,274	\$372,300	\$913,574
2020	\$654,922	\$220,619	\$875,541



David O. McKay School of Education 2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
<i>Center for Improvement of Teacher Education & Schooling</i>								
Flox, Cally		Utah Division of Arts & Museums		Native American Curriculum Initiative (BYU Arts Partnership) Continuation Project	5/1/2020	6/30/2021	R0402353	\$30,000
Flox, Cally		Utah State Board of Education		BTSALP Grant Application 2020-2021	7/1/2020	6/30/2021	R0402359	\$157,500
<i>Communication Disorders</i>								
Cardon, Garrett		NIH		Neurophysiological and Behavioral Correlates of Sensory and Communication Dysfunction in Children with Autism Spectrum Disorder.	8/1/2019	5/31/2021	R0102099	\$109,890
Cardon, Garrett		NIH		Neurophysiological and Behavioral Correlates of Sensory and Communication Dysfunction in Children with Autism Spectrum Disorder.	6/1/2020	5/31/2021	R0102099	\$127,060
Tanner, Kristine		NIH		Pathophysiology of Voice Disorders due to Combination Inhaled Corticosteroids in Asthma	5/14/2018	4/30/2021	R0102086	\$269,883
Tanner, Kristine		NIH		Imaging and influence of glottic and subglottic anatomy in healthy and stenotic patients	9/1/2020	8/31/2021	R0102088	\$69,471
<i>Counseling, Psychology, & Special Education</i>								
Gabrielsen, Terisa		Utah State Board of Education		Building Utah's School Psychologist Workforce	9/3/2020	6/30/2022	R0402357	\$16,560
Young, Ellie	w/ Gabrielsen, Terisa	Utah State Board of Education		Building Utah's School Psychologist Workforce	9/3/2020	6/30/2022	R0402357	\$16,560
<i>Instructional Psychology</i>								
Rich, Peter		George Mason University	NSF	Project REVEAL-HS: Fostering Student Computational Thinking in Data Analysis Through Self-Regulated Learning Prompts and Analytics (Joint Proposal with George Mason University)	10/1/2018	9/30/2021	R0302828	\$78,618

David O. McKay School of Education Source Breakdown

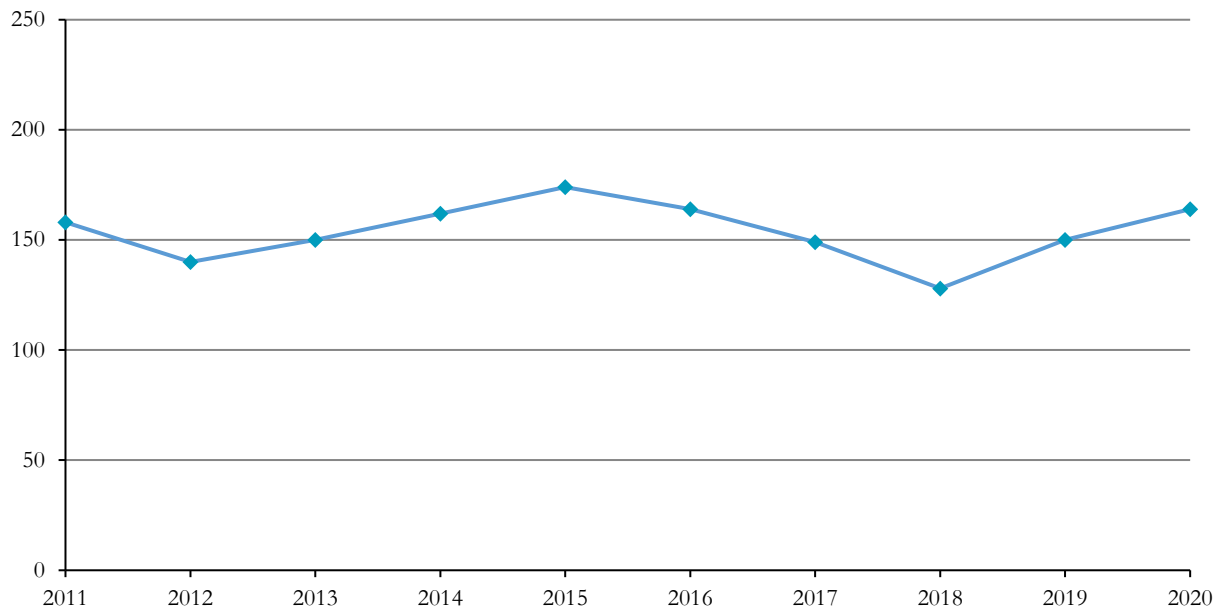
Sponsor	Total Amount
Federal	
NIH	\$576,304
Total	\$576,304
Federal Subcontract	
George Mason University	\$78,618
Total	\$78,618
State	
Utah Division of Arts & Museums	\$30,000
Utah State Board of Education	\$190,619
Total	\$220,619
Grand Total	\$875,541

Ira A. Fulton College of Engineering

Summary by Departments

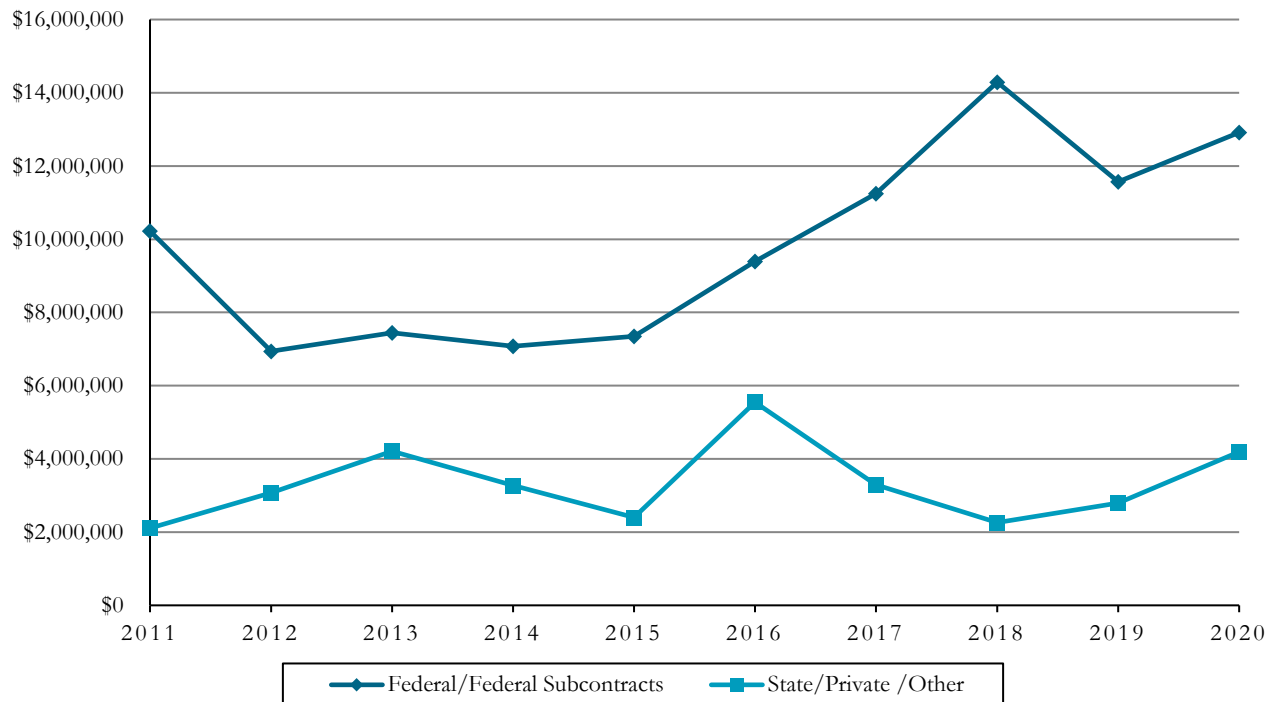
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Chemical Engineering	16	30	20	\$6,170,807
Civil & Environmental Engineering	10	23	28	\$1,964,396
Electrical & Computer Engineering	20	50	36	\$3,403,558
Manufacturing Engineering	6	8	8	\$666,986
Mechanical Engineering	21	50	61	\$4,640,453
School of Technology	2	3	3	\$265,655
TOTALS	75	164	156	\$17,111,855

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$10,224,839	\$2,108,091	\$12,332,930
2012	\$6,940,419	\$3,075,235	\$10,015,653
2013	\$7,446,524	\$4,208,437	\$11,654,961
2014	\$7,073,257	\$3,279,114	\$10,352,371
2015	\$7,345,708	\$2,397,665	\$9,743,373
2016	\$9,391,742	\$5,546,423	\$14,938,165
2017	\$11,246,406	\$3,294,087	\$14,540,493
2018	\$14,289,851	\$2,259,118	\$16,548,969
2019	\$11,570,059	\$2,794,877	\$14,364,936
2020	\$12,915,725	\$4,196,130	\$17,111,855



Ira A. Fulton College of Engineering 2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
<i>Chemical Engineering</i>								
Baxter, Larry		DOE		Nuclear Energy University Programs-Fellowship and Scholarship	11/1/2013	6/30/2022	Ro202405	\$7,500
Baxter, Larry		Savannah River National Lab	DOE	Isotope Effects on Hydrogen Ignition	12/18/2018	12/17/2020	Ro302831	\$194,681
Bundy, Brad		VentureWell	NIH	Mass-Produced, Point-of-Care, At-Home, Paper-based, Colorimetric SARS-CoV-2/COVID19 Screening in 30 Min for Less than \$0.10	5/17/2020	5/31/2020	Ro302915	\$8,500
Bundy, Brad		University of Massachusetts Amherst	NIH	At-home, Paper-based, Colorimetric, Extreme-low-cost SARS-CoV-2 Testing: Repurposing Pseudoknots as an RNA switch and Demonstrating Signal Amplification through Transcription-Translation Cascades	5/19/2020	8/31/2020	Ro302916	\$91,221
Bundy, Brad		University of Utah	NASA	Creating K-12 Engineering Adventures: The Impact of Space Travel on Human Health	5/18/2020	5/17/2021	Ro302937	\$5,000
Bundy, Brad		Xenon H S		Mass-produced Inexpensive Paper-based SARS-CoV-2 Diagnostic Test Using Saliva for At-home Use	10/1/2020	12/31/2021	Ro602650	\$187,500
Fletcher, Tom		USDA		Fundamental Measurements and Modeling of Prescribed Fire Behavior in the Naturally Heterogeneous Fuel Beds of Southern Pine	4/15/2016	4/25/2021	Ro202467	\$15,000
Fry, Andrew		DOE		Testing and model -based optimization of coal-fired primary heater design for indirect supercritical CO2 Power Cycles	10/1/2020	12/31/2021	Ro202545	\$2,797,599
Fry, Andrew		University of Utah	DOE	Deployment of artificial intelligence for dynamic optimization to measure heat rate during ramping for coal-based power plants	10/1/2019	9/30/2020	Ro302897	\$110,224
Harb, John		Alpha Tech Research Corp		Separation and Purification of Fission Products from Molten Salt Reactors	6/1/2020	5/31/2021	Ro602639	\$95,864
Hedengren, John	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - NSF Center Support	3/15/2017	2/28/2022	Ro112339	\$7,000
Hedengren, John	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - REU	3/15/2017	2/28/2022	Ro112343	\$7,863
Hedengren, John	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site	3/15/2017	2/28/2022	Ro112367	\$13,000
Hedengren, John	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200

Hedengren, John	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200
Hedengren, John	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$24,200
Hedengren, John	w/ McLain, Tim	BP		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$17,600
Hedengren, John	w/ McLain, Tim	FCLTech		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$11,000
Hedengren, John	w/ McLain, Tim	Honeywell		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$9,600
Hedengren, John	w/ McLain, Tim	Insitu		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$26,400
Hedengren, John	w/ McLain, Tim	L3Harris		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
Hedengren, John	w/ McLain, Tim	Raytheon		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
Knotts, Tommy	w/ Wilding, Vincent	American Institute of Chemical Engineers		DIPPR 801	1/1/2018	12/31/2020	Ro602557	\$321,250
Knotts, Tommy	w/ Wilding, Vincent	American Institute of Chemical Engineers		DIPPR 801	1/1/2018	12/31/2021	Ro602557	\$321,250
Memmott, Matthew		University of New Mexico	DOE	Experimental Investigation of Radioisotope Retention Capability of Liquid Metal Coolants (Lead and Sodium)	10/1/2018	9/30/2020	Ro302849	\$73,234
Memmott, Matthew		University of New Mexico	DOE	Experimental Investigation of Radioisotope Retention Capability of Liquid Metal Coolants (Lead and Sodium)	10/1/2018	9/30/2021	Ro302849	\$74,217
Pitt, Bill	w/ Bundy, Brad	VentureWell	NIH	Mass-Produced, Point-of-Care, At-Home, Paper-based, Colorimetric SARS-CoV-2/COVID19 Screening in 30 Min for Less than \$0.10	5/17/2020	5/31/2020	Ro302915	\$8,250
Pitt, Bill	w/ Bundy, Brad	University of Massachusetts Amherst	NIH	At-home, Paper-based, Colorimetric, Extreme-low-cost SARS-CoV-2 Testing: Repurposing Pseudoknots as an RNA switch and Demonstrating Signal Amplification through Transcription-Translation Cascades	5/19/2020	8/31/2020	Ro302916	\$88,538
Pitt, Bill	w/ Bundy, Brad	Xenon H S		Mass-produced Inexpensive Paper-based SARS-CoV-2 Diagnostic Test Using Saliva for At-home Use	10/1/2020	12/31/2021	Ro602650	\$187,500
Rappleye, Devin		Lawrence Livermore National Labs	DOE	Process Development of Metal Purification via Chloride Volatility	10/14/2020	9/30/2022	Ro302949	\$417,360
Seo, DJ		NSF		Collaborative Research: Selective Flow through Membrane Pores with in situ Change of Wettability	8/1/2020	7/31/2023	Ro112466	\$272,958
Wheeler, Dean		National Renewable Energy Laboratory	DOE	Local Mapping of Electrode Properties for Extreme Fast Charging	2/26/2020	8/31/2020	Ro302898	\$50,000
Wheeler, Dean		National Renewable Energy Laboratory	DOE	Local Mapping of Electrode Properties for Extreme Fast Charging	2/26/2020	8/25/2021	Ro302898	\$50,000
Wheeler, Dean		University of Utah	NASA	Enabling Electrified Flight through Utah-Sourced Material for Improving Lithium-Ion Batteries	5/18/2020	5/17/2021	Ro302933	\$12,000

Wilding, Vincent		American Institute of Chemical Engineers	DIPPR 801	1/1/2018	12/31/2020	RO602557	\$321,250
Wilding, Vincent		American Institute of Chemical Engineers	DIPPR 801	1/1/2018	12/31/2021	RO602557	\$321,250
Civil & Environmental Engineering							
Ames, Dan		NASA	An AmeriGEOSS Cloud-based Platform for Rapid Deployment of GEOGLOWS Water and Food Security Decision Support Apps	1/20/2018	1/19/2021	RO162032	\$46,282
Ames, Dan		NASA	An AmeriGEOSS Cloud-based Platform for Rapid Deployment of GEOGLOWS Water and Food Security Decision Support Apps	1/20/2018	1/19/2021	RO162032	\$46,282
Ames, Dan	w/ Nelson, Jim	NASA	Improving Resiliency and Reducing Risk due to Extreme Hydrologic Events through Application of Earth Observations and In-Situ Monitoring Information	11/1/2019	10/31/2022	RO162040	\$79,359
Ames, Dan	w/ Nelson, Jim	World Meteorological Organization	Design and development of a water data sharing portal for the WIGOS/WHOS-Plata	2/28/2020	12/31/2020	RO570029	\$10,000
Ames, Dan	w/ Nelson, Jim	World Meteorological Organization	Riverine Flood Forecasting in Dominican Republic	3/27/2020	2/20/2021	RO570031	\$17,500
Fonseca, Fernando	w/ Judd, Johnn	Timber Framers Guild	Serviceability performance criteria for stand-alone timber frame structures with knee braces	11/1/2020	10/31/2022	RO502345	\$15,000
Fonseca, Fernando		MTC Solutions	Strength and behavior of composite timber concrete panels and bearing beam hangers	10/20/2019	10/1/2021	RO602632	\$20,000
Franke, Kevin	w/ McLain, Tim	NSF	I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - NSF Center Support	3/15/2017	2/28/2022	RO112339	\$7,000
Franke, Kevin	w/ McLain, Tim	NSF	I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - REU	3/15/2017	2/28/2022	RO112343	\$7,863
Franke, Kevin	w/ McLain, Tim	NSF	I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site	3/15/2017	2/28/2022	RO112367	\$13,000
Franke, Kevin		NSF	Collaborative Research: NNA Track 2 - Coastal Evolution and Arctic Communities in the Context of Climate Change: Interaction between Coastal and Riverine Processes and the Built Environment	9/15/2020	8/31/2022	RO112451	\$44,815
Franke, Kevin	w/ McLain, Tim	AeroVironment	C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	RO602546	\$2,200
Franke, Kevin	w/ McLain, Tim	AeroVironment	C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	RO602546	\$2,200
Franke, Kevin	w/ McLain, Tim	AeroVironment	C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	RO602546	\$24,200
Franke, Kevin	w/ McLain, Tim	BP	C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	RO602546	\$17,600
Franke, Kevin	w/ McLain, Tim	FCLTech	C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	RO602546	\$11,000

Franke, Kevin	w/ McLain, Tim	Honeywell		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	R0602546	\$9,600
Franke, Kevin	w/ McLain, Tim	Insitu		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	R0602546	\$26,400
Franke, Kevin	w/ McLain, Tim	L3Harris		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	R0602546	\$8,800
Franke, Kevin	w/ McLain, Tim	Raytheon		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	R0602546	\$8,800
Guthrie, W. Spencer		Utah Valley University	UDOT	UDOT20.103 Long-Term Performance of Low Permeable Concrete for Structures	9/15/2020	9/30/2021	R0402361	\$7,500
Guthrie, W. Spencer		Utah Valley University	ACI Foundation	Validation of Service Life Prediction for a 28-Year-Old Parking Garage Constructed of Low Permeability Concrete	5/26/2020	8/30/2021	R0492049	\$11,500
Hotchkiss, Rollin		SWCA-Denver	BLM	Feasibility-Level Study on Using Abandoned Coal Mine Water for Beneficial Use	7/29/2020	7/31/2021	R0302950	\$50,235
Jones, Norm		NASA		Geospatial Information Tools that use Machine Learning to Enable Sustainable Groundwater Management in West Africa.	10/28/2019	10/27/2022	R0162039	\$109,517
Judd, Johnn		American Institute of Steel Construction		AISC Milek Fellowship Award: Inelastic Design for Steel Structures Subjected to Wind Loads	7/20/2020	6/30/2023	R0502338	\$50,000
Judd, Johnn		American Institute of Steel Construction		AISC Milek Fellowship Award: Inelastic Design for Steel Structures Subjected to Wind Loads	7/20/2020	6/30/2023	R0502338	\$100,000
Judd, Johnn		Metal Building Manufacturers Association		Load-deformation behavior of tension-only roof truss diaphragms in metal buildings	1/1/2021	12/31/2021	R0502344	\$63,000
Judd, Johnn		Timber Framers Guild		Serviceability performance criteria for stand-alone timber frame structures with knee braces	11/1/2020	10/31/2022	R0502345	\$15,000
Macfarlane, Gregory		Georgia Institute of Technology		Strategic Implications of Changing Public Transportation Travel Trends	8/1/2020	1/31/2022	R0302952	\$71,398
Macfarlane, Gregory		UDOT		Modeling the Demand and Operating Characteristics for Wheelchair-accessible, On-demand Mobility Services	1/30/2020	9/30/2021	R0402350	\$62,275
Macfarlane, Gregory		Bio-West	UDOT	Evaluating the Systemic Redundancy of Critical Highway Facilities	11/27/2019	12/31/2020	R0402351	\$60,508
Macfarlane, Gregory	w/ Schultz, Grant	UDOT		Evaluating Signal Performance Measures: A Longitudinal Analysis	11/2/2020	4/30/2022	R0402362	\$12,500
Macfarlane, Gregory	w/ Schultz, Grant	UDOT		Evaluating Signal Performance Measures: A Longitudinal Analysis	11/2/2020	4/30/2022	R0402363	\$22,500
Macfarlane, Gregory		UDOT		Identifying Microtransit Service Areas through Microsimulation	11/9/2020	6/30/2021	R0402364	\$19,987
Nelson, Jim	w/ Ames, Dan	NASA		An AmeriGEOSS Cloud-based Platform for Rapid Deployment of GEOGLOWS Water and Food Security Decision Support Apps	1/20/2018	1/19/2021	R0162032	\$46,282

Nelson, Jim	w/ Ames, Dan	NASA		An AmeriGEOSS Cloud-based Platform for Rapid Deployment of GEOGLOWS Water and Food Security Decision Support Apps	1/20/2018	1/19/2021	Ro162032	\$46,282
Nelson, Jim		NASA		Improving Resiliency and Reducing Risk due to Extreme Hydrologic Events through Application of Earth Observations and In-Situ Monitoring Information	11/1/2019	10/31/2022	Ro162040	\$81,764
Nelson, Jim		Johns Hopkins University	NASA	Environmental Determinants of Enteric Infectious Disease: a GEO Platform for analysis and risk assessment.	12/21/2017	4/30/2021	Ro302795	\$25,000
Nelson, Jim		World Meteorological Organization		Design and development of a water data sharing portal for the WIGOS/WHOS-Plata	2/28/2020	12/31/2020	Ro570029	\$10,000
Nelson, Jim		World Meteorological Organization		Riverine Flood Forecasting in Dominican Republic	3/27/2020	2/20/2021	Ro570031	\$17,500
Rollins, Kyle		UDOT		Evaluation of Lateral Pile Resistance Near MSE Walls at a Dedicated Wall site - Phase 2	8/31/2020	6/15/2021	Ro402317	\$20,000
Rollins, Kyle		UDOT		Behavior of Reinforced and Unreinforced Lightweight Cellular Concrete for Retaining Walls	5/21/2020	9/30/2023	Ro402354	\$290,003
Schultz, Grant		UDOT		Evaluating Ramp Meter Delay in Utah	1/1/2020	6/30/2021	Ro402349	\$64,996
Schultz, Grant		UDOT		Evaluating Signal Performance Measures: A Longitudinal Analysis	11/2/2020	4/30/2022	Ro402362	\$12,500
Schultz, Grant		UDOT		Evaluating Signal Performance Measures: A Longitudinal Analysis	11/2/2020	4/30/2022	Ro402363	\$22,500
Scott, Michael		Sandia National Laboratories	DOE	Using smooth shape functions to improve the efficiency of explicit time integration	2/17/2020	9/30/2020	Ro302861	\$30,000
Scott, Michael		IERUS Technologies	DOD	N20B-To28 Advanced Electromagnetic Modeling and Analysis Tools for Complex Aircraft Structures and Systems	9/16/2020	3/24/2021	Ro302957	\$49,000
Williams, Gustavious	w/ Jones, Norm	NASA		Geospatial Information Tools that use Machine Learning to Enable Sustainable Groundwater Management in West Africa.	10/28/2019	10/27/2022	Ro162039	\$109,517
Williams, Gustavious		University of Utah	NASA	Automated Tools to Statistically Analyze Historical Water Quality Trends	5/18/2020	5/17/2021	Ro302922	\$15,000
Williams, Gustavious	w/ Hotchkiss, Rollin	SWCA-Denver	BLM	Feasibility-Level Study on Using Abandoned Coal Mine Water for Beneficial Use	7/29/2020	7/31/2021	Ro302950	\$50,235
Electrical & Computer Engineering								
Beard, Randy	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - NSF Center Support	3/15/2017	2/28/2022	Ro112339	\$7,000
Beard, Randy	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - Interagency Memberships	3/15/2017	2/28/2022	Ro112353	\$44,000

Beard, Randy	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site	3/15/2017	2/28/2022	Ro112367	\$13,000
Beard, Randy	w/ McLain, Tim	Utopia Compression	Air Force	RAPID: Airborne Visual Analytics (AVIAN) - C-UAS Membership Dues	6/17/2019	6/16/2020	Ro302879	\$5,500
Beard, Randy	w/ McLain, Tim	Utopia Compression	Air Force	RAPID: Airborne Visual Analytics (AVIAN) - C-UAS Membership Dues	6/17/2019	6/16/2020	Ro302879	\$5,500
Beard, Randy	w/ McLain, Tim	Scientific Systems Company	Air Force	C-UAS Membership Dues	5/1/2020	2/28/2022	Ro302943	\$22,000
Beard, Randy	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200
Beard, Randy	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200
Beard, Randy	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$24,200
Beard, Randy	w/ McLain, Tim	BP		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$17,600
Beard, Randy	w/ McLain, Tim	FCLTech		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$11,000
Beard, Randy	w/ McLain, Tim	Honeywell		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$9,600
Beard, Randy	w/ McLain, Tim	Insitu		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$26,400
Beard, Randy	w/ McLain, Tim	L3Harris		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
Beard, Randy	w/ McLain, Tim	Raytheon		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
Camacho, Ryan		University of Arizona	NSF	Photonic Circuit Simulation for NSF Engineering Research Center for Quantum Networks (CQN)	9/1/2020	8/31/2021	Ro302961	\$50,000
Chiang, Shiu-hua Wood		University of Utah	NASA	A CMOS Digital Amplifier for Space Dust Analyzer	5/18/2020	5/17/2021	Ro302921	\$5,100
Chiang, Shiu-hua Wood	w/ Iverson, Brian	Perkin Elmer		Compact Next-generation GC and MS Instrumentation	1/1/2020	12/31/2020	Ro602633	\$22,488
Goeders, Jeff	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC)	9/1/2017	8/31/2022	Ro112363	\$37,500
Goeders, Jeff	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC) - MIPR: Government Memberships	9/1/2017	8/31/2022	Ro112389	\$22,832
Goeders, Jeff	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC) - MIPR: Government Memberships	9/1/2017	8/31/2022	Ro112389	\$30,138
Goeders, Jeff	w/ Wirthlin, Mike	Pennsylvania State University	Defense Threat Reduction Agency	Interaction of Ionizing Radiation with Matter, University Research Alliance (IIRM-URA)	7/1/2020	12/31/2021	Ro302947	\$58,500
Goeders, Jeff	w/ Wirthlin, Mike	BAE Systems		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Goeders, Jeff	w/ Wirthlin, Mike	Ball Aerospace		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Goeders, Jeff	w/ Wirthlin, Mike	L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Goeders, Jeff	w/ Wirthlin, Mike	L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Goeders, Jeff	w/ Wirthlin, Mike	Raytheon		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000

Harrison, Willie		NSF		CIF: Small: Best wiretap codes for real-world physical-layer security	10/1/2019	9/30/2022	Ro112417	\$24,000
Harrison, Willie		NSF		CIF: Small: Best wiretap codes for real-world physical-layer security	10/1/2019	9/30/2022	Ro112433	\$24,000
Hawkins, Aaron		University of California, Santa Cruz	NIH	Nanopore-based multi-target analysis of Zika virus infection	5/1/2020	4/30/2021	Ro302873	\$101,175
Hawkins, Aaron	w/ Chiang, Shih-hua Wood	University of Utah	NASA	A CMOS Digital Amplifier for Space Dust Analyzer	5/18/2020	5/17/2021	Ro302921	\$4,950
Hawkins, Aaron		University of California, Santa Cruz	NIH	Nanopore-based multi-target analysis of Zika virus infection	7/13/2020	4/30/2021	Ro302948	\$80,000
Hawkins, Aaron	w/ Iverson, Brian	Perkin Elmer		Compact Next-generation GC and MS Instrumentation	1/1/2020	12/31/2020	Ro602633	\$22,488
Hutchings, Brad	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC)	9/1/2017	8/31/2022	Ro112363	\$37,500
Hutchings, Brad	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC) - MIPR: Government Memberships	9/1/2017	8/31/2022	Ro112389	\$22,832
Hutchings, Brad	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC) - MIPR: Government Memberships	9/1/2017	8/31/2022	Ro112389	\$30,138
Hutchings, Brad	w/ Wirthlin, Mike	BAE Systems		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Hutchings, Brad	w/ Wirthlin, Mike	Ball Aerospace		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Hutchings, Brad	w/ Wirthlin, Mike	L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Hutchings, Brad	w/ Wirthlin, Mike	L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Hutchings, Brad	w/ Wirthlin, Mike	Raytheon		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Jeffs, Brian	w/ Warnick, Karl	ONR	DOD	Real Time Adaptive Beamforming and Interference Mitigation	1/1/2018	12/31/2021	Ro202503	\$133,196
Long, David		NASA		Designing a SmallSAT Constellation of Microwave Imagers to Viably Measure Near-Hourly Ocean Wind Vectors: FINESST Fellowship for M. Patrick Walton	9/1/2019	8/31/2021	Ro162037	\$45,000
Long, David		NASA		Global L-band Active/Passive Observatory for Water Cycle Studies (GLOWS)	2/1/2020	1/31/2023	Ro163041	\$100,863
Long, David		University of Utah	NASA	Utah Space Grant Consortium Proposal for National Space Grant College and Fellowship Program Opportunities in NASA STEM FY 2020-2024	5/18/2020	5/17/2021	Ro302938	\$78,000
Long, David		University of Colorado, Boulder	NASA	BYU support for NSIDC proposal for firm aquifers from SMAP	9/9/2020	9/8/2021	Ro302956	\$68,175

Long, David		University of Colorado, Boulder	Army	Using Enhanced-Resolution Passive Microwave Data to Improve Spatially Distributed Near Real-Time Snow Water Equivalent - Period 2	7/14/2020	8/31/2021	Ro302958	\$75,485
Lundrigan, Philip	w/ Warnick, Karl	NSF		Collaborative: SWIFT: Large: Spectrum Sharing Via Interference-resilient Passive Receivers and Passive-aware Active Services	9/1/2020	8/31/2023	Ro112450	\$129,000
Mazzeo, Brian	w/ Wheeler, Dean	University of Utah	NASA	Enabling Electrified Flight through Utah-Sourced Material for Improving Lithium-Ion Batteries	5/18/2020	5/17/2021	Ro302933	\$12,000
Mazzeo, Brian	w/ Guthrie, W. Spencer	Utah Valley University	UDOT	UDOT20.103 Long-Term Performance of Low Permeable Concrete for Structures	9/15/2020	9/30/2021	Ro402361	\$7,500
Mazzeo, Brian	w/ Guthrie, W. Spencer	Utah Valley University	ACI Foundation	Validation of Service Life Prediction for a 28-Year-Old Parking Garage Constructed of Low Permeability Concrete	5/26/2020	8/30/2021	Ro492049	\$11,500
Nelson, Brent	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC)	9/1/2017	8/31/2022	Ro112363	\$37,500
Nelson, Brent	w/ Wirthlin, Mike	NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC) - MIPR: Government Memberships	9/1/2017	8/31/2022	Ro112389	\$22,832
Nelson, Brent	w/ Wirthlin, Mike	Sandia National Laboratories		I/UCRC SHREC Membership Dues	9/1/2017	8/31/2022	Ro302751	\$10,000
Nelson, Brent		GrammaTech	ONR	Grammatech STTR Phase 2 - Bitstream Security	3/19/2020	9/22/2020	Ro302918	\$39,714
Nelson, Brent		GrammaTech	ONR	Grammatech STTR Phase 2 - Bitstream Security	7/30/2020	7/30/2021	Ro302955	\$163,475
Nelson, Brent	w/ Wirthlin, Mike	BAE Systems		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Nelson, Brent	w/ Wirthlin, Mike	Ball Aerospace		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Nelson, Brent	w/ Wirthlin, Mike	L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Nelson, Brent	w/ Wirthlin, Mike	L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Nelson, Brent	w/ Wirthlin, Mike	Raytheon		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	Ro602555	\$10,000
Nordin, Greg	w/ Woolley, Adam	NIH		3D-Printed Integrated Microfluidic Devices for Preterm Birth Biomarker Analysis	7/1/2020	6/30/2021	Ro102090	\$85,932
Nordin, Greg		NIH		High Density 3D Printed Microfluidics for Cell-Based Biomedical Applications	9/15/2020	8/31/2023	Ro102108	\$143,560
Peterson, Cammy	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - NSF Center Support	3/15/2017	2/28/2022	Ro112339	\$7,000
Peterson, Cammy	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - REU	3/15/2017	2/28/2022	Ro112343	\$8,000

Peterson, Cammy	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - REU	3/15/2017	2/28/2022	Ro112343	\$15,725
Peterson, Cammy	w/ McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site	3/15/2017	2/28/2022	Ro112367	\$13,000
Peterson, Cammy	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200
Peterson, Cammy	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200
Peterson, Cammy	w/ McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$24,200
Peterson, Cammy	w/ McLain, Tim	BP		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$17,600
Peterson, Cammy	w/ McLain, Tim	FCLTech		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$11,000
Peterson, Cammy	w/ McLain, Tim	Honeywell		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$9,600
Peterson, Cammy	w/ McLain, Tim	Insitu		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$26,400
Peterson, Cammy	w/ McLain, Tim	L3Harris		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
Peterson, Cammy	w/ McLain, Tim	Raytheon		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
Peterson, Cammy		4-D Avionics Systems, LLC		Autonomous 4D Flightpath Based Airborne Separation Assurance System	9/17/2020	9/16/2021	Ro602645	\$42,126
Schultz, Stephen		Neff Aeronautics	Army	Transparent Cryogenic Probe Card based of Silicon Carbide MEMS	9/11/2019	3/11/2020	Ro302899	\$32,295
Schultz, Stephen		Neff Aeronautics	DOE	Fast, Low Kerf-loss Wafering of Silicon Ingots for Low-cost Solar Power	6/29/2020	3/28/2021	Ro302927	\$63,093
Smalley, Daniel		NSF		Breakthrough Display Technology as a New Medium for Spatial Thinking in STEM	4/1/2019	3/31/2024	Ro112399	\$115,614
Smalley, Daniel		University of Utah	NASA	Utah Space Grant Consortium Proposal for National Space Grant College and Fellowship Program Opportunities in NASA STEM FY 2020-2024	5/18/2020	5/17/2021	Ro302936	\$5,000
Smalley, Daniel		Light Field Lab		FENG Characterization & Transparent "Sell" Membrane Ultrasonic Transducers	7/1/2018	5/31/2020	Ro602573	\$198,657
Warnick, Karl		NSF		Collaborative: SWIFT: Large: Spectrum Sharing Via Interference-resilient Passive Receivers and Passive-aware Active Services	9/1/2020	8/31/2023	Ro112450	\$129,000
Warnick, Karl		ONR	DOD	Real Time Adaptive Beamforming and Interference Mitigation	1/1/2018	12/31/2021	Ro202503	\$133,196
Wirthlin, Mike		NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC)	9/1/2017	8/31/2022	Ro112363	\$37,500
Wirthlin, Mike		NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC) - MIPR: Government Memberships	9/1/2017	8/31/2022	Ro112389	\$22,832

Wirthlin, Mike		NSF		Phase-I- I/UCRC Brigham Young University: Center for Space, High-Performance, and Resilient Computing (SHREC) - MIPR: Government Memberships	9/1/2017	8/31/2022	R0112389	\$31,051
Wirthlin, Mike		Sandia National Laboratories		I/UCRC SHREC Membership Dues	9/1/2017	8/31/2022	R0302751	\$10,000
Wirthlin, Mike		Purdue University	Army	Cornerstone Workforce Development	12/20/2019	10/19/2020	R0302928	\$25,000
Wirthlin, Mike		Purdue University	Army	Cornerstone Workforce Development	12/20/2019	10/20/2024	R0302928	\$200,000
Wirthlin, Mike		Pennsylvania State University	Defense Threat Reduction Agency	Interaction of Ionizing Radiation with Matter, University Research Alliance (IIRM-URA)	7/1/2020	12/31/2021	R0302947	\$58,500
Wirthlin, Mike		BAE Systems		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	R0602555	\$10,000
Wirthlin, Mike		Ball Aerospace		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	R0602555	\$10,000
Wirthlin, Mike		L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	R0602555	\$10,000
Wirthlin, Mike		L3Harris		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	R0602555	\$10,000
Wirthlin, Mike		Raytheon		SHREC I/UCRC Industry Membership Dues	9/1/2017	8/31/2022	R0602555	\$10,000
Manufacturing Engineering								
Domike, Reuben	w/ Taylor, Brad	Western Dairy		Vitamin stability of dairy-based foods fortified with ferrous sulfate	5/1/2019	8/31/2021	R0502294	\$9,625
Hovanski, Yuri	w/ Nelson, Tracy	ONR	DOD	Investigation of friction stir additive repair techniques of AA7050 for naval applications	5/8/2020	5/8/2023	R0202537	\$47,731
Hovanski, Yuri		NASA		Center for Friction Stir Processing Membership	8/2/2020	8/1/2021	R0202544	\$50,000
Hovanski, Yuri		University of Utah	NASA	Spectral Correlation Based Defect Recognition System to Enable In-Process, Real-Time Non-Destructive Examination for Friction Stir Welding	5/18/2020	5/17/2021	R0302932	\$25,000
Hovanski, Yuri		Northrop Grumman		Mobile Smart Manufacturing Demonstrator	6/5/2019	6/30/2021	R0602608	\$72,000
Hovanski, Yuri		Boeing		Center of Friction Stir Processing Membership	12/1/2019	11/30/2020	R0602623	\$35,000
Hovanski, Yuri		Bond Technologies		Center of Friction Stir Processing Membership	12/1/2019	11/30/2020	R0602623	\$25,000
Miles, Michael	w/ Munro, Troy	NSF		Improving Friction Stir Welding: Quantifying Thermal Interfaces using Thermal Waves	1/1/2020	12/31/2022	R0112425	\$174,201
Miles, Michael	w/ Munro, Troy	NSF		Improving Friction Stir Welding: Quantifying Thermal Interfaces using Thermal Waves	1/1/2020	12/31/2022	R0112431	\$8,000
Miles, Michael		NSF		GOALI/Collaborative Research: Strain Gradient Plasticity Modeling to Link Microstructural Non-Local Effects of Dislocation/Interface Interactions with Ductility and Springback	10/1/2019	9/30/2022	R0112432	\$8,000

Miles, Michael		NASA		Development of a Methodology for Characterizing the Tool/Part Interface in Friction Stir Welding for Improvement of Predictive Modeling in Aluminum Alloys	1/14/2019	1/13/2022	R0162036	\$58,622
Miles, Michael	w/ Nelson, Tracy	ONR	DOD	Investigation of friction stir additive repair techniques of AA7050 for naval applications	5/8/2020	5/8/2023	R0202537	\$47,731
Nelson, Tracy	w/ Miles, Michael	NASA		Development of a Methodology for Characterizing the Tool/Part Interface in Friction Stir Welding for Improvement of Predictive Modeling in Aluminum Alloys	1/14/2019	1/13/2022	R0162036	\$56,898
Nelson, Tracy		ONR	DOD	Investigation of friction stir additive repair techniques of AA7050 for naval applications	5/8/2020	5/8/2023	R0202537	\$49,178
<i>Mechanical Engineering</i>								
Adams, Brad	w/ Carling, Greg	NSF		Collaborative Research: Network Cluster: Dust in the Critical Zone from the Great Basin to the Rocky Mountains	9/1/2020	8/31/2021	R0112444	\$65,687
Adams, Brad		NKFG Corporation		Development of UVC-LED Intensity and Pathogen Destruction Model	1/1/2020	9/30/2021	R0570028	\$78,000
Bowden, Anton	w/ Jensen, Brian	Argyle Scientific		Carbon Nanotube Coatings on Implants for Enhanced Bacterial Resistance	9/15/2020	4/30/2021	R0602647	\$5,000
Charles, Steven		NSF		Tremor decomposition: A method for determining which muscles are most responsible for a patient's tremor.	7/15/2018	6/30/2021	R0112440	\$8,000
Cook, Douglas		Pioneer Hi-Bred International		Capacitive and Mechanical Assessment of Maize Stalk Integrity	3/5/2020	3/4/2021	R0602634	\$50,000
Crane, Nathan		NSF		Could Slower Be Better? Assessing Sintering Time, Temperature, and Area Tradeoffs in Polymer Sintering	8/7/2018	1/31/2022	R0112411	\$8,000
Crane, Nathan		NSF		Collaborative Research: Microfluidic MM-Wave RF Devices with Integrated Actuation	9/1/2019	8/31/2022	R0112434	\$8,000
Crane, Nathan		NSF		Collaborative Research: Modulating Powder Bed Cohesion to Reduce Defects in Binder Jetting	8/1/2020	7/31/2023	R0112447	\$310,776
Fullwood, David	w/ Miles, Michael	NSF		GOALI/Collaborative Research: Strain Gradient Plasticity Modeling to Link Microstructural Non-Local Effects of Dislocation/Interface Interactions with Ductility and Springback	10/1/2019	9/30/2022	R0112432	\$8,000

Fullwood, David		DOE		Grain Boundary - Dislocation Interactions in Polycrystals: Characterization and Simulation for the Effective Design of High-Ductility Structural Alloys	8/15/2020	8/14/2021	Ro202437	\$64,970
Fullwood, David		University of Utah	NASA	2021 IREC Participation	5/18/2020	5/17/2021	Ro302934	\$10,000
Homer, Eric		NSF		Discovering the Building Blocks and Structure Property Relationships of Grain Boundaries using Machine Learning	8/15/2019	7/31/2022	Ro112402	\$70,000
Homer, Eric	w/ Fullwood, David	DOE		Grain Boundary - Dislocation Interactions in Polycrystals: Characterization and Simulation for the Effective Design of High-Ductility Structural Alloys	8/15/2020	8/14/2021	Ro202437	\$64,970
Homer, Eric		DOE		Computational and Experimental Investigation of Cryogenic Grain Boundary Motion for Enhanced Mechanical Behavior and Properties	8/1/2016	7/31/2021	Ro202473	\$176,687
Homer, Eric		University of Utah	NASA	High Temperature Shape Memory Ceramic Actuators for Space Applications	5/18/2020	5/17/2021	Ro302919	\$25,000
Howell, Larry		NSF		Graduate Research Fellowship Program	7/1/2018	6/30/2023	Parent	\$46,000
Howell, Larry	w/ Magleby, Spencer	Florida International University	Air Force	Transforming Antennas Center (TAC)	8/15/2019	8/14/2024	Ro302882	\$75,000
Howell, Larry	w/ Magleby, Spencer	Science Systems and Applications	NASA	Conceptual Design and Prototyping of Origami-Based Deployable Systems for LIDAR Telescopes	7/20/2020	3/31/2021	Ro302931	\$23,885
Howell, Larry		Cincinnati Children's Hospital Medical Center		Next-Generation Pectus Excavatum Correction Device	3/1/2019	8/15/2020	Ro602625	\$112,500
Iverson, Brian		University of Utah	NASA	Dynamic Radiator for CubeSat Thermal Management	5/18/2020	5/17/2021	Ro302920	\$22,000
Iverson, Brian		Perkin Elmer		Compact Next-generation GC and MS Instrumentation	1/1/2020	12/31/2020	Ro602633	\$22,488
Jensen, Brian		Argyle Scientific		Carbon Nanotube Coatings on Implants for Enhanced Bacterial Resistance	9/15/2020	4/30/2021	Ro602647	\$5,000
Johnson, Oliver		NSF		CAREER: CDS&E: Quantifying & Designing Grain Boundary Network Structure via Spectral Graph Theory	6/1/2017	5/31/2022	Ro112336	\$112,031
Killpack, Marc		NSF		Collaborative Research: NRI: FND: Foundations for Physical Co-Manipulation with Mixed Teams of Humans and Soft Robots	1/1/2021	12/31/2023	Ro112449	\$358,515
Magleby, Spencer		Florida International University	Air Force	Transforming Antennas Center (TAC)	8/15/2019	8/14/2024	Ro302882	\$75,000
Magleby, Spencer		Science Systems and Applications	NASA	Conceptual Design and Prototyping of Origami-Based Deployable Systems for LIDAR Telescopes	7/20/2020	3/31/2021	Ro302931	\$23,885

Mattson, Chris	US Air Force Academy	DOD	Promoting Desirability and Transferability in Engineering Design through Customized Development Processes	5/16/2019	9/28/2021	Ro202505	\$42,200
Mattson, Chris	US Air Force Academy	DOD	Promoting Desirability and Transferability in Engineering Design through Customized Development Processes	5/16/2019	9/28/2021	Ro202505	\$47,562
McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - NSF Center Support	3/15/2017	2/28/2022	Ro112339	\$7,000
McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - REU	3/15/2017	2/28/2022	Ro112343	\$8,000
McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - Interagency Memberships	3/15/2017	2/28/2022	Ro112353	\$25,140
McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - Interagency Memberships	3/15/2017	2/28/2022	Ro112353	\$44,000
McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site - AFRL Munitions Add-on	3/15/2017	2/28/2022	Ro112355	\$67,984
McLain, Tim	NSF		I/UCRC: Center for Unmanned Aircraft Systems, Phase II Site	3/15/2017	2/28/2022	Ro112367	\$13,000
McLain, Tim	University of Colorado, Boulder	NSF	Center for Unmanned Aircraft Systems, Phase II, Managing Director Support	4/1/2017	3/31/2021	Ro302750	\$39,912
McLain, Tim	Virginia Polytechnic Institute and State University	NSF	I/UCRC: Center for Unmanned Aircraft Systems Phase II, Managing Director Support	3/1/2017	2/28/2021	Ro302761	\$39,912
McLain, Tim	Utopia Compression	Air Force	RAPID: Airborne Visual Analytics (AVIAN) - C-UAS Membership Dues	6/17/2019	6/16/2020	Ro302879	\$5,500
McLain, Tim	Utopia Compression	Air Force	RAPID: Airborne Visual Analytics (AVIAN) - C-UAS Membership Dues	6/17/2019	6/16/2020	Ro302879	\$5,500
McLain, Tim	Scientific Systems Company	Air Force	C-UAS Membership Dues	5/1/2020	2/28/2022	Ro302943	\$22,000
McLain, Tim	Lawrence Livermore National Labs	DOE	UAS Precision Landing by Fusing RTK GPS and Optical Sensor Data	10/5/2020	9/30/2021	Ro302951	\$76,940
McLain, Tim	Texas A&M University	NSF	Phase II IUCRC Texas A&M University: Center for Unmanned Air Systems C-UAS	3/15/2020	2/28/2022	Ro302953	\$38,716
McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200
McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$2,200
McLain, Tim	AeroVironment		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$24,200
McLain, Tim	BP		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$17,600
McLain, Tim	FCLTech		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$11,000
McLain, Tim	Honeywell		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$9,600

McLain, Tim		Insitu		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$26,400
McLain, Tim		L3Harris		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
McLain, Tim		Raytheon		C-UAS I/UCRC Phase II Industry Sponsors	3/15/2017	2/28/2022	Ro602546	\$8,800
Munro, Troy		NSF		Improving Friction Stir Welding: Quantifying Thermal Interfaces using Thermal Waves	1/1/2020	12/31/2022	Ro112425	\$174,201
Munro, Troy		NSF		Improving Friction Stir Welding: Quantifying Thermal Interfaces using Thermal Waves	1/1/2020	12/31/2022	Ro112431	\$8,000
Munro, Troy		Idaho National Laboratory	DOE	Development of a Diamond Substrate-based Hot-Wire Sensor for Irradiated Molten Salt Thermal Conductivity Measurements	7/1/2020	6/30/2021	Ro302926	\$59,032
Ning, Andrew		NSF		Investigating Wind Farm Wake Interactions by Leveraging a Viscous Vortex Particle Method	5/1/2020	4/30/2023	Ro112429	\$300,000
Ning, Andrew		National Renewable Energy Laboratory	DOE	Multidisciplinary Optimization and Uncertainty Qualification of Wind Energy Systems	12/15/2020	9/30/2021	Ro302778	\$25,000
Ning, Andrew		National Renewable Energy Laboratory	DOE	Multidisciplinary Optimization and Uncertainty Qualification of Wind Energy Systems	12/15/2017	12/14/2020	Ro302778	\$120,000
Ning, Andrew		Rutgers University	DOE	Computationally Efficient Atmospheric-Data-Driven Control Co-Design Optimization Framework with Mixed-Fidelity Fluid and Structure Analysis	2/1/2020	1/31/2021	Ro302909	\$120,580
Salmon, John	w/ Killpack, Marc	NSF		Collaborative Research: NRI: FND: Foundations for Physical Co-Manipulation with Mixed Teams of Humans and Soft Robots	1/1/2021	12/31/2023	Ro112449	\$358,515
Salmon, John		Neff Aeronautics		Integrated and Interactive Airborne Platform Vehicle Analysis Tool	8/3/2020	6/30/2021	Ro302939	\$147,500
Salmon, John		Neff Aeronautics		Airship Analysis Tool-Capstone	8/24/2020	6/30/2021	Ro302940	\$22,000
Salmon, John	w/ Peterson, Cammy	4-D Avionics Systems, LLC		Autonomous 4D Flightpath Based Airborne Separation Assurance System	9/17/2020	9/16/2021	Ro602645	\$42,126
Sorensen, Carl	w/ Miles, Michael	NASA		Development of a Methodology for Characterizing the Tool/Part Interface in Friction Stir Welding for Improvement of Predictive Modeling in Aluminum Alloys	1/14/2019	1/13/2022	Ro162036	\$56,898
Sorensen, Carl	w/ Mattson, Chris	US Air Force Academy	DOD	Promoting Desirability and Transferability in Engineering Design through Customized Development Processes	5/16/2019	9/28/2021	Ro202505	\$42,200
Sorensen, Carl	w/ Mattson, Chris	US Air Force Academy	DOD	Promoting Desirability and Transferability in Engineering Design through Customized Development Processes	5/16/2019	9/28/2021	Ro202505	\$47,562
Sorensen, Carl		Idaho National Laboratory		Design/Use of Soft Robots to Handle Radioactive Samples	12/3/2019	4/30/2020	Ro302892	\$2,110

Sorensen, Carl		Idaho National Laboratory	Design/Use of Soft Robots to Handle Radioactive Samples	12/3/2019	4/30/2020	R0302892	\$22,000
Sorensen, Carl		Los Alamos National Laboratory	Micro-PDV Auto Alignment System and Secure Container	1/6/2020	12/31/2020	R0302893	\$44,000
Sorensen, Carl		Innovative Scientific Solutions	Jet Engine Turbine Coupling	9/25/2019	5/31/2020	R0302896	\$22,000
Sorensen, Carl		Idaho National Laboratory	Malcolm Analytics Pipeline	8/17/2020	4/29/2021	R0302941	\$21,000
Sorensen, Carl		Lawrence Livermore National Labs	Capstone Project - Blur Removal for High Speed Images	9/9/2020	5/31/2021	R0302945	\$22,000
Sorensen, Carl		Lawrence Livermore National Labs	Capstone Project - UAS Landing Pad Capture System	6/30/2020	4/30/2021	R0302946	\$23,500
Thomson, Scott		NIH	Imaging and Influence of Glottic and Subglottic Anatomy in healthy and stenotic patients	9/1/2020	8/31/2021	R0102087	\$536,670
<i>School of Technology</i>							
Giboney, Justin		NSA	BYU GenCyber Teacher Camp	4/1/2020	3/31/2022	R0202538	\$33,537
Giboney, Justin		NSA	BYU GenCyber Youth Camp	4/1/2020	3/31/2022	R0202539	\$47,362
Hughes, Amanda		NSF	RAPID: Analyzing Social Media Using Human-AI Teaming during an Ongoing Disaster for Intelligent Decision Support toward Enhanced Response to the COVID-19 Pandemic	5/15/2020	4/30/2021	R0112437	\$24,498
Hughes, Amanda	w/ Nelson, Jim	NASA	Improving Resiliency and Reducing Risk due to Extreme Hydrologic Events through Application of Earth Observations and In-Situ Monitoring Information	11/1/2019	10/31/2022	R0162040	\$79,359
Wright, Geoffrey	w/ Giboney, Justin	NSA	BYU GenCyber Teacher Camp	4/1/2020	3/31/2022	R0202538	\$33,537
Wright, Geoffrey	w/ Giboney, Justin	NSA	BYU GenCyber Youth Camp	4/1/2020	3/31/2022	R0202539	\$47,362

Ira A. Fulton College of Engineering Source Breakdown

Sponsor	Total Amount
Federal	
DOE	\$3,111,726
NASA	\$1,012,921
NIH	\$766,162
NSA	\$161,798
NSF	\$3,451,037
ONR	\$411,032
US Air Force Academy	\$179,524
USDA	\$15,000
Total	\$9,109,200
Federal Subcontract	
Florida International University	\$150,000
Georgia Institute of Technology	\$71,398
GammaTech	\$203,189
Idaho National Laboratory	\$104,142
IERUS Technologies	\$49,000
Innovative Scientific Solutions	\$22,000
Johns Hopkins University	\$25,000
Lawrence Livermore National Labs	\$539,800
Los Alamos National Laboratory	\$44,000
National Renewable Energy Laboratory	\$245,000
Neff Aeronautics	\$264,888
Pennsylvania State University	\$117,000
Purdue University	\$225,000
Rutgers University	\$120,580
Sandia National Laboratories	\$50,000
Savannah River National Lab	\$194,681
Science Systems and Applications	\$47,769
Scientific Systems Company	\$44,000
SWCA-Denver	\$100,470
Texas A&M University	\$38,716
University of Arizona	\$50,000
University of California, Santa Cruz	\$181,175
University of Colorado, Boulder	\$183,572
University of Massachusetts Amherst	\$179,758
University of New Mexico	\$147,451
University of Utah	\$329,274
Utopia Compression	\$22,000
VentureWell	\$16,749
Virginia Polytechnic Institute and State University	\$39,912
Total	\$3,806,525

State	
Bio-West	\$60,508
UDOT	\$527,261
Utah Valley University	\$38,000
Total	\$625,769
Private/Other	
4-D Avionics Systems, LLC	\$84,252
AeroVironment	\$143,000
Alpha Tech Research Corp	\$95,864
American Institute of Chemical Engineers	\$1,285,000
American Institute of Steel Construction	\$150,000
Argyle Scientific	\$10,000
BAE Systems	\$40,000
Ball Aerospace	\$40,000
Boeing	\$35,000
Bond Technologies	\$25,000
BP	\$88,000
Cincinnati Children's Hospital Medical Center	\$112,500
FCLTech	\$55,000
Honeywell	\$48,000
Insitu	\$132,000
L3Harris	\$124,000
Light Field Lab	\$198,657
Metal Building Manufacturers Association	\$63,000
MTC Solutions	\$20,000
NKFG Corporation	\$78,000
Northrop Grumman	\$72,000
Perkin Elmer	\$67,463
Pioneer Hi-Bred International	\$50,000
Raytheon	\$84,000
Timber Framers Guild	\$30,000
Western Dairy	\$9,625
World Meteorological Organization	\$55,000
Xenon H S	\$375,000
Total	\$3,570,361
Grand Total	\$17,111,855

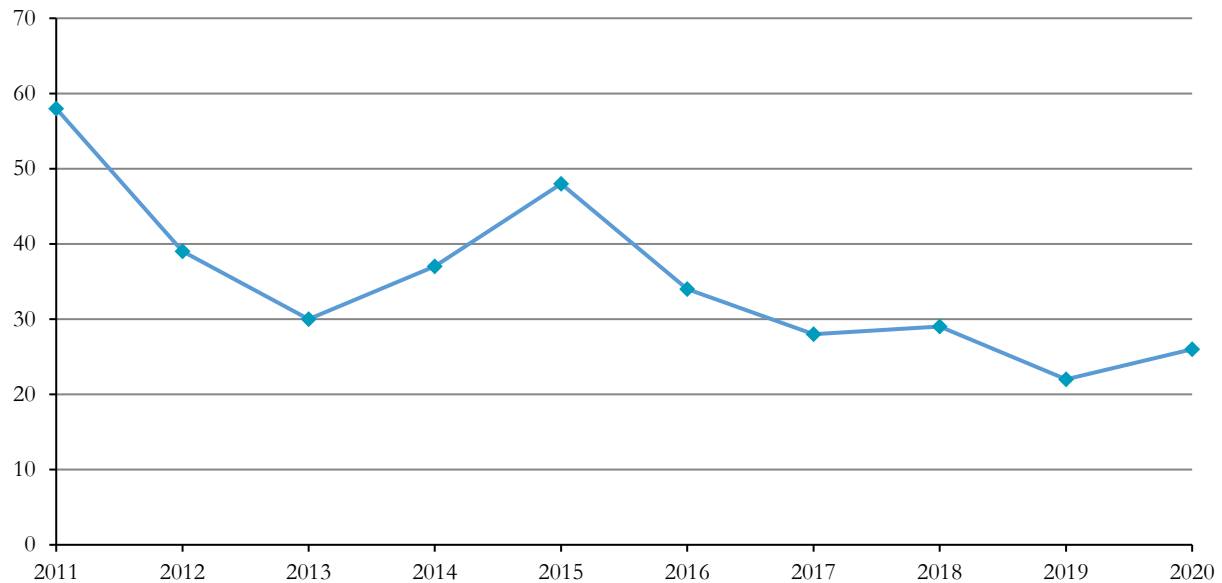
College of Family, Home, & Social Sciences



Summary by Departments

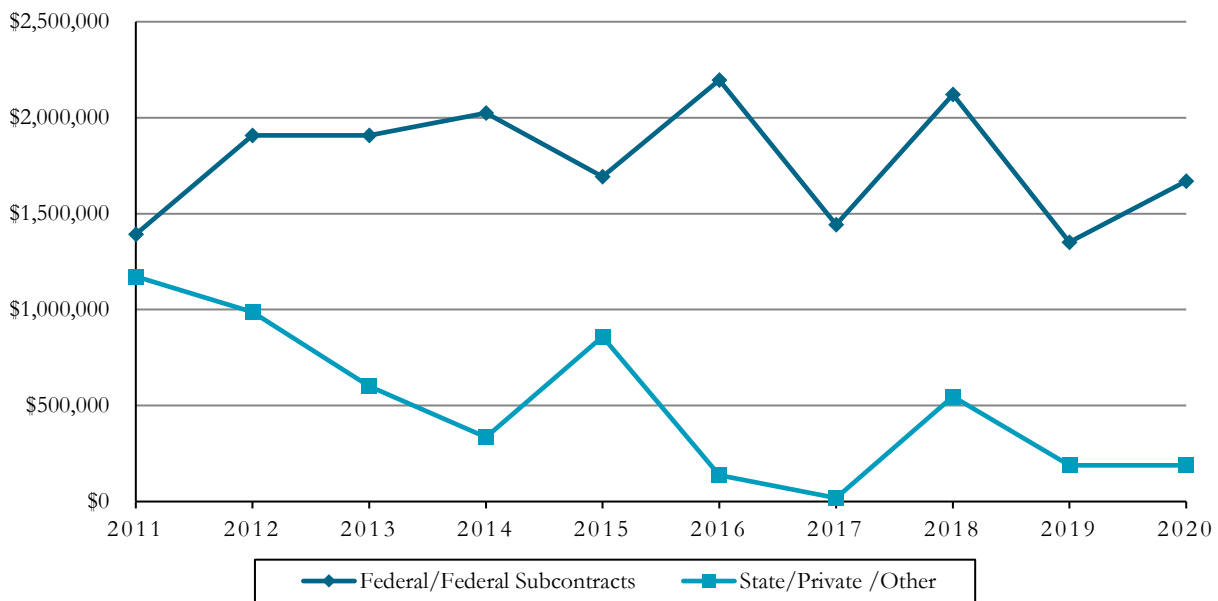
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Anthropology	2	4	1	\$46,000
Economics	2	6	7	\$202,760
Geography	0	0	0	\$0
History	1	2	5	\$519,561
Museum of Peoples & Cultures	0	0	0	\$0
Office of Public Archaeology	1	1	1	\$4,500
Political Science	3	0	2	\$394,446
Psychology	6	9	6	\$225,460
School of Family Life	1	1	1	\$435,350
Social Work	1	1	1	\$18,385
Sociology	2	2	1	\$12,198
TOTALS	19	26	25	\$1,858,660

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$1,391,892	\$1,172,630	\$2,564,522
2012	\$1,907,383	\$987,853	\$2,564,522
2013	\$1,908,007	\$600,123	\$2,377,935
2014	\$2,024,525	\$334,700	\$2,359,225
2015	\$1,692,729	\$859,560	\$2,552,289
2016	\$2,196,122	\$137,839	\$2,333,961
2017	\$1,442,760	\$18,636	\$1,461,396
2018	\$2,121,801	\$547,574	\$2,669,375
2019	\$1,351,545	\$188,421	\$1,539,966
2020	\$1,669,813	\$188,847	\$1,858,660



College of Family, Home, & Social Sciences 2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
<i>Anthropology</i>								
Hickman, Jacob		NSF		Graduate Research Fellowship Program	6/7/2020	5/31/2023	R0112439	\$46,000
<i>Economics</i>								
Pope, Arden		University of Louisville	NIH	Endothelial progenitor cells and particulate air pollution	4/1/2019	3/31/2020	R0302786	\$18,962
Price, Joe		USDA		Development of a School Meal Programs State Policy Database for Use in School Nutrition Research	9/3/2020	9/30/2021	R0202541	\$50,000
Price, Joe		University of Minnesota	NIH	Microdata for analysis of early life conditions, health, and population	4/1/2020	3/31/2021	R0302815	\$14,099
Price, Joe		University of Michigan	NIH	Longitudinal and intergenerational determinants of aging and mortality	1/1/2020	12/31/2020	R0302826	\$36,192
Price, Joe		University of Notre Dame	Russell Sage Foundation	Social Inequality and Intergenerational Mobility: Evidence from Genealogy Records and Linked Data	12/1/2018	11/30/2020	R0502299	\$46,412
Wilson, Riley		Boston College	Social Security Administration	The Impact of Claimant Representation Fee Schedules on the Disability Applicant Process	4/24/2020	9/29/2020	R0302910	\$32,095
Wilson, Riley		W.E. Upjohn Institute for Employment Research		The Impact of State Borders on Mobility and Regional Labor Market Adjustments.	5/5/2020	9/30/2021	R0502326	\$5,000
<i>History</i>								
Crandell, Jill		University of Wisconsin-Madison	DOD	Defense POW/MIA Accounting Agency Repatriation Project	9/30/2019	9/29/2020	R0302894	\$135,743
Crandell, Jill		University of Washington		Linking Families for Cancer Prevention	5/27/2020	7/31/2022	R0802047	\$8,000
Crandell, Jill		University of Washington		Linking Families for Cancer Prevention	5/27/2020	7/31/2022	R0802047	\$20,000
Shumway, Jeffrey		University of Utah	ED	Intermountain Consortium for Latin American Studies Undergraduate FLAS Program	8/15/2018	8/14/2021	R0302823	\$279,000
Shumway, Jeffrey		University of Utah	ED	Intermountain Consortium for Latin American Studies Undergraduate NRC and FLAS programs (NRC)	8/15/2018	8/14/2021	R0302839	\$76,818

Office of Public Archaeology

Talbot, Richard		Project Engineering Consultants	Provo Regional Sports Park Monitoring	2/10/2020	2/9/2021	R0602629	\$4,500
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Political Science

Hyer, Eric		University of Utah	ED	Intermountain Consortium for Asian and Pacific Studies Undergraduate FLAS Program	8/15/2019	8/14/2021	R0302824	\$289,500
Hyer, Eric		University of Utah	ED	Intermountain Consortium for Asian and Pacific Studies Undergraduate NRC and FLAS Programs (NRC)	8/15/2019	8/14/2021	R0302829	\$104,946

Psychology

Baldwin, Scott		University of Washington	NIH	Evaluating change in drinking identity as a mechanism for reducing hazardous drinking	6/17/2020	4/30/2021	R0302678	\$34,542
Cobia, Derin		Northwestern University	NIH	Determinants of neurodegenerative decline in the aphasic variant of Alzheimer's disease	5/1/2020	2/28/2021	R0302765	\$5,625
Hardy, Sam		Biola University		Gratitude and Indebtedness to God	8/1/2020	8/31/2022	R0502335	\$8,485
Holt-Lunstad, Julianne		Swinburne University of Technology	Next Door, Inc	Developing a strengths-based intervention targeting loneliness in young Americans: A learning exchange between Australia and United States	6/15/2020	11/30/2020	R0602643	\$30,050
Nelson, Jenae	w/ Hardy, Sam	Biola University		Gratitude and Indebtedness to God	8/1/2020	8/31/2022	R0502335	\$8,235
Steffensen, Scott		NIH		Novel methods of acupuncture delivery in the treatment of drug-abuse disorders	1/1/2019	12/31/2020	R0102092	\$80,358
Steffensen, Scott		American Osteopathic Association		Neural Mechanisms of Osteopathic Spinal Manipulation on Opioid-Use Disorder and Associated Hyperalgesia	10/1/2020	2/28/2021	R0502343	\$49,930
Tice, Dianne	w/ Hardy, Sam	Biola University		Gratitude and Indebtedness to God	8/1/2020	8/31/2022	R0502335	\$8,235

School of Family Life

Coyne, Sarah		NIH		Thriving in a Digital World: Examining Trajectories of Healthy and Problematic Media use in Early Childhood	5/1/2020	4/30/2023	R0102100	\$217,675
Stockdale, Laura	w/ Coyne, Sarah	NIH		Thriving in a Digital World: Examining Trajectories of Healthy and Problematic Media use in Early Childhood	5/1/2020	4/30/2023	R0102100	\$217,675

Social Work

Clark, Charlene		Utah Commission on Service & Volunteerism		AmeriCorps Program 2019-2020	8/1/2020	7/31/2021	R0302929	\$18,385
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College of Family, Home, & Social Sciences Source Breakdown

Sponsor	Total Amount
Federal	
NIH	\$515,708
NSF	\$46,000
USDA	\$50,000
Total	\$489,050
Federal Subcontract	
Boston College	\$32,095
Chief Dull Knife College	\$12,198
Northwestern University	\$5,625
University of Louisville	\$18,962
University of Michigan	\$36,192
University of Minnesota	\$14,099
University of Utah	\$750,264
University of Washington	\$34,542
University of Wisconsin-Madison	\$135,743
Utah Commission on Service & Volunteerism	\$18,385
Total	\$1,058,105
Private/Other	
American Osteopathic Association	\$49,930
Biola University	\$24,955
Project Engineering Consultants	\$4,500
Swinburne University of Technology	\$30,050
University of Notre Dame	\$46,412
University of Washington	\$28,000
W.E. Upjohn Institute for Employment Research	\$5,000
Total	\$188,847
Grand Total	\$1,858,660

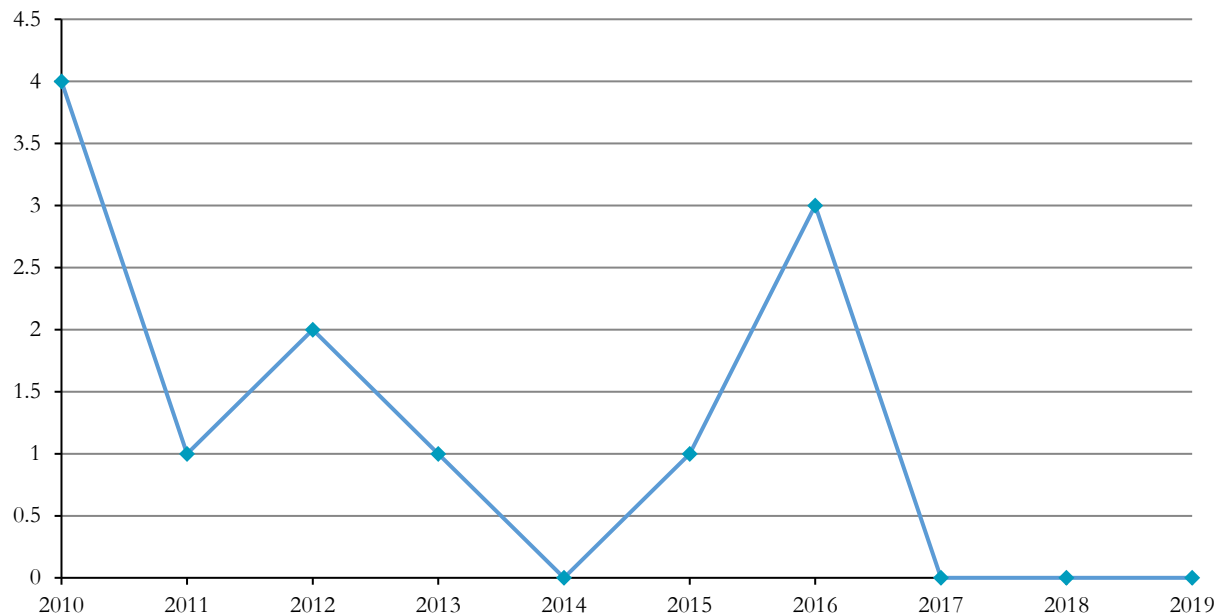
College of Fine Arts & Communications



Summary by Departments

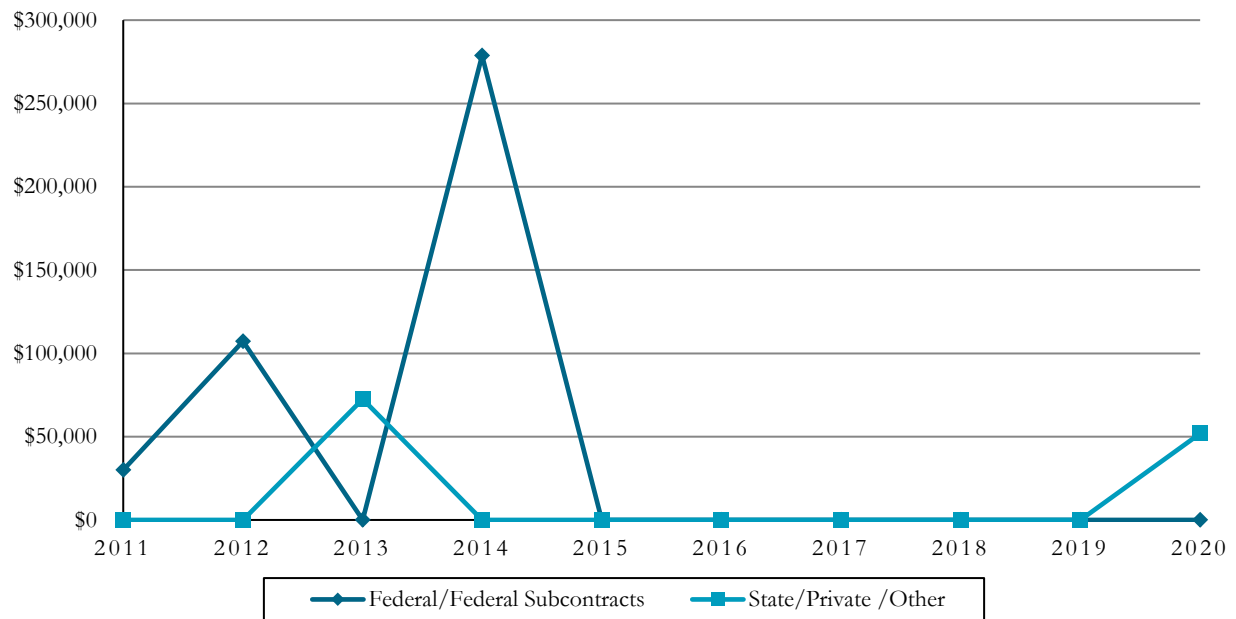
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Art	0	0	0	\$0
Communications	1	0	0	\$51,938
Dance	0	0	0	\$0
Design	0	0	0	\$0
School of Music	0	0	0	\$0
Theatre & Media Arts	0	0	0	\$0
TOTALS	1	0	0	\$51,938

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$30,000	\$0	\$0
2012	\$107,250	\$0	\$107,250
2013	\$0	\$72,500	\$72,500
2014	\$278,688	\$0	\$278,688
2015	\$0	\$0	\$0
2016	\$0	\$0	\$0
2017	\$0	\$0	\$0
2018	\$0	\$0	\$0
2019	\$0	\$0	\$0
2020	\$0	\$51,938	\$51,938



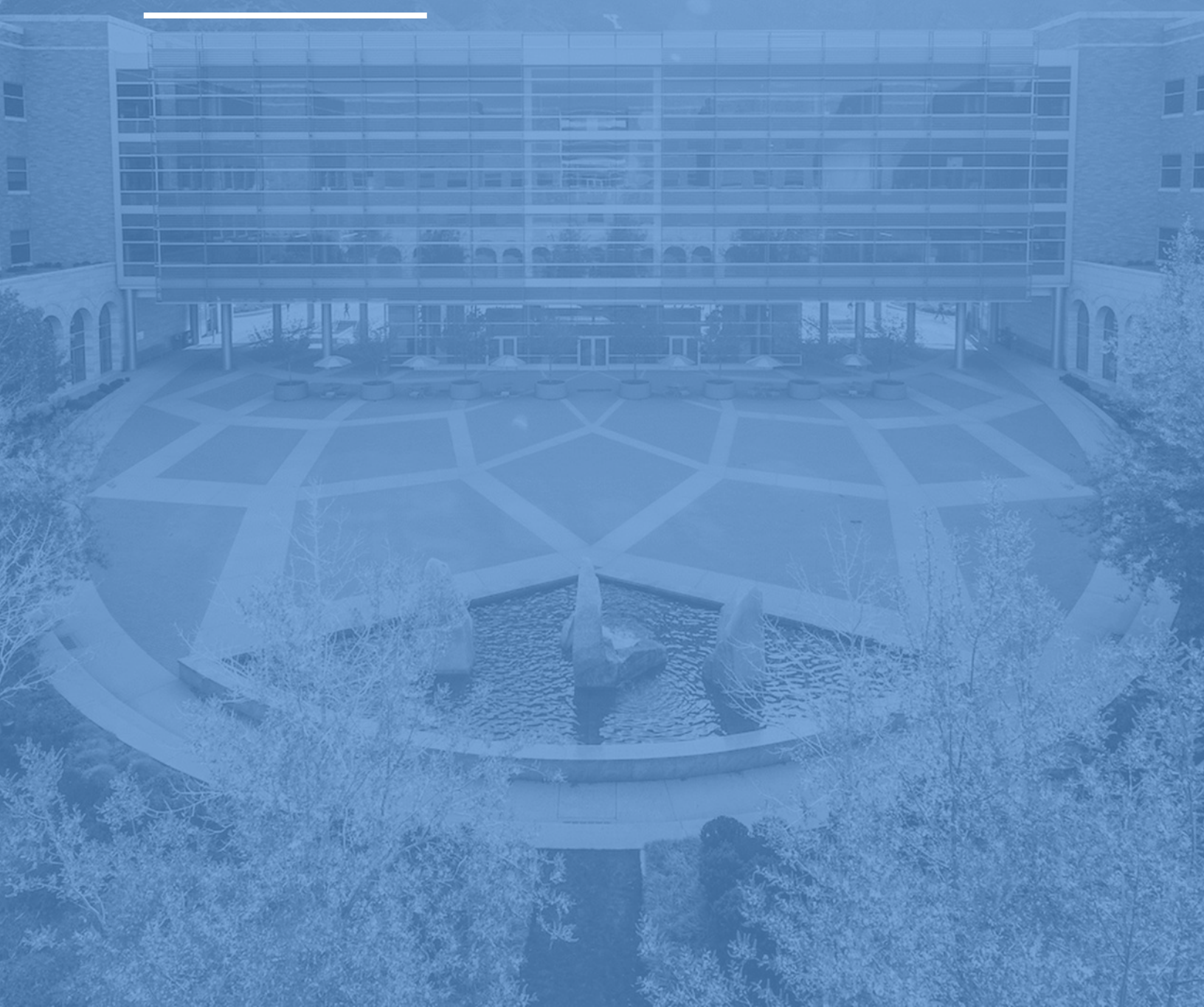
College of Fine Arts & Communications 2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
<i>Communications</i>								
Smith, Brian	w/ Page, Xinru	FCLTech		Increasing Transparency of Fine-grained User Profiling: Deploying Visual Interventions for Users of Varying Digital Literacy	11/23/2020	8/30/2022	R0602648	\$51,938

College of Fine Arts & Communications Source Breakdown

<u>Sponsor</u>	<u>Total Amount</u>
Private/Other	
FCLTech	\$51,938
<i>Total</i>	\$51,938
<i>Grand Total</i>	\$51,938

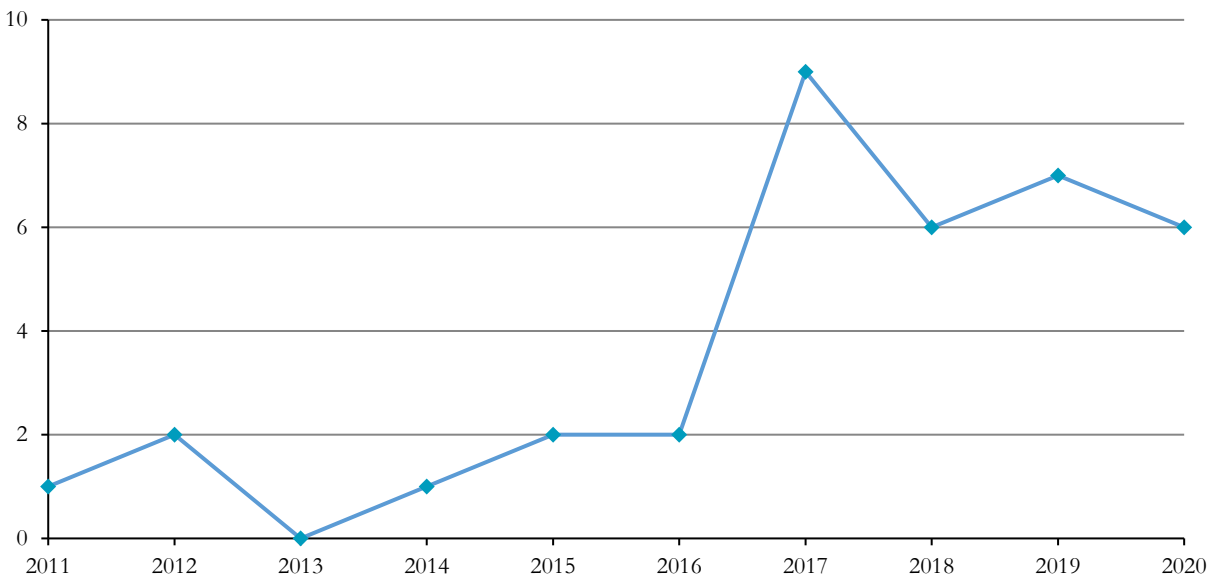
College of Humanities



Summary by Departments

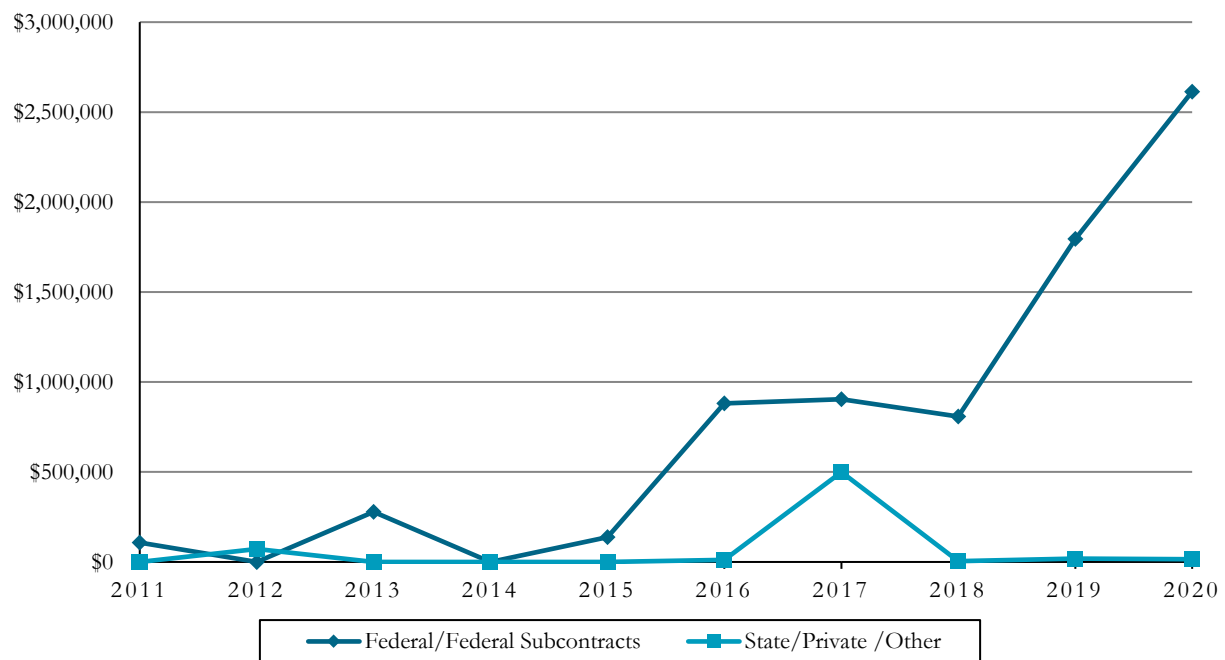
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Asian & Near Eastern Languages	3	4	7	\$2,049,491
Comparative Arts & Letters	1	1	1	\$7,952
English	1	1	1	\$571,995
French & Italian	0	0	0	\$0
German & Russian	0	0	0	\$0
Linguistics & English Language	2	0	0	\$0
Philosophy	0	0	0	\$0
Spanish & Portuguese	1	0	0	\$0
TOTALS	8	6	9	\$2,629,438

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$107,250	\$0	\$107,250
2012	\$0	\$72,500	\$72,500
2013	\$278,688	\$0	\$278,688
2014	\$0	\$0	\$0
2015	\$137,798	\$0	\$137,798
2016	\$880,583	\$12,320	\$892,903
2017	\$904,942	\$499,520	\$1,403,942
2018	\$807,501	\$4,000	\$811,501
2019	\$1,795,832	\$18,000	\$1,813,832
2020	\$2,613,986	\$15,453	\$2,629,438



College of Humanities

2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
<i>Asian & Near East Languages</i>								
Belnap, Kirk		IIE	NSEP	2020-21 Student Support	4/1/2020	3/31/2021	R0302907	\$27,965
Belnap, Kirk		IIE	NSEP	Arabic Flagship Center 2020-2021	6/1/2020	3/31/2021	R0302914	\$270,676
Belnap, Kirk		Qatar Foundation		Arabic Online Summer Camp Scholarships	1/31/2020	9/30/2020	R0502323	\$7,500
Christensen, Matthew		IIE	NSEP	BYU Overseas Chinese Flagship Program 2019-2020	6/1/2019	5/31/2020	R0302870	\$876,466
Christensen, Matthew		IIE	NSEP	Chinese Flagship Center Student Support 20-21	4/1/2020	3/31/2021	R0302908	\$32,128
Christensen, Matthew		IIE	NSEP	BYU Domestic Chinese Flagship Program 2020-2021	6/1/2020	3/31/2021	R0302913	\$270,775
Christensen, Matthew		IIE	NSEP	2020-2021 Chinese Overseas Flagship Project	6/1/2020	3/31/2021	R0302923	\$563,980
<i>Comparative Arts & Letters</i>								
Kramer, Nate		Finnish National Agency for Education		Support for the Teaching of Finnish Language and Culture	1/1/2020	12/31/2021	R0570032	\$7,953
<i>English</i>								
Dean, Deborah		University of California, Irvine	ED	The Pathway to Academic Success	10/1/2019	9/30/2023	R0302930	\$571,995

College of Humanities

Source Breakdown

<u>Sponsor</u>	<u>Total Amount</u>
Federal Subcontract	
IIE	\$2,041,991
University of California, Irvine	\$571,995
Total	\$2,613,986
Private/Other	
Finnish National Agency for Education	\$7,953
Qatar Foundation	\$7,500
Total	\$15,453
Grand Total	\$2,629,438

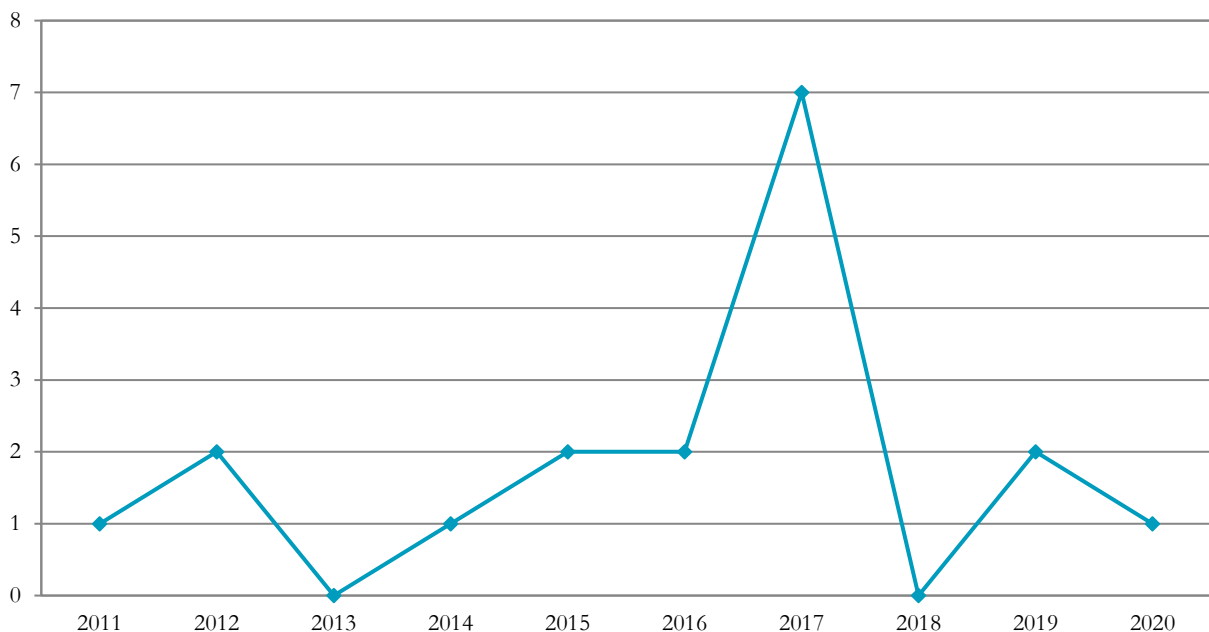
J. Reuben Clark Law School



Summary by Departments

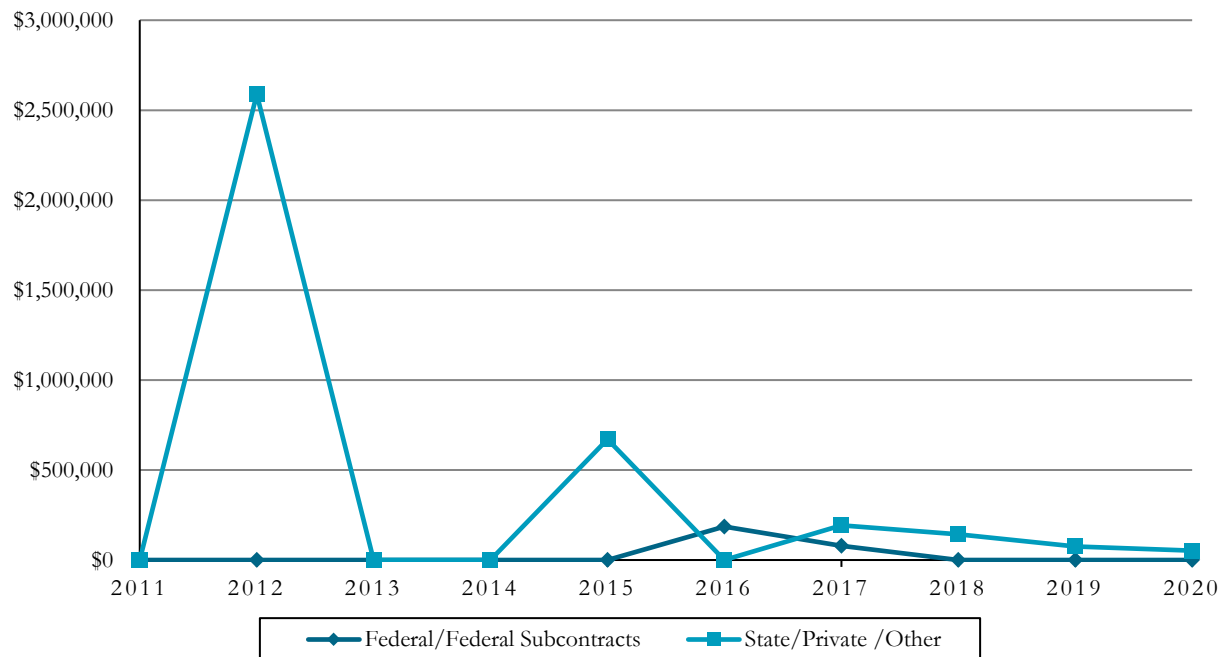
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Law School	1	1	2	\$51,568
TOTALS	1	1	2	\$51,568

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private	
2011	\$0	\$0	\$0
2012	\$0	\$2,588,209	\$2,588,209
2013	\$0	\$0	\$0
2014	\$0	\$0	\$0
2015	\$0	\$670,637	\$670,637
2016	\$185,790	\$0	\$185,790
2017	\$79,189	\$191,800	\$270,989
2018	\$0	\$143,423	\$143,423
2019	\$0	\$76,117	\$76,117
2020	\$0	\$51,568	\$51,568



J. Reuben Clark Law School 2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
Daniels, Brigham		University of California, Santa Barbara	Global Integrity	Rewarding Good Governance Through Community Recognition	1/1/2019	6/30/2021	R0502298	\$37,868
Nunez, Carolina		Utah Bar Foundation		Utah Bar Foundation 2020 Grant Proposal	1/1/2020	6/30/2020	R0502321	\$13,700

J. Reuben Clark Law School Source Breakdown

<u>Sponsor</u>	<u>Total Amount</u>
Private/Other	
University of California, Santa Barbara	\$37,868
Utah Bar Foundation	\$13,700
Total	\$51,568
Grand Total	\$51,568

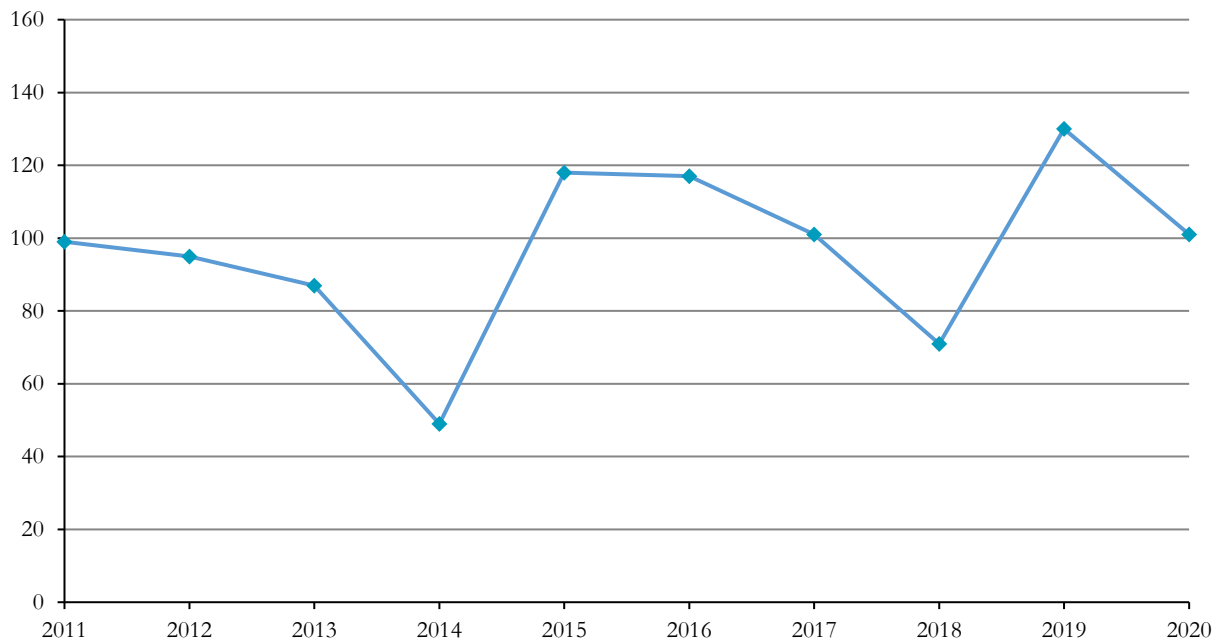
College of Life Sciences



Summary by Departments

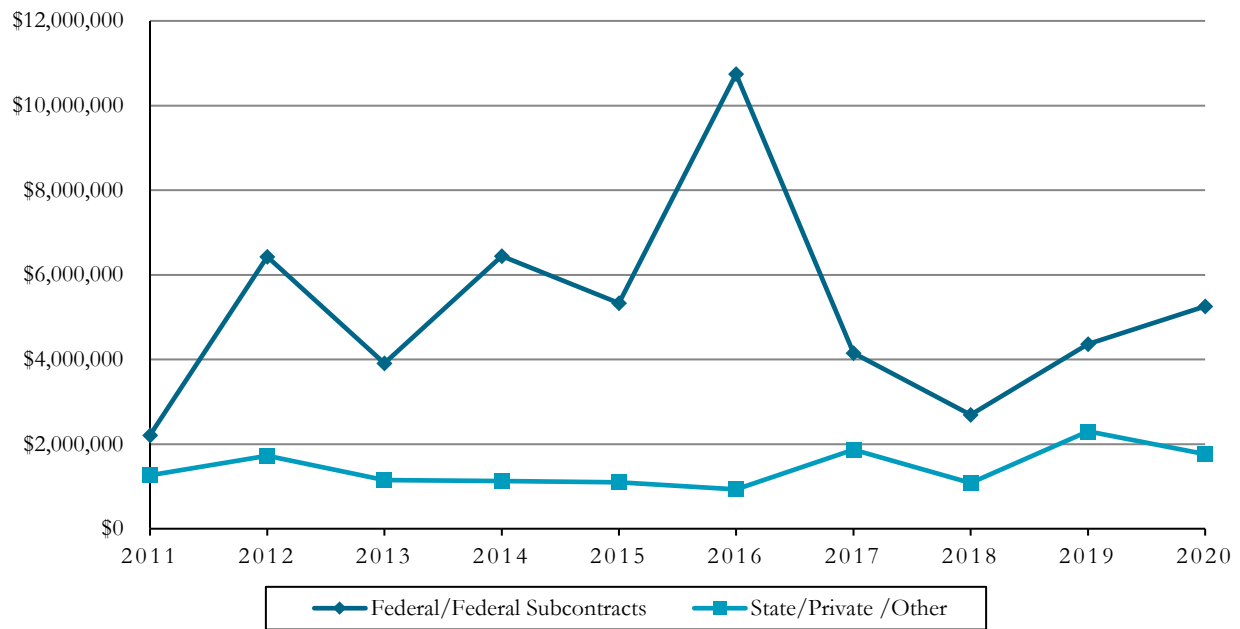
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Monte L. Bean Life Science Museum	0	0	2	\$34,000
Biology	16	18	16	\$1,905,489
Exercise Science	4	2	4	\$53,100
Microbiology & Molecular Biology	9	19	10	\$492,001
Nutrition, Dietetics & Food Science	12	15	18	\$512,457
Physiology & Developmental Biology	12	19	7	\$1,255,633
Plant & Wildlife Sciences	20	25	25	\$2,463,229
Public Health	4	3	0	\$300,319
TOTALS	77	101	82	\$7,016,228

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$2,211,664	\$1,263,459	\$3,475,123
2012	\$6,426,283	\$1,727,334	\$8,163,617
2013	\$3,905,977	\$1,151,388	\$4,988,584
2014	\$6,442,140	\$1,125,358	\$7,567,498
2015	\$5,327,507	\$1,099,440	\$6,426,947
2016	\$10,743,176	\$929,921	\$11,673,097
2017	\$4,154,421	\$1,869,843	\$6,024,264
2018	\$2,688,968	\$1,082,714	\$3,771,682
2019	\$4,363,993	\$2,301,116	\$6,665,109
2020	\$5,256,149	\$1,760,079	\$7,016,228



College of Life Sciences

2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
Biology								
Adams, Byron		University of Colorado, Boulder	NSF	LTER: Ecosystem response to amplified landscape connectivity in the McMurdo Dry Valleys, Antarctica	6/15/2020	5/31/2021	R0302755	\$76,281
Bailey, Liz		NSF		Graduate Research Fellowship Program	6/1/2020	5/31/2023	R0112436	\$46,000
Belk, Mark		Utah Chapter of American Fisheries Society		Comparative Analysis of Morphometric and Gene-Expression Patterns in larval June Sucker and Utah Sucker	6/1/2020	12/31/2020	R0502327	\$500
Bybee, Seth		NSF		Collaborative Research: Shedding light on firefly phylogenetic systematics and the evolution of their sexual signal types	2/1/2018	6/30/2021	R0112371	\$15,000
Bybee, Seth		NSF		Collaborative Research: Shedding light on firefly phylogenetic systematics and the evolution of their sexual signal types	7/15/2017	6/30/2021	R0112372	\$15,768
Bybee, Seth		NSF		Collaborative Research: Shedding light on firefly phylogenetic systematics and the evolution of their sexual signal types	7/15/2017	6/30/2021	R0112435	-\$15,000
Bybee, Seth		NSF		Collaborative Research: Genealogy of Odonata (GEODE): Dispersal and color as drivers of 300 million years of global dragonfly evolution	6/15/2020	5/31/2021	R0112441	\$315,647
Bybee, Seth		NSF		Collaborative Research: Genealogy of Odonata (GEODE): Dispersal and color as drivers of 300 million years of global dragonfly evolution	6/15/2020	5/31/2021	R0112442	\$25,625
Bybee, Seth	w/ Jensen, Jamie	Howard Hughes Medical Institute		Building Roads to Reconciliation at the Intersection of Evolution & Religion	4/15/2020	5/31/2022	R0502325	\$36,630
Gill, Richard		USGS	BLM	Droughts in dryland regions: The Sensitivity of Grasslands and Shrublands of the Colorado Plateau to Historical, Current and Experimental Droughts	6/1/2017	5/31/2022	R0202495	\$26,000
Jensen, Jamie	w/ Bybee, Seth	NSF		Collaborative Research: Genealogy of Odonata (GEODE): Dispersal and color as drivers of 300 million years of global dragonfly evolution	6/15/2020	5/31/2021	R0112441	\$315,646

Jensen, Jamie	w/ Bybee, Seth	NSF		Collaborative Research: Genealogy of Odonata (GEODE): Dispersal and color as drivers of 300 million years of global dragonfly evolution	6/15/2020	5/31/2021	R0112442	\$25,625
Jensen, Jamie		Howard Hughes Medical Institute		Building Roads to Reconciliation at the Intersection of Evolution & Religion	4/15/2020	5/31/2022	R0502325	\$37,740
Jensen, Jamie	w/ Poole, Brian	Merck		Overcoming barriers to HPV vaccine acceptance in religious populations	12/22/2020	10/31/2022	R0602646	\$30,436
Kauwe, Keoni		NIH		Epidemiology of Alzheimer's Disease Resilience and Risk Pedigrees	9/1/2016	3/31/2020	R0102101	\$76,296
Kauwe, Keoni	w/ Ridge, Perry	University of Pennsylvania	NIH	Pleiotropy GWAS of Alzheimer's Disease	6/1/2020	4/30/2021	R0302727	\$54,642
Kauwe, Keoni		Icahn School of Medicine at Mount Sinai	NIH	Integrative Network Modeling of Cognitive Resilience to Alzheimer's Disease	9/15/2017	5/31/2021	R0302775	\$30,030
Kauwe, Keoni		Bright Focus Foundation		Leveraging Heterogeneity in Alzheimer's Disease to Assess Differences in Longitudinal Health Outcomes	9/1/2020	8/31/2022	R0502331	\$100,000
Leavitt, Steve		Canyonlands Natural History Association		Lichens as tools to monitor disturbances in the La Sal Mountains	3/1/2020	2/28/2021	R0502322	\$15,675
Miller, Justin	w/ Kauwe, Keoni	Bright Focus Foundation		Leveraging Heterogeneity in Alzheimer's Disease to Assess Differences in Longitudinal Health Outcomes	9/1/2020	8/31/2022	R0502331	\$100,000
Nelson, Riley	w/ St Clair, Sam	UDNR	USDA	Megafire impacts on terrestrial and aquatic ecosystems and management interventions to protect wildlife habitat and watershed hydrology	7/1/2020	6/30/2021	R0402356	\$20,743
Payne, Sam	w/ Price, John	NIH		Biochemical Consequences of Regiospecific Metabolic Bias in the Brain	5/15/2020	2/28/2021	R0102103	\$154,081
Payne, Sam	w/ Kelly, Ryan	NIH		Fully Automated and Ultra-high Throughput Platform for In-depth Single Cell Proteomics	9/5/2020	8/31/2021	R0102106	\$165,263
Payne, Sam	w/ Valentine, Julie	Utah Department of Public Safety		Assessment of Sexual Assault Kit (SAK) Evidence Selection Leading to Development of SAK Evidence Machine Learning Model (SAK ML-Model)	3/1/2020	12/31/2022	R0302911	\$82,500
Ridge, Perry		University of Pennsylvania	NIH	Pleiotropy GWAS of Alzheimer's Disease	6/1/2020	4/30/2021	R0302727	\$54,642
Stowers, Josh	w/ Jensen, Jamie	Howard Hughes Medical Institute		Building Roads to Reconciliation at the Intersection of Evolution & Religion	4/15/2020	5/31/2022	R0502325	\$36,630
Whiting, Michael		Texas A&M University	NSF	NSFDEB-NERC: Integrating phylogenomics, biophysics, and functional genomics to unravel the evolution of hearing and singing in Ensifera (katydids, crickets and relatives)	1/1/2020	12/31/2024	R0302889	\$63,089

Exercise Sciences

Bruening, Dustin		NSF	Graduate Research Fellowship Program	9/1/2019	8/31/2022	R0112419	\$46,000
Hopkins, Ty		NATA Research Education Foundation	Risk Factors Associated with Chronic Ankle Instability or Recurrent Lateral Ankle Sprain in Individuals with a First-time Lateral Ankle Sprain	6/15/2020	6/14/2021	R0502328	\$2,500
Hopkins, Ty		NATA Research Education Foundation	The association of submaximal force steadiness and chronic ankle instability with and without visual disruption	6/15/2020	7/10/2020	R0502332	\$1,000
Hunter, Iain		USA Track and Field	Analysis of distance running	10/4/2003	12/31/2021	R0502040	\$3,600

Microbiology & Molecular Biology

Berges, Brad	w/ Robison, Richard	Recursion Pharmaceuticals	Evaluation of possible therapeutic compounds active against SARS-CoV-2.	7/20/2020	8/18/2020	R0602638	\$1,500
Berges, Brad	w/ Robison, Richard	Recursion Pharmaceuticals	Evaluation of possible therapeutic compounds active against SARS-CoV-2.	4/22/2020	6/30/2020	R0602638	\$20,325
Berges, Brad	w/ Robison, Richard	Recursion Pharmaceuticals	Evaluation of possible therapeutic compounds active against SARS-CoV-2.	4/22/2020	5/19/2020	R0602638	\$17,826
Griffitts, Joel	w/ Taylor, Brad	Western Dairy	Bioconversion of Dairy Lactose to Rare Sugars	7/15/2020	7/14/2021	R0502334	\$16,895
Grose, Julianne		University of Utah	NIH Sequencing, annotation and characterization of bacteriophages that infect the Enterobacteriaceae	4/1/2020	8/31/2020	R0302912	\$15,010
Poole, Brian		Merck	Overcoming barriers to HPV vaccine acceptance in religious populations	12/22/2020	10/31/2022	R0602646	\$31,359
Robison, Richard	w/ Bundy, Brad	VentureWell	NIH Mass-Produced, Point-of-Care, At-Home, Paper-Based, Colorimetric SARS-CoV-2/COVID19 Screening in 30 Min for Less than \$0.10	5/17/2020	5/31/2020	R0302915	\$8,250
Robison, Richard	w/ Bundy, Brad	University of Massachusetts Amherst	NIH At-home, Paper-based, Colorimetric, Extreme-low-cost SARS-CoV-2 Testing: Repurposing Pseudoknots as an RNA switch and Demonstrating Signal Amplification through Transcription-Translation Cascades	5/19/2020	8/31/2020	R0302916	\$88,538
Robison, Richard		Bruce Lindorf Memorial Foundation	Microbial Pathogens Involved in Tick-borne Diseases	1/1/2020	12/31/2020	R0502320	\$53,420
Robison, Richard		Young Living Essential Oils	The Antimicrobial Effects of Essential Oil Mixtures	2/8/2019	7/31/2021	R0602592	\$26,250
Robison, Richard		Young Living Essential Oils	The Antimicrobial Effects of Essential Oil Mixtures	2/8/2019	7/31/2021	R0602592	\$13,500
Robison, Richard		Recursion Pharmaceuticals	Evaluation of possible therapeutic compounds active against SARS-CoV-2.	7/20/2020	8/18/2020	R0602638	\$1,500
Robison, Richard		Recursion Pharmaceuticals	Evaluation of possible therapeutic compounds active against SARS-CoV-2.	4/22/2020	6/30/2020	R0602638	\$20,325
Robison, Richard		Recursion Pharmaceuticals	Evaluation of possible therapeutic compounds active against SARS-CoV-2.	4/22/2020	5/19/2020	R0602638	\$17,826
Robison, Richard		Exhalent Diagnostics	SARS-CoV-2 VOC Detection	8/26/2020	12/31/2020	R0602642	\$15,000

Wilson, Eric		University of Montana	NIH	Role of the Staphylococcus aureus SaeR/S regulatory system in neutrophil evasion	7/1/2020	5/31/2021	R0302905	\$144,479
Monte L. Bean Life Science Museum								
Knight, Katy	w/ Rogers, Duke	Utah Division of Arts & Museums		General Operating Support for the Bean Life Science Museum at BYU	7/1/2020	6/30/2021	R0402360	\$5,000
Rogers, Duke		Utah Division of Arts & Museums		General Operating Support for the Bean Life Science Museum at BYU	7/1/2020	6/30/2021	R0402360	\$5,000
Rogers, Duke		Center for the Involvement of Teacher Education and Schooling		Education Partnership-Bean Museum	1/1/2011	12/31/2020	R0502113	\$24,000
Nutrition, Dietetics, & Food Science								
Ahlborn, Gene	w/ Ahlborn, Gene	Western Dairy		BUILD Dairy Grant - Student Program funding support (Jeremy Pack)	7/22/2020	10/21/2020	R0502333	\$45,789
Ahlborn, Gene		Western Dairy		Development of Flavor Profiles of Cheese with Lipase, Culture and Processing Treatment Variables	4/15/2020	4/14/2022	R0502336	\$51,790
Dunn, Michael		Western Dairy		Consumer Attitude Assessment and RSM Evaluation of Natural Stabilizer Efficacy in Ice Creams	4/1/2019	12/31/2020	R0502293	\$20,000
Dunn, Michael	w/ Taylor, Brad	Western Dairy		Vitamin stability of dairy-based foods fortified with ferrous sulfate	5/1/2019	8/31/2021	R0502294	\$9,625
Dunn, Michael	w/ Steele, Frost	BPS Just Energy Technology		Synergism of SymMax treated water with calcium propionate, a traditional mold inhibitor, in sweetened and unsweetened baked goods	9/1/2019	3/30/2020	R0602617	\$11,063
Jefferies, Laura		Western Dairy		Relationship between Overall Sensory Acceptance, Purchase Intent, and Emotions of Dairy Milk and Plant-based Alternative Beverages	7/31/2020	7/31/2021	R0502341	\$6,000
Jefferies, Laura		Basic American Foods		Sensory Panel Projects 2019	1/1/2020	12/31/2020	R0602604	\$26,000
Kenealey, Jason		Western Dairy		Increasing the stability of Lactase for Reuse in Processing Whey Permeate into Commercially Viable Products	9/1/2020	8/31/2021	R0502305	\$25,000
Kenealey, Jason		Western Dairy		Optimization of immobilized enzyme mixture to utilize whey permeate	9/1/2020	8/31/2021	R0502306	\$25,000
Kenealey, Jason	w/ Steele, Frost	BPS Just Energy Technology		Synergism of SymMax treated water with calcium propionate, a traditional mold inhibitor, in sweetened and unsweetened baked goods	9/1/2019	3/30/2020	R0602617	\$11,063
Patten, Emily	w/ Stokes, Nathan	Academy of Nutrition and Dietetics Foundation		Student Perceptions of their Student-Operated Restaurant Experience and Confidence with Specific Foodservice Management Competencies	5/1/2020	4/30/2021	R0502340	\$250

Patten, Emily	w/ Stokes, Nathan	Academy of Nutrition and Dietetics Foundation	Student Perceptions of their Student-Operated Restaurant Experience and Confidence with Specific Foodservice Management Competencies	5/1/2020	4/30/2021	R0502340	\$2,250
Pike, Oscar	w/ Taylor, Brad	Western Dairy	Vitamin stability of dairy-based foods fortified with ferrous sulfate	5/1/2019	8/31/2021	R0502294	\$9,625
Steele, Frost		Western Dairy	Isolation and use of bacteriophage to control bacterial spore former growth in dairy powder production	8/15/2019	8/14/2021	R0502301	\$20,000
Steele, Frost		BPS Just Energy Technology	Synergism of SymMax treated water with calcium propionate, a traditional mold inhibitor, in sweetened and unsweetened baked goods	9/1/2019	3/30/2020	R0602617	\$11,399
Steele, Frost		Deseret Meats	Pathogen Analysis for Meat Products Produced at Deseret Meats & Houston Peanut Butter	3/1/2001	12/31/2020	R0702001	\$4,000
Steele, Frost		Deseret Meats	Pathogen Analysis for Meat Products Produced at Deseret Meats & Houston Peanut Butter	1/1/2019	12/31/2020	R0702001	\$20,000
Steele, Frost		Deseret Meats	Pathogen Analysis for Meat Products Produced at Deseret Meats & Houston Peanut Butter	1/1/2019	12/31/2020	R0702001	\$46,250
Stokes, Nathan		Academy of Nutrition and Dietetics Foundation	Student Perceptions of their Student-Operated Restaurant Experience and Confidence with Specific Foodservice Management Competencies	5/1/2020	4/30/2021	R0502340	\$250
Stokes, Nathan		Academy of Nutrition and Dietetics Foundation	Student Perceptions of their Student-Operated Restaurant Experience and Confidence with Specific Foodservice Management Competencies	5/1/2020	4/30/2021	R0502340	\$2,250
Taylor, Brad		Western Dairy	Vitamin stability of dairy-based foods fortified with ferrous sulfate	5/1/2019	8/31/2021	R0502294	\$9,625
Taylor, Brad		Western Dairy	Bioconversion of Dairy Lactose to Rare Sugars	7/15/2020	7/14/2021	R0502334	\$16,895
Tessem, Jeff		North Carolina State University	USDA Bioavailable gut microbial metabolites potentiate the beta-cell stimulatory and anti-obesity activities of poorly-bioavailable cocoa flavanols	4/1/2020	3/31/2021	R0302903	\$83,333
Tessem, Jeff		Beatson Foundation	Defining beta cell heterogeneity to expand functional beta cell mass as a treatment for Type 1 Diabetes	7/1/2019	6/30/2021	R0502307	\$55,000
Physiology & Developmental Biology							
Arroyo, Juan	w/ Reynolds, Paul	Flight Attendant Medical Research Institute	RAGE and SAGE: Modeling Secondhand Smoke-Induced COPD and Therapeutic Modalities	7/1/2020	6/30/2021	R0502229	\$31,194

Arroyo, Juan	w/ Reynolds, Paul	Performance Labs		Exploring the degree to which chlorophyll mitigates the negative effects of inhaled pollutants	5/1/2020	4/30/2022	R0602641	\$19,230
Bikman, Benjamin	w/ Reynolds, Paul	Performance Labs		Exploring the degree to which chlorophyll mitigates the negative effects of inhaled pollutants	5/1/2020	4/30/2022	R0602641	\$19,230
Edwards, Jeff		NIH		Ventral Tegmental Area GABA Neurons: Plasticity & Opiate Receptors at inhibitory inputs	9/30/2020	8/31/2023	R0102109	\$450,000
Hansen, Jason		University of Massachusetts Amherst	NIH	Activation of Nrf2 during embryonic development: Mechanisms and consequences	6/1/2020	5/31/2021	R0302683	\$24,122
Hill, Jonathon	w/ Tessem, Jeff	Beatson Foundation		Defining beta cell heterogeneity to expand functional beta cell mass as a treatment for Type 1 Diabetes	7/1/2019	6/30/2021	R0502307	\$55,000
Kooyman, David		Snow Canyon Pharmaceuticals		Utility of Synthetic Wogonin Compared to Natural	1/13/2020	8/30/2020	R0602624	\$74,922
Reynolds, Paul		NIH		RAGE targeting attenuates smoke-induced COPD	7/15/2020	6/30/2023	R0102105	\$450,000
Reynolds, Paul		Flight Attendant Medical Research Institute		RAGE and SAGE: Modeling Secondhand Smoke-Induced COPD and Therapeutic Modalities	7/1/2020	6/30/2021	R0502229	\$31,194
Reynolds, Paul		Performance Labs		Exploring the degree to which chlorophyll mitigates the negative effects of inhaled pollutants	5/1/2020	4/30/2022	R0602641	\$19,812
Thomson, David		Skylark Bioscience		Effect of the AMP-mimetic Prodrug 39 (P39) on muscle, liver, and brain metabolism and cell signaling.	10/1/2020	9/30/2021	R0602649	\$31,000
Yorgason, Jordan	w/ Steffensen, Scott	American Osteopathic Association		Neural Mechanisms of Osteopathic Spinal Manipulation on Opioid-Use Disorder and Associated Hyperalgesia	10/1/2020	2/28/2021	R0502343	\$49,930
Plant & Wildlife Sciences								
Aanderud, Zach	w/ Carling, Greg	NSF		Collaborative Research: Network Cluster: Dust in the Critical Zone from the Great Basin to the Rocky Mountains	9/1/2020	8/31/2021	R0112444	\$65,687
Aanderud, Zach		CUWCD		Creating an early detection network for aquatic cyanobacteria	7/1/2019	7/1/2024	R0402333	\$43,907
Aanderud, Zach		University of Utah	Utah Division of Water Quality	Monitoring wastewater influent as a tool to determine COVID outbreaks	5/6/2020	4/19/2021	R0402355	\$6,067
Aanderud, Zach		State of Utah Department of Environmental Quality		Monitoring Utah's Wastewater to Assist in Utah's Response to the COVID-19 Pandemic	7/15/2020	12/31/2020	R0402358	\$30,800
Abbott, Ben		NSF		Collaborative Research: Network Cluster: Using Big Data approaches to assess ecohydrological resilience across scales	9/1/2020	8/31/2021	R0112445	\$93,407

Abbott, Ben	w/ St Clair, Sam	UDNR	USDA	Megafire impacts on terrestrial and aquatic ecosystems and management interventions to protect wildlife habitat and watershed hydrology	7/1/2020	6/30/2021	R0402356	\$20,743
Anderson, Val Jo	w/ Madsen, Matthew	Rio Tinto Kennecott		Improving Vegetation Establishment on Kennecott Mine Waste Rock Dumps and Tailings	6/15/2020	6/14/2022	R0602635	\$20,000
Chaston, John		NIH		The causes of geographic variation in Drosophila melanogaster microbiota composition	9/10/2020	8/31/2021	R0102107	\$467,333
Chaston, John		Wittmann Biotech Sciences		Growth of bacteria in a proprietary probiotic-nutrient mix	1/1/2020	4/1/2020	R0602626	\$1,040
Frandsen, Paul	w/ St Clair, Sam	UDNR	USDA	Megafire impacts on terrestrial and aquatic ecosystems and management interventions to protect wildlife habitat and watershed hydrology	7/1/2020	6/30/2021	R0402356	\$20,743
Geary, Brad	w/ Madsen, Matthew	Rio Tinto Kennecott		Improving Vegetation Establishment on Kennecott Mine Waste Rock Dumps and Tailings	6/15/2020	6/14/2022	R0602635	\$20,000
Hansen, Neil		Utah State University	USDA	Identifying Stacked Conservation Practices that Optimize Water Use in Agriculture	7/1/2019	5/31/2022	R0302891	\$17,329
Hansen, Neil		Utah State University	4R Research Fund	Stacking and Intersecting Nutrient and Irrigation 4R's	7/1/2019	12/31/2020	R0502317	\$18,940
Hopkins, Bryan		USGS	BLM	USGS - Soil Analysis	9/26/2020	9/25/2025	R0202546	\$6,232
Hopkins, Bryan	w/ Hansen, Neil	Utah State University	USDA	Identifying Stacked Conservation Practices that Optimize Water Use in Agriculture	7/1/2019	5/31/2022	R0302891	\$16,819
Hopkins, Bryan	w/ Hansen, Neil	Utah State University	4R Research Fund	Stacking and Intersecting Nutrient and Irrigation 4R's	7/1/2019	12/31/2020	R0502317	\$18,940
Jarvis, David	w/ Jellen, Rick	USDA		Avena Pangenome	8/1/2020	7/31/2022	R0152019	\$47,299
Jarvis, David		USDA		Improving quinoa productivity through introgression of heat and drought tolerance from wild relatives	5/1/2020	4/30/2025	R0202536	\$170,000
Jarvis, David	w/ Jellen, Rick	Ardent Mills		Quinoa Improvement via Quinoa X Pitseed Goosefoot Crosses	9/23/2019	5/31/2020	R0602618	\$5,940
Jellen, Rick		USDA		Small Grains Pangenome Assembly and Annotation	8/1/2020	7/31/2025	R0152018	\$79,481
Jellen, Rick		USDA		Avena Pangenome	8/1/2020	7/31/2022	R0152019	\$48,732
Jellen, Rick	w/ Jarvis, David	USDA		Improving quinoa productivity through introgression of heat and drought tolerance from wild relatives	5/1/2020	4/30/2025	R0202536	\$165,000
Jellen, Rick	w/ Maughan, Jeff	General Mills		Neolithic Oat Traits (NOTS)	5/17/2017	12/31/2020	R0602547	\$1,955
Jellen, Rick		Ardent Mills		Quinoa Improvement via Quinoa X Pitseed Goosefoot Crosses	9/23/2019	5/31/2020	R0602618	\$6,120

Larsen, Randy		Utah Reclamation Mitigation and Conservation Commission	Department of Interior	Monitoring bird abundance and movement for Provo river delta restoration project	2/1/2017	1/31/2022	R0202489	\$30,000
Larsen, Randy		Utah Reclamation Mitigation and Conservation Commission	Department of Interior	Study of Sage-grouse in Strawberry Valley	7/1/2019	6/30/2024	R0202518	\$65,000
Larsen, Randy		Army Dugway	DOD	Monitoring of Natural Resources with Remote Cameras, Photo Database and Automation Algorithm-Dugway Proving Ground, UT	9/5/2019	9/4/2021	R0202529	\$59,902
Larsen, Randy		Colorado State University	DOD	Technician Support for the US Army Dugway Proving Ground--Summer 2020	5/1/2020	9/30/2020	R0302917	\$58,366
Madsen, Matthew		Rio Tinto Kennecott		Improving Vegetation Establishment on Kennecott Mine Waste Rock Dumps and Tailings	6/15/2020	6/14/2022	R0602635	\$20,000
Madsen, Matthew		University of Nevada, Reno		Novel Seed Treatments to Arrest the Cheatgrass Wildfire Cycle	7/16/2019	9/30/2021	R0802045	\$30,000
Maughan, Jeff		USDA		Techniques and improved efficiency in next generation sequencing	9/15/2016	9/14/2021	R0152012	\$65,882
Maughan, Jeff		USDA		Application of enhanced sequencing techniques	7/1/2020	6/30/2021	R0152017	\$33,330
Maughan, Jeff	w/ Jellen, Rick	USDA		Small Grains Pangenome Assembly and Annotation	8/1/2020	7/31/2025	R0152018	\$79,481
Maughan, Jeff	w/ Jellen, Rick	USDA		Avena Pangenome	8/1/2020	7/31/2022	R0152019	\$47,299
Maughan, Jeff	w/ Jarvis, David	USDA		Improving quinoa productivity through introgression of heat and drought tolerance from wild relatives	5/1/2020	4/30/2025	R0202536	\$165,000
Maughan, Jeff		General Mills		Neolithic Oat Traits (NOTS)	5/17/2017	12/31/2020	R0602547	\$1,955
Maughan, Jeff	w/ Jellen, Rick	Ardent Mills		Quinoa Improvement via Quinoa X Pitseed Goosefoot Crosses	9/23/2019	5/31/2020	R0602618	\$5,940
McMillan, Brock	w/ Larsen, Randy	Army Dugway	DOD	Monitoring of Natural Resources with Remote Cameras, Photo Database and Automation Algorithm-Dugway Proving Ground, UT	9/5/2019	9/4/2021	R0202529	\$59,902
Petersen, Steven	w/ Madsen, Matthew	Rio Tinto Kennecott		Improving Vegetation Establishment on Kennecott Mine Waste Rock Dumps and Tailings	6/15/2020	6/14/2022	R0602635	\$20,000
St Clair, Sam		USDA		Monroe mountain aspen ecosystems monitoring	4/23/2018	4/23/2023	R0202506	\$153,960
St Clair, Sam		USDA		Monroe Mountain Aspen Restoration Phase 3 Monitoring	8/31/2020	5/31/2025	R0202543	\$153,960
St Clair, Sam		UDNR	USDA	Megafire impacts on terrestrial and aquatic ecosystems and management interventions to protect wildlife habitat and watershed hydrology	7/1/2020	6/30/2021	R0402356	\$20,743

Public Health

Merrill, Ray	w/ Tanner, Kristine	NIH	Pathophysiology of Voice Disorders due to Combination Inhaled Corticosteroids in Asthma	5/14/2018	4/30/2021	R0102086	\$269,883
Sloan, Chantel	w/ Poole, Brian	Merck	Overcoming barriers to HPV vaccine acceptance in religious populations	12/22/2020	10/31/2022	R0602646	\$30,436

College of Life Sciences

Source Breakdown

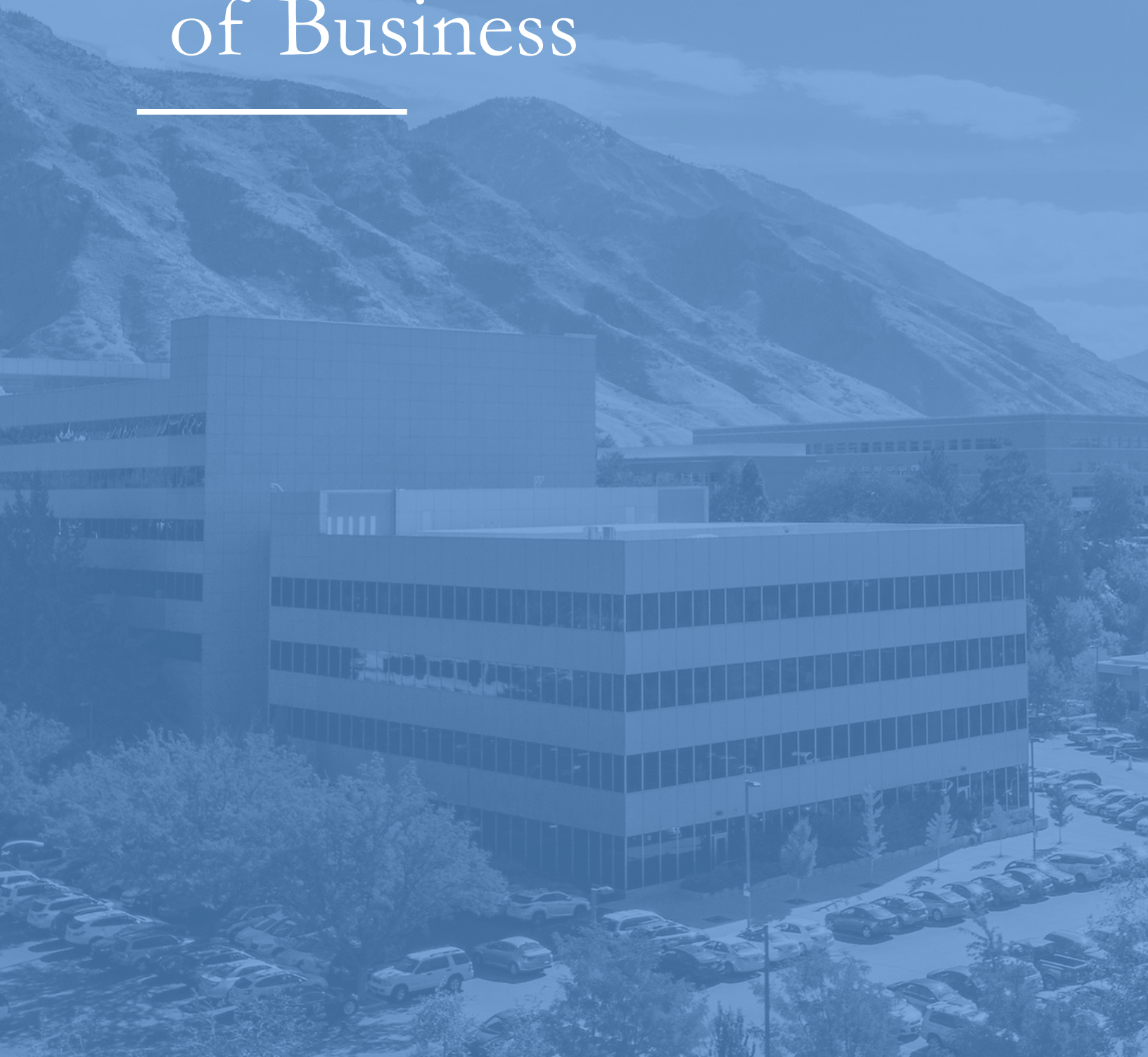
Sponsor	Total Amount
Federal	
Army Dugway	\$119,805
NIH	\$2,032,856
NSF	\$949,405
USDA	\$1,209,422
USGS	\$32,232
Utah Reclamation Mitigation and Conservation Commission	\$95,000
Total	\$4,438,721
Federal Subcontract	
Colorado State University	\$58,366
Icahn School of Medicine at Mount Sinai	\$30,030
North Carolina State University	\$83,333
Texas A&M University	\$63,089
University of Colorado, Boulder	\$76,281
University of Massachusetts Amherst	\$112,660
University of Montana	\$144,479
University of Pennsylvania	\$109,284
University of Utah	\$15,010
Utah Department of Public Safety	\$82,500
Utah State University	\$34,148
VentureWell	\$8,250
Total	\$817,429
State	
CUWCD	\$43,907
State of Utah Department of Environmental Quality	\$30,800
UDNR	\$82,971
University of Utah	\$6,067
Utah Division of Arts & Museums	\$10,000
Total	\$173,745

Private/Other

Academy of Nutrition and Dietetics Foundation	\$5,000
American Osteopathic Association	\$49,930
Ardent Mills	\$17,999
Basic American Foods	\$26,000
Beatson Foundation	\$110,000
BPS Just Energy Technology	\$33,525
Bright Focus Foundation	\$200,000
Bruce Lindorf Memorial Foundation	\$53,420
Canyonlands Natural History Association	\$15,675
Center for the Involvement of Teacher Education and Schooling	\$24,000
Deseret Meats	\$70,250
Exhalent Diagnostics	\$15,000
Flight Attendant Medical Research Institute	\$62,388
General Mills	\$3,909
Howard Hughes Medical Institute	\$111,000
Merck	\$92,231
NATA Research Education Foundation	\$3,500
Performance Labs	\$58,272
Recursion Pharmaceuticals	\$79,301
Rio Tinto Kennecott	\$79,999
Skylark Bioscience	\$31,000
Snow Canyon Pharmaceuticals	\$74,922
University of Nevada, Reno	\$30,000
USA Track and Field	\$3,600
Utah Chapter of American Fisheries Society	\$500
Utah State University	\$37,880
Western Dairy	\$256,244
Wittmann Biotech Sciences	\$1,040
Young Living Essential Oils	\$39,750

Total	\$1,586,334
Grand Total	\$7,016,228

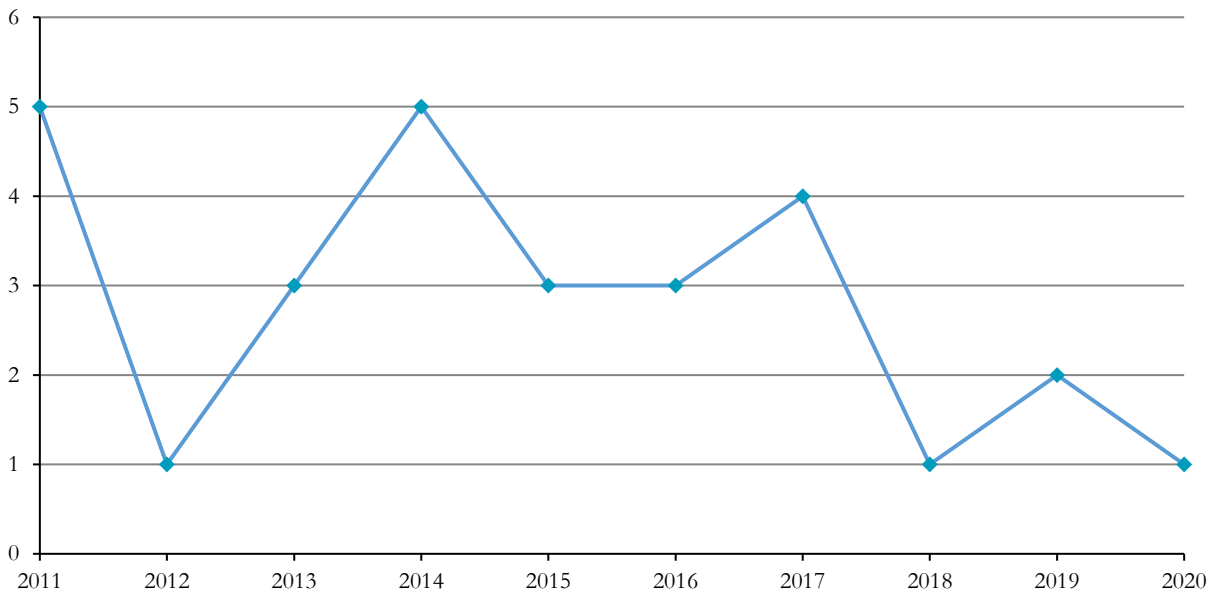
Marriott School of Business



Summary by Departments

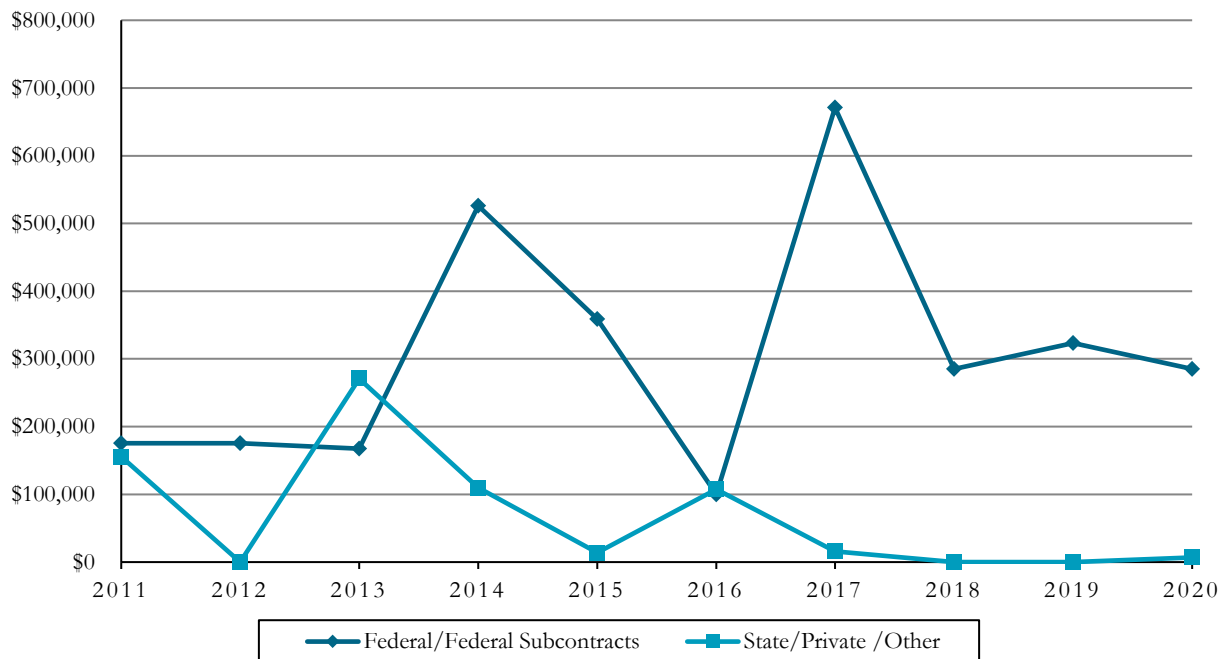
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
School of Accountancy	0	0	1	\$6,750
Experience Design & Management	0	0	0	\$0
Finance & Managerial Economics	0	0	0	\$0
Global Management Center	0	0	0	\$142,500
Information Systems	0	0	0	\$0
Management	1	1	0	\$0
Marketing & Global Supply Chain	0	0	1	\$142,500
Romney Institute of Public Management	0	0	0	\$0
TOTALS	1	1	2	\$291,750

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$175,321	\$155,800	\$331,121
2012	\$175,321	\$0	\$175,321
2013	\$167,256	\$270,767	\$438,023
2014	\$526,276	\$110,000	\$636,276
2015	\$358,690	\$13,910	\$372,600
2016	\$100,000	\$107,500	\$207,500
2017	\$671,051	\$15,600	\$686,651
2018	\$285,000	\$0	\$285,000
2019	\$323,439	\$0	\$323,439
2020	\$285,000	\$6,750	\$291,750



Marriott School of Business

2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
<i>Global Management Center</i>								
Wood, Jonathon	w/ Money, Bruce	ED		2018-2022 Center for International Business Education Grant	10/1/2020	9/30/2021	R0132024	\$142,500
<i>Marketing & Global Supply Chain</i>								
Money, Bruce		ED		2018-2022 Center for International Business Education Grant	10/1/2020	9/30/2021	R0132024	\$142,500
<i>School of Accountancy</i>								
Tayler, Bill		Institute of Management Accountants		An FMRI Investigation of Surrogation	10/1/2018	6/30/2019	R0502300	\$6,750

Marriott School of Business

Source Breakdown

Sponsor	<u>Total Amount</u>
Federal	
Department of Education	\$285,000
Total	\$285,000
Private/Other	
Institute of Management Accountants	\$6,750
Total	\$6,750
Grand Total	\$291,750

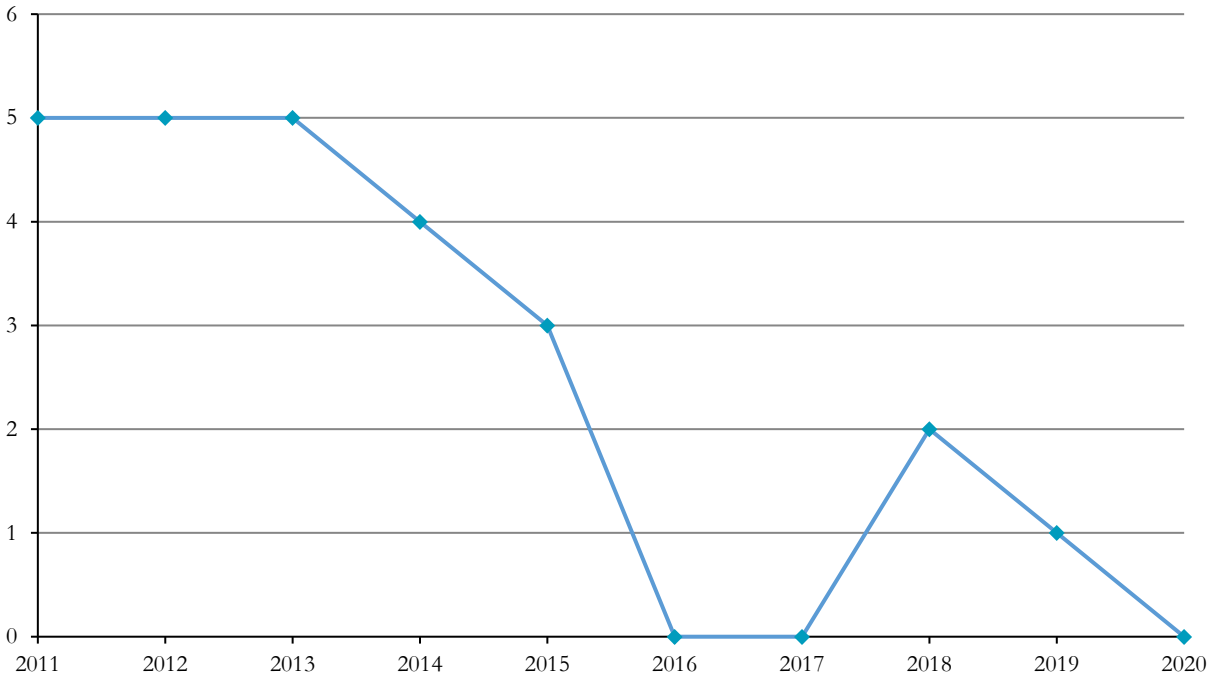
College of Nursing



Summary by Departments

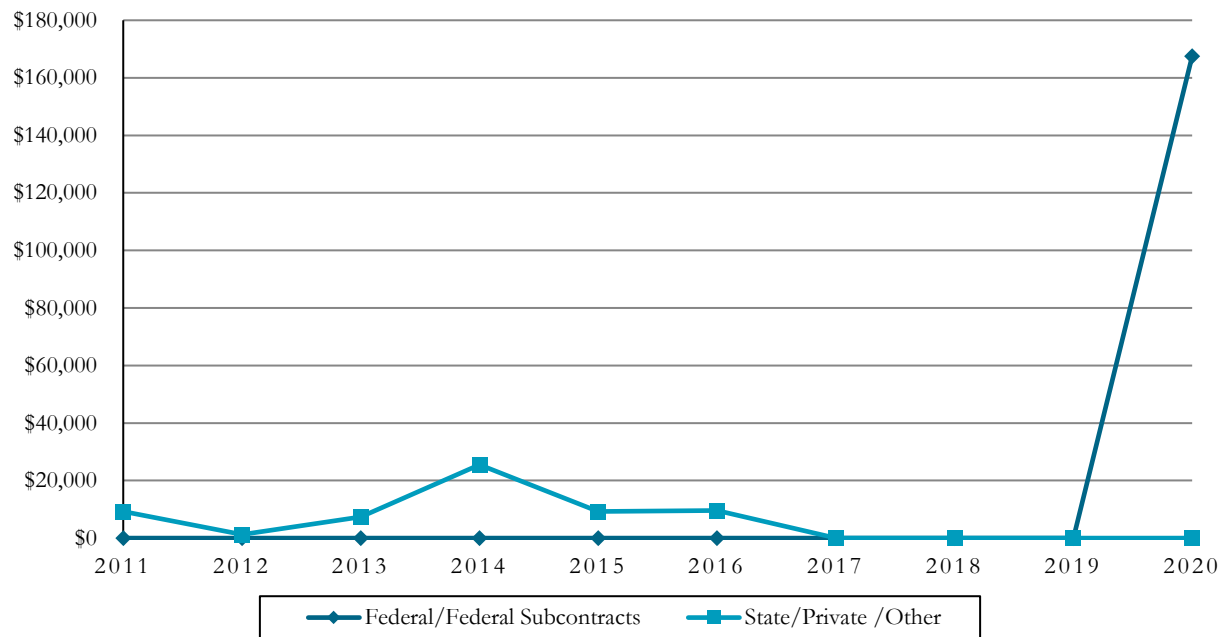
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Nursing	1	0	1	\$167,500
TOTALS	1	0	1	\$167,500

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$0	\$9,250	\$9,250
2012	\$0	\$1,200	\$1,200
2013	\$0	\$7,350	\$7,350
2014	\$0	\$25,500	\$25,500
2015	\$0	\$9,200	\$9,200
2016	\$0	\$9,626	\$9,626
2017	\$0	\$0	\$0
2018	\$0	\$0	\$0
2019	\$0	\$0	\$0
2020	\$167,500	\$0	\$167,500



College of Nursing 2020 Awards

PI	Co-PI	Sponsor	Prime Sponsor	Title	Beg Date	End Date	Account	Amount
Miles, Leslie	w/ Valentine, Julie	Utah Department of Public Safety		Assessment of Sexual Assault Kit (SAK) Evidence Selection Leading to Development of SAK Evidence Machine Learning Model (SAK ML-Model)	3/1/2020	12/31/2022	R0302911	\$82,500
Valentine, Julie		Utah Department of Public Safety		Assessment of Sexual Assault Kit (SAK) Evidence Selection Leading to Development of SAK Evidence Machine Learning Model (SAK ML-Model)	3/1/2020	12/31/2022	R0302911	\$85,000

College of Nursing Source Breakdown

Sponsor	Total Amount
Federal Subcontracts	
Utah Department of Public Safety	\$167,500
Total	\$167,500
Grand Total	\$167,500

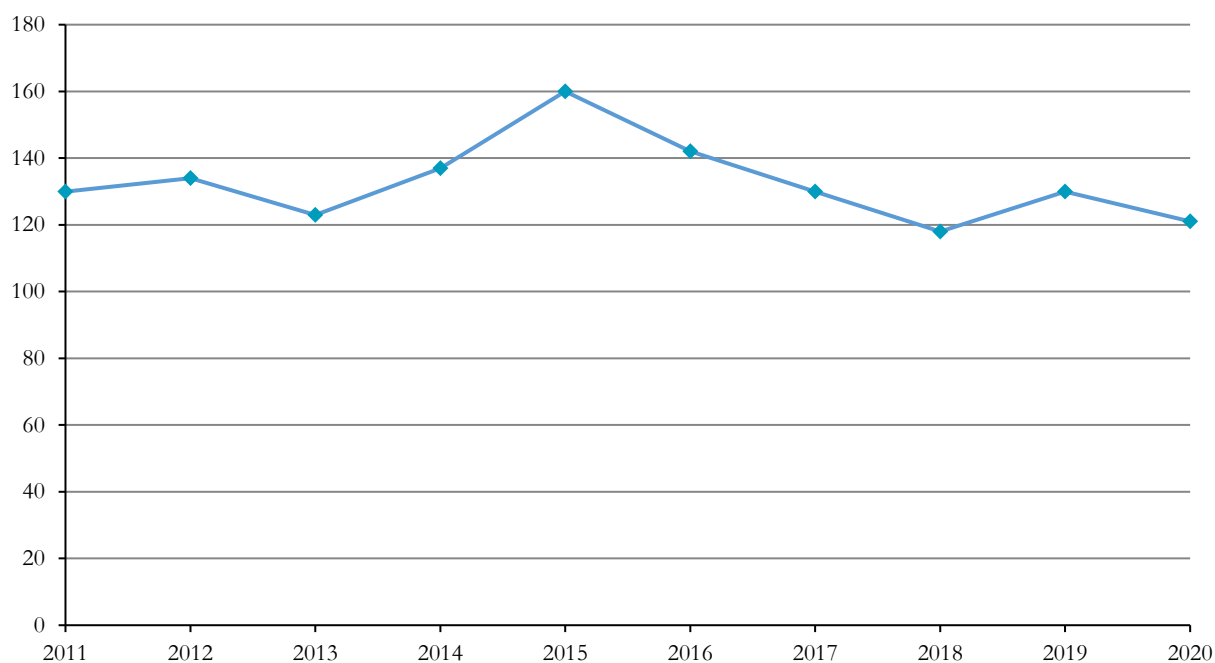
College of Physical & Mathematical Sciences



Summary by Departments

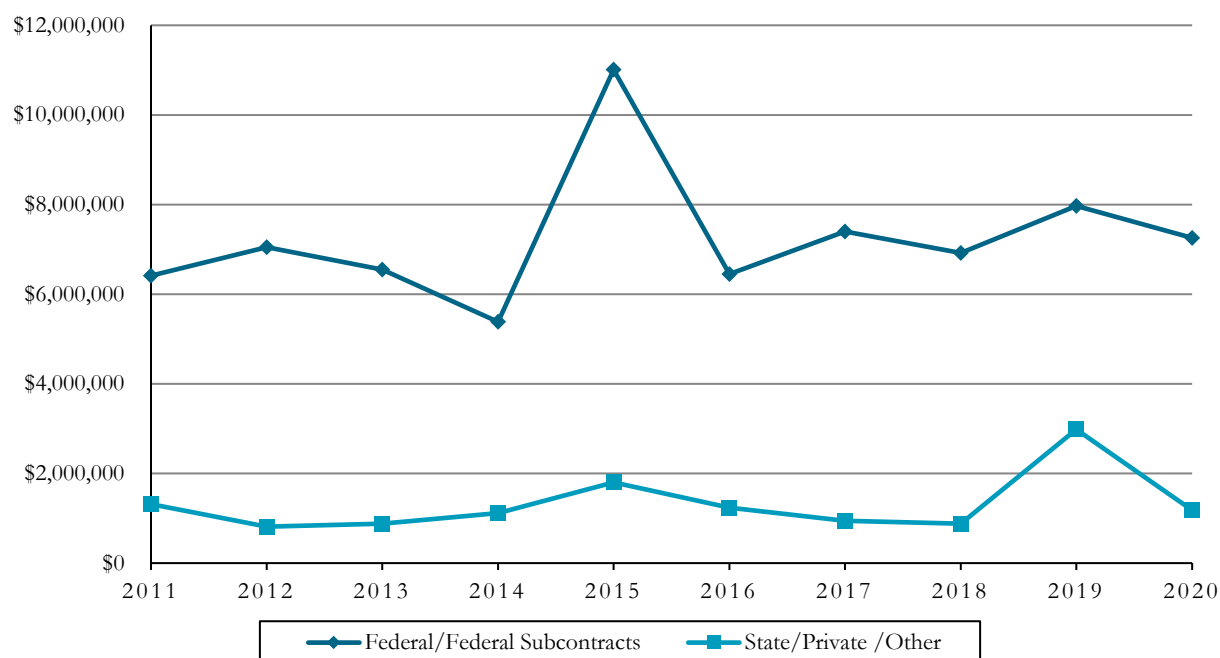
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Chemistry & Biochemistry	28	55	31	\$3,973,025
Computer Science	13	21	8	\$728,705
Geology	7	5	9	\$557,716
Mathematics	12	12	9	\$233,131
Mathematics Education	3	2	1	\$42,500
Physics & Astronomy	20	23	35	\$2,696,276
Statistics	5	3	1	\$205,518
TOTALS	88	121	94	\$8,436,871

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$6,410,182	\$1,313,108	\$7,723,290
2012	\$7,049,532	\$813,628	\$7,963,160
2013	\$6,548,760	\$878,540	\$7,408,208
2014	\$5,382,972	\$1,113,596	\$6,496,568
2015	\$11,009,182	\$1,803,190	\$12,812,372
2016	\$6,447,585	\$1,239,899	\$7,687,484
2017	\$7,399,801	\$944,244	\$8,344,045
2018	\$6,919,640	\$878,316	\$7,797,956
2019	\$7,967,960	\$2,983,216	\$10,951,176
2020	\$7,256,305	\$1,180,566	\$8,436,871



College of Physical & Mathematical Sciences 2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
<i>Chemistry & Biochemistry</i>								
Austin, Daniel		NSF		Collaborative Research: Development and Evaluation of a Miniature Coaxial Ion Trap Mass Analyzer for Portable Chemical Analysis	8/15/2020	7/31/2023	R0112448	\$165,312
Austin, Daniel	w/ Chiang, Shiu-hua Wood	University of Utah	NASA	A CMOS Digital Amplifier for Space Dust Analyzer	5/18/2020	5/17/2021	R0302921	\$4,950
Castle, Steven		NSF		Reaching New Horizons in Iminyl Radical Chemistry via Microwave Irradiation	8/1/2020	7/31/2022	R0112409	\$330,936
Castle, Steven		NIH		Dehydroamino Acids as Stabilizing and Rigidifying Components of Bioactive Peptides and Natural Products: Synthetic, Structural, and Medicinal Studies	8/1/2020	7/31/2023	R0102104	\$436,500
Christensen, Ken	w/ Nordin, Greg	NIH		High Density 3D Printed Microfluidics for Cell-Based Biomedical Applications	9/15/2020	8/31/2023	R0102108	\$139,337
Dearden, David		Magellan Bioanalytics		Serum Lipid and Peptide Markers Diagnosing Alzheimer's Disease	3/1/2020	6/30/2020	R0602628	\$25,000
Ess, Dan		NSF		Dynamic Organometallic Mechanisms	9/1/2020	8/31/2023	R0112428	\$265,338
Ess, Dan		DOE		Theory of Main-group, P-Block Hydrocarbon Functionalization Reactions	9/15/2017	9/14/2021	R0202502	\$48,432
Ess, Dan		Rice University	NIH	Defining Evolutionary Trajectories: Molecular adaptation to antibiotic resistance	4/1/2020	3/31/2021	R0302902	\$32,144
Ess, Dan		Chevron Phillips Chemical		Optimization of Homogeneous Alpha Olefin Catalysts	12/26/2013	12/31/2020	R0602446	\$150,000
Ess, Dan		Phillips 66		Computational Optimization of Solid Acid Metal-Organic Frameworks	9/1/2019	8/31/2020	R0602607	\$20,000
Ess, Dan		Phillips 66		Computational Optimization of Solid Acid Metal-Organic Frameworks	9/29/2020	8/31/2021	R0602607	\$80,000
Hansen, Jaron		Verde		Biological Pretreatment of Biomass for Enhanced Biogas Production	1/16/2017	12/31/2020	R0602536	\$2,000
Harper, James		NSF		CAREER: Developing Accurate Crystallography without Diffraction	8/1/2019	7/31/2020	R0112412	\$225,406
Kelly, Ryan	w/ Price, John	NIH		Biochemical Consequences of Regiospecific Metabolic Bias in the Brain	5/15/2020	2/28/2021	R0102103	\$154,082

Kelly, Ryan			NIH	Fully Automated and Ultra-high Throughput Platform for In-depth Single Cell Proteomics	9/5/2020	8/31/2021	R0102106	\$165,263	
Kelly, Ryan			Fred Hutchinson Cancer Research Center	National Cancer Institute	Integration and Validation of Emerging Technologies to Accelerate Cancer Research (R33)	7/1/2020	6/30/2021	R0302954	\$37,557
Kelly, Ryan			University of Victoria		NanoPOTS and isotope dilution mass spectrometry to determine erythrocyte age	9/15/2020	9/14/2021	R0570033	\$35,000
Linford, Matthew			Restek Corporation		ALD on Materials for Sample Preparation and Chromatography, and SPME	12/1/2020	12/31/2021	R0602619	\$65,000
Linford, Matthew			Moxtek		Matthew Linford Research Project #25 (2020 Winter)	1/1/2020	4/30/2020	R0602627	\$20,000
Linford, Matthew			Moxtek		Spectroscopic ellipsometry scatterometry of surface nanostructures	5/1/2020	4/30/2021	R0602637	\$25,000
Michaelis, David	w/ Madsen, Matthew	Rio Tinto Kennecott			Improving Vegetation Establishment on Kennecott Mine Waste Rock Dumps and Tailings	6/15/2020	6/14/2022	R0602635	\$20,000
Patterson, James		Naval Air Warfare Center Weapons Division	DOD		Determination of the Effects of Thermal and Mechanical Stress on PBX Binder Materials and the HE/Binder Interface	5/29/2019	12/31/2020	R0202517	\$148,817
Price, John			NIH		Biochemical Consequences of Regiospecific Metabolic Bias in the Brain	5/15/2020	2/28/2021	R0102103	\$154,082
Price, Josh			NIH		Predictive Structure-based Guidelines for Identifying Optimal PEGylation Sites within Proteins and Understanding the Context-Dependence of Non-covalent Interaction Strength	5/1/2020	3/31/2023	R0102102	\$217,875
Savage, Paul			Scripps Research Institute	NIH	Biology of a-linked glycosylceramides in the immune system	1/1/2018	12/31/2020	R0302779	\$75,000
Savage, Paul			Scripps Research Institute	NIH	Development of the Next Generation of Conjugate Vaccines	7/1/2020	6/30/2021	R0302803	\$165,000
Savage, Paul			Vanderbilt University Medical Center	NIH	Molecular Basis of CD1D and Natural Killer T Cell Function	8/1/2020	7/31/2021	R0302883	\$200
Savage, Paul			Vanderbilt University Medical Center	NIH	Molecular Basis of CD1D and Natural Killer T Cell Function	8/1/2020	7/31/2021	R0302883	\$37,000
Savage, Paul			Georgia Institute of Technology	NIH	Strategies for generating high affinity antibodies against Gram-negative bacteria	3/2/2020	2/28/2021	R0302900	\$97,500
Savage, Paul			N8 Medical		Collection Account for Royalty Payments	5/12/2004	12/31/2020	R0802005	\$78,000
Van Ry, Pam			Jain Foundation		Galectin-1: A potential therapy for Limb Girdle Muscular Dystrophy Type 2B	11/1/2019	10/31/2020	R0502311	\$96,394
Van Ry, Pam			Jain Foundation		Galectin-1: A potential protein therapy for Limb Girdle Muscular Dystrophy type 2B-year 2	11/1/2020	12/31/2021	R0502342	\$169,666
Van Ry, Pam			University of Washington		Studies of AvB6 integrin binders in rodent models of idiopathic pulmonary fibrosis	8/1/2018	12/31/2020	R0802043	\$58,363

Woolley, Adam		NIH		3D-Printed Integrated Microfluidic Devices for Preterm Birth Biomarker Analysis	7/1/2020	6/30/2021	R0102090	\$88,536
Woolley, Adam	w/ Nordin, Greg	NIH		High Density 3D Printed Microfluidics for Cell-Based Biomedical Applications	9/15/2020	8/31/2023	R0102108	\$139,337
Computer Science								
Crandall, Jacob		ONR		Autonomous Robots for Proficiency Self-Assessment	8/1/2020	7/31/2021	R0202540	\$56,500
Crandall, Jacob		Carnegie Mellon University	ONR	Success: Self-Assessment and Understanding of Competence and Conditions to Ensure System Success	6/1/2018	5/31/2021	R0302806	\$175,436
Fulda, Nancy		Latitude		Enchanted Forests Don't Have Supermarkets: Preserving Narrative Coherence in AI-Generated Interactive Fiction	8/31/2020	8/30/2021	R0602644	\$15,003
Goodrich, Michael	w/ Crandall, Jacob	ONR		Autonomous Robots for Proficiency Self-Assessment	8/1/2020	7/31/2021	R0202540	\$56,500
Goodrich, Michael	w/ Crandall, Jacob	Carnegie Mellon University	ONR	Success: Self-Assessment and Understanding of Competence and Conditions to Ensure System Success	6/1/2018	5/31/2021	R0302806	\$175,436
Goodrich, Michael		Oregon State University	ONR	A Formal Framework for Developing Resilient Teams of Heterogeneous Autonomous Agents	8/15/2020	8/14/2021	R0302835	\$80,000
Page, Xinru		FCLTech		Increasing Transparency of Fine-grained User Profiling: Deploying Visual Interventions for Users of Varying Digital Literacy	11/23/2020	8/30/2022	R0602648	\$51,938
Wingate, David		NSF		CAREER: Blending Deep RL and Probabilistic Programming	3/1/2017	2/28/2022	R0112338	\$8,000
Wingate, David		NSF		CAREER: Blending Deep RL and Probabilistic Programming	3/1/2017	2/28/2022	R0112338	\$101,894
Wingate, David		NSF		CAREER: Blending Deep RL and Probabilistic Programming	3/1/2017	2/28/2022	R0112346	\$8,000
Geology								
Bickmore, Barry		NSF		A Machine-Learning Approach to Quantitative Phase Analysis of Whole Rocks and Sediments	8/1/2020	7/31/2023	R0112443	\$147,372
Carling, Greg		NSF		Collaborative Research: Network Cluster: Dust in the Critical Zone from the Great Basin to the Rocky Mountains	9/1/2020	8/31/2021	R0112444	\$67,678
Hudson, Sam		ConocoPhillips		Outcrop Characterization of Brookian Deltaic Topsets of the Nanushuk Formation - Understanding Facies Heterogeneity, Sedimentation Patterns and Shoreline Evolution Within the Colville Basin, Alaska	1/22/2019	12/31/2021	R0602590	\$73,980
McBride, John		University of Illinois	DOE	CarbonSAFE Evaluation of Seismic Data Wabash Valley, Illinois	2/1/2019	5/31/2021	R0302876	\$43,286

McBride, John	University of Illinois	DOE	Illinois Storage Corridor	10/1/2020	9/30/2021	R0302959	\$45,964
Radebaugh, Jani	JPL	NASA	Yardangs: Wind Flow and Controls on Formation	2/12/2019	2/11/2022	R0302840	\$69,945
Radebaugh, Jani	JPL	NASA	Yardangs: Wind Flow and Controls on Formation	2/12/2019	2/11/2020	R0302840	\$83,032
Radebaugh, Jani	University of Utah	NASA	Sand collection in the Shangri-La sand sea of Titan from remote sensing and field comparisons	5/18/2020	5/17/2021	R0302935	\$11,459
Ritter, Scott	University of Utah	DOE	Reservoir Characterization and Petrology of the Cane Creek B Interval (Pennsylvanian), Paradox Basin, Utah	10/1/2019	9/30/2020	R0302901	\$15,000

Mathematics

Allen, Mark	Simons Foundation		Nonlocal Equations and Free Boundary Problems	9/1/2019	8/31/2024	R0502315	\$8,400
Andersen, Nickolas	NSF		Workshop on Automorphic Forms and Related Topics	1/1/2020	12/31/2020	R0112424	\$3,500
Doud, Darrin	w/ Andersen, Nickolas	NSF	Workshop on Automorphic Forms and Related Topics	1/1/2020	12/31/2020	R0112424	\$3,500
Doud, Darrin	w/ Griffin, Michael	NSA	34th Automorphic Forms Workshop	1/1/2020	12/31/2020	R0202534	\$4,277
Evans, Emily	w/ Bickmore, Barry	NSF	A Machine-Learning Approach to Quantitative Phase Analysis of Whole Rocks and Sediments	8/1/2020	7/31/2023	R0112443	\$147,372
Fisher, Todd	Simons Foundation		Topological Pressure and Equilibrium States for Smooth Dynamic Systems	9/1/2018	8/31/2023	R0502274	\$8,400
Griffin, Michael	w/ Andersen, Nickolas	NSF	Workshop on Automorphic Forms and Related Topics	1/1/2020	12/31/2020	R0112424	\$3,500
Griffin, Michael		NSA	34th Automorphic Forms Workshop	1/1/2020	12/31/2020	R0202534	\$4,406
Jenkins, Paul	w/ Andersen, Nickolas	NSF	Workshop on Automorphic Forms and Related Topics	1/1/2020	12/31/2020	R0112424	\$3,500
Jenkins, Paul	w/ Griffin, Michael	NSA	34th Automorphic Forms Workshop	1/1/2020	12/31/2020	R0202534	\$4,277
Kent, Curt	Simons Foundation		Topology of Coarse Geometry Structures	9/1/2018	8/31/2023	R0502275	\$8,400
Lu, Kening	Simons Foundation		Complicated Dynamics for Infinite Dimensional Dynamical Systems	9/1/2020	8/31/2021	R0502329	\$8,400
Priddis, Nathan	Simons Foundation		Mirror Symmetry and the LG/CY Correspondence	9/1/2018	8/31/2023	R0502276	\$8,400
Webb, Ben	Simons Foundation		Interplay of Structure and Dynamics in Real-World Systems	9/1/2020	8/15/2021	R0502330	\$8,400
Whitehead, Jared	Simons Foundation		Analysis and Computation of Geophysical Fluid Dynamics	9/1/2018	8/31/2023	R0502277	\$8,400

Mathematics Education

Corey, Douglas	NSF		Conference for Building a Knowledge Base of Teaching College Mathematics	4/1/2020	3/31/2021	R0112427	\$21,250
Jones, Steven	w/ Corey, Douglas	NSF	Conference for Building a Knowledge Base of Teaching College Mathematics	4/1/2020	3/31/2021	R0112427	\$21,250

Physics & Astronomy

Allred, David		Arizona State University	NSF	Performing the necessary steps so a multilayer of wide-bandgap fluoride layers can act as a dielectric-like mirror for H Lyman UV	5/1/2020	9/30/2020	R0302924	\$450
Anderson, Brian		Los Alamos National Laboratory	DOE	Source Signature Encryption and Super Resolution Imaging using Near Field Scattering	6/11/2019	12/31/2023	R0302863	\$85,555
Bergeson, Scott		NSF		Collaborative Research Proposal: Ultracold Neutral Plasmas as High Energy Density Plasma Simulators	6/1/2020	5/30/2021	R0112438	\$257,711
Colton, John	w/ Van Huele, Jean-Francois	NSF		Physics Research at Brigham Young University. This record is for the parent award. The REU award for participant support costs is on R0112384.	7/1/2018	6/30/2021	R0112383	\$28,638
Colton, John	w/ Van Huele, Jean-Francois	NSF		REU Site: Physics Research at Brigham Young University. This record is for the Participant Support Costs portion of the overall award.	7/1/2018	6/30/2021	R0112384	\$59,885
Corte, Dennis Della	w/ Price, Josh	NIH		Predictive Structure-based Guidelines for Identifying Optimal PEGylation Sites within Proteins and Understanding the Context-Dependence of Non-covalent Interaction Strength	5/1/2020	3/31/2023	R0102102	\$217,875
Frandsen, Benjamin		DOE		Probing Short-Range Structure and Magnetism In Next-Generation Energy Conversion Materials	9/1/2020	8/31/2021	R0202542	\$143,184
Gee, Kent		ONR	DOD	Connecting analyses of installed tactical jet engine noise with simulated and laboratory-scale data.	12/4/2020	12/13/2023	R0202547	\$90,000
Gee, Kent	w/ Transtrum, Mark	BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$10,000
Gee, Kent	w/ Transtrum, Mark	BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$20,000
Gee, Kent	w/ Transtrum, Mark	BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$20,000
Gee, Kent	w/ Transtrum, Mark	BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$20,000
Gee, Kent		BRRC	DOD	Advanced Non-Linear Acoustic Modeling- AICU Studies and Noisemap Enhancements	12/10/2018	4/30/2020	R0302830	\$12,795
Gee, Kent		National Institute of Aerospace	NASA	Analysis of sonic boom measurement variability	9/17/2020	2/28/2022	R0302944	\$123,630
Hart, Gus	w/ Homer, Eric	NSF		Discovering the Building Blocks and Structure Property Relationships of Grain Boundaries using Machine Learning	8/15/2019	7/31/2022	R0112402	\$70,000

Hart, Gus		Materials Design	Naval Nuclear Laboratory	Advanced Materials Simulation Engineering Tool (AMSET) MLP Project Phase I	5/1/2020	4/30/2021	R0302904	\$110,000
Hintz, Eric	w/ Stephens, Denise	The New York Community Trust		Funds to Purchase a New Computer and Storage for soon to be installed 24-inch Telescope	12/1/2019	11/30/2020	R0502319	\$1,450
Hirschmann, Eric	w/ Neilsen, David	NASA		Binary black hole waveforms for LISA using numerical relativity	1/7/2020	1/6/2023	R0162042	\$55,000
Hirschmann, Eric	w/ Neilsen, David	NASA		Binary black hole waveforms for LISA using numerical relativity	1/7/2020	1/6/2023	R0162042	\$8,950
Hirschmann, Eric	w/ Neilsen, David	NASA		Binary black hole waveforms for LISA using numerical relativity	1/7/2020	1/6/2023	R0162042	\$21,632
Leishman, Timothy		Institute for Scientific Research in Music		Optimization of Anechoic Musical Instrument Recordings	8/25/2020	8/10/2021	R0502337	\$25,000
Neilsen, David		NASA		Binary black hole waveforms for LISA using numerical relativity	1/7/2020	1/6/2023	R0162042	\$55,000
Neilsen, David		NASA		Binary black hole waveforms for LISA using numerical relativity	1/7/2020	1/6/2023	R0162042	\$8,950
Neilsen, David		NASA		Binary black hole waveforms for LISA using numerical relativity	1/7/2020	1/6/2023	R0162042	\$21,632
Neilsen, Traci		KSA	DOD	Through the Sensor Statistical Inference Module (SIM) for Assessing Predictions made on SSNs	12/15/2018	12/31/2020	R0302848	\$66,793
Ragozzine, Darin		NASA		Homogeneous Photodynamical Analysis of Kepler's Multiply-Transiting Systems	1/19/2018	1/18/2021	R0162033	\$116,235
Ragozzine, Darin		Arizona State University	NASA	Haumea: Internal Structure and Collisional Family	10/12/2018	10/11/2021	R0302844	\$38,550
Ragozzine, Darin		Space Telescope Science Institute	NASA	16306.003 - Toward a more complete understanding of Haumea's family tree	12/1/2020	11/30/2023	R0302962	\$17,341
Sandberg, Richard		SLAC National Accelerator Laboratory	DOE	Development of high resolution, single shot, dynamic x-ray imaging	2/11/2020	9/30/2024	R0302895	\$14,673
Sandberg, Richard		SLAC National Accelerator Laboratory	DOE	Development of high resolution, single shot, dynamic x-ray imaging	11/1/2019	9/30/2022	R0302895	\$77,875
Sandberg, Richard		SLAC National Accelerator Laboratory	DOE	Development of high resolution, single shot, dynamic x-ray imaging	2/11/2020	9/30/2024	R0302895	\$79,243
Sandberg, Richard		Los Alamos National Laboratory	DOE	Development of rapid, three dimensional, nanometer scale x-ray imaging	9/14/2020	5/14/2021	R0302942	\$43,062
Sommerfeldt, Scott		Caterpillar		Acoustic Modeling of Resonators and Development of a Multi-Driver Volume Velocity Source	1/1/2014	12/31/2021	R0602437	\$86,035
Stephens, Denise		The New York Community Trust		Funds to Purchase a New Computer and Storage for soon to be installed 24-inch Telescope	12/1/2019	11/30/2020	R0502319	\$1,450
Transtrum, Mark	w/ Price, John	NIH		Biochemical Consequences of Regiospecific Metabolic Bias in the Brain	5/15/2020	2/28/2021	R0102103	\$154,081
Transtrum, Mark		NSF		NSF CAREER- Connecting Mathematical Models Across Scales	4/15/2018	3/31/2023	R0112376	\$167,059

Transtrum, Mark		NSF		NSF CAREER- Connecting Mathematical Models Across Scales	4/15/2018	3/31/2023	R0112430	\$8,941
Transtrum, Mark		Cornell University	NSF	Center for Bright Beams	10/1/2016	9/30/2020	R0302718	\$20,000
Transtrum, Mark		Cornell University	NSF	Center for Bright Beams	10/1/2016	9/30/2020	R0302718	\$12,528
Transtrum, Mark		Cornell University	NSF	Center for Bright Beams	10/1/2016	9/30/2020	R0302718	\$96,588
Transtrum, Mark		BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$10,000
Transtrum, Mark		BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$20,000
Transtrum, Mark		BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$20,000
Transtrum, Mark		BRRC	Army	Acoustic Background Noise Analysis for Mission Planning and Community Noise	12/13/2018	9/25/2020	R0302825	\$20,000
Transtrum, Mark	w/ Neilsen, Traci	KSA	DOD	Through the Sensor Statistical Inference Module (SIM) for Assessing Predictions made on SSNs	12/15/2018	12/31/2020	R0302848	\$66,793
Turley, Steve		NSF		Steve Turley Intergovernmental Personnel Act (IPA) Assignment from NSF	1/2/2018	1/1/2020	R0112373	\$2,723
Turley, Steve		Arizona State University	NSF	Updating the Octopus Extreme Ultraviolet Measurement System for Student Research	5/1/2020	9/30/2020	R0302925	\$450
Van Huele, Jean-Francois		NSF		Physics Research at Brigham Young University. This record is for the parent award. The REU award for participant support costs is on R0112384.	7/1/2018	6/30/2021	R0112383	\$28,638
Van Huele, Jean-Francois		NSF		REU Site: Physics Research at Brigham Young University. This record is for the Participant Support Costs portion of the overall award.	7/1/2018	6/30/2021	R0112384	\$59,885
Statistics								
Heaton, Matt	w/ Hansen, Neil	Utah State University	USDA	Identifying Stacked Conservation Practices that Optimize Water Use in Agriculture	7/1/2019	5/31/2022	R0302891	\$16,819
Heaton, Matt		University of Utah	NASA	Historical and Future Precipitation and Glacier Changes in High Mountain Asia	8/17/2020	8/16/2021	R0302960	\$40,140
Reese, Shane	w/ Heaton, Matt	University of Utah	NASA	Historical and Future Precipitation and Glacier Changes in High Mountain Asia	8/17/2020	8/16/2021	R0302960	\$40,140
Tolley, Dennis	w/ Woolley, Adam	NIH		3D-Printed Integrated Microfluidic Devices for Preterm Birth Biomarker Analysis	7/1/2020	6/30/2021	R0102090	\$85,932
Tolley, Dennis	w/ Iverson, Brian	Perkin Elmer		Compact Next-generation GC and MS Instrumentation	1/1/2020	12/31/2020	R0602633	\$22,488

College of Physical & Mathematical Sciences

Source Breakdown

Sponsor	Total Amount
Federal	
DOE	\$191,616
NASA	\$287,397
Naval Air Warfare Center Weapons Division	\$148,817
NIH	\$1,952,899
NSA	\$12,960
NSF	\$2,207,285
ONR	\$203,000
Total	\$5,003,974
Federal Subcontract	
Arizona State University	\$39,450
BRRC	\$152,795
Carnegie Mellon University	\$350,871
Cornell University	\$129,116
Fred Hutchinson Cancer Research Center	\$37,557
Georgia Institute of Technology	\$97,500
JPL	\$152,977
KSA	\$133,585
Los Alamos National Laboratory	\$128,617
Materials Design	\$110,000
National Institute of Aerospace	\$123,630
Oregon State University	\$80,000
Rice University	\$32,144
Scripps Research Institute	\$240,000
SLAC National Accelerator Laboratory	\$171,791
Space Telescope Science Institute	\$17,341
University of Illinois	\$89,250
University of Utah	\$111,688
Utah State University	\$16,819
Vanderbilt University Medical Center	\$37,200
Total	\$2,252,331

Private/Other	
Caterpillar	\$86,035
Chevron Phillips Chemical	\$150,000
ConocoPhillips	\$73,980
FCLTech	\$51,938
Institute for Scientific Research in Music	\$25,000
Jain Foundation	\$266,060
Latitude	\$15,003
Magellan Bioanalytics	\$25,000
Moxtek	\$45,000
N8 Medical	\$78,000
Perkin Elmer	\$22,488
Phillips 66	\$100,000
Restek Corporation	\$65,000
Rio Tinto Kennecott	\$20,000
Simons Foundation	\$58,800
The New York Community Trust	\$2,900
University of Victoria	\$35,000
University of Washington	\$58,363
Verde	\$2,000
Total	\$1,180,566
Grand Total	\$8,436,871

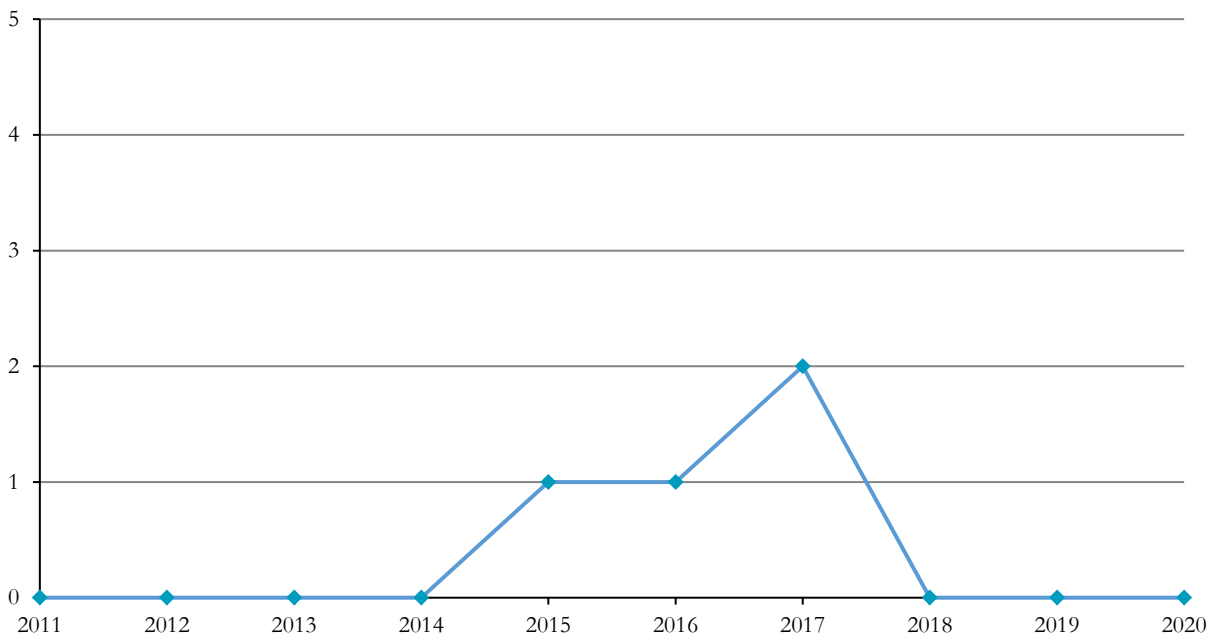
Religious Education



Summary by Departments

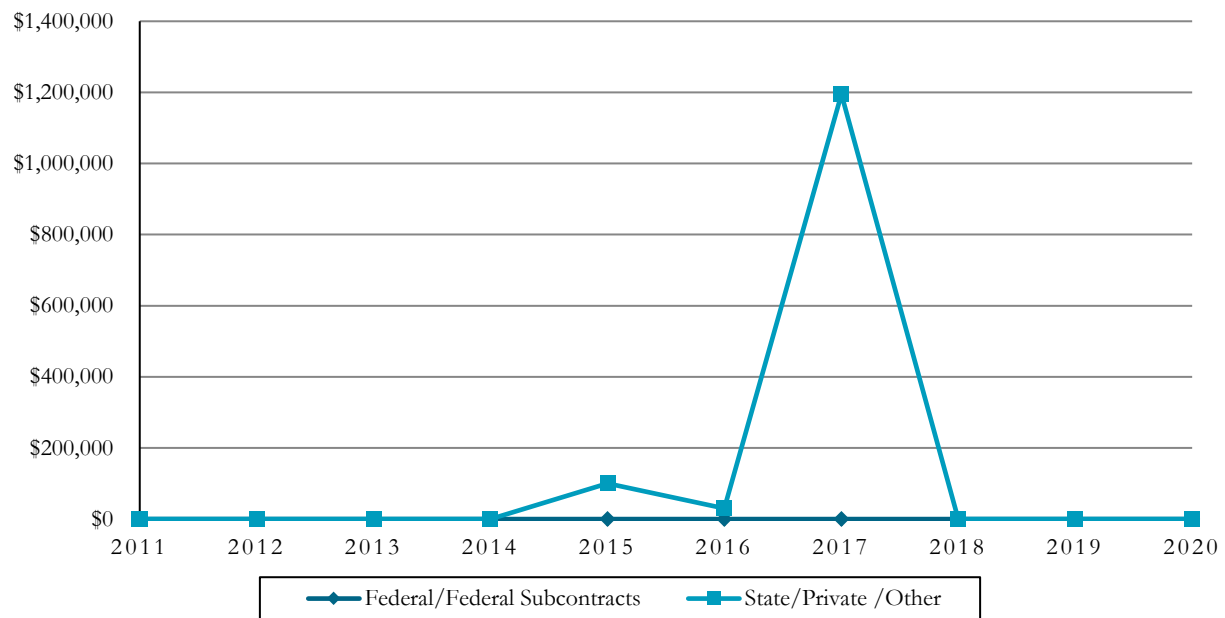
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Ancient Scripture	0	0	0	\$0
Church History & Doctrine	0	0	0	\$0
<i>TOTALS</i>	0	0	0	\$0

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$0	\$0	\$0
2012	\$0	\$0	\$0
2013	\$0	\$0	\$0
2014	\$0	\$0	\$0
2015	\$0	\$100,000	\$100,000
2016	\$0	\$30,000	\$30,000
2017	\$0	\$1,194,811	\$1,194,811
2018	\$0	\$0	\$0
2019	\$0	\$0	\$0
2020	\$0	\$0	\$0



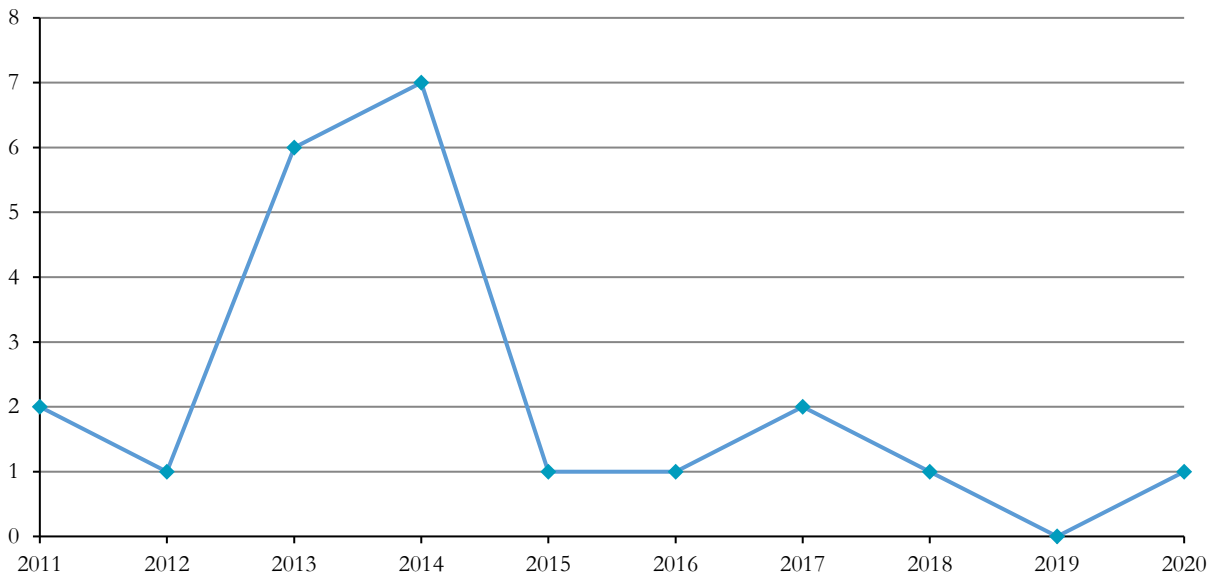
Non-College Units



Summary by Units

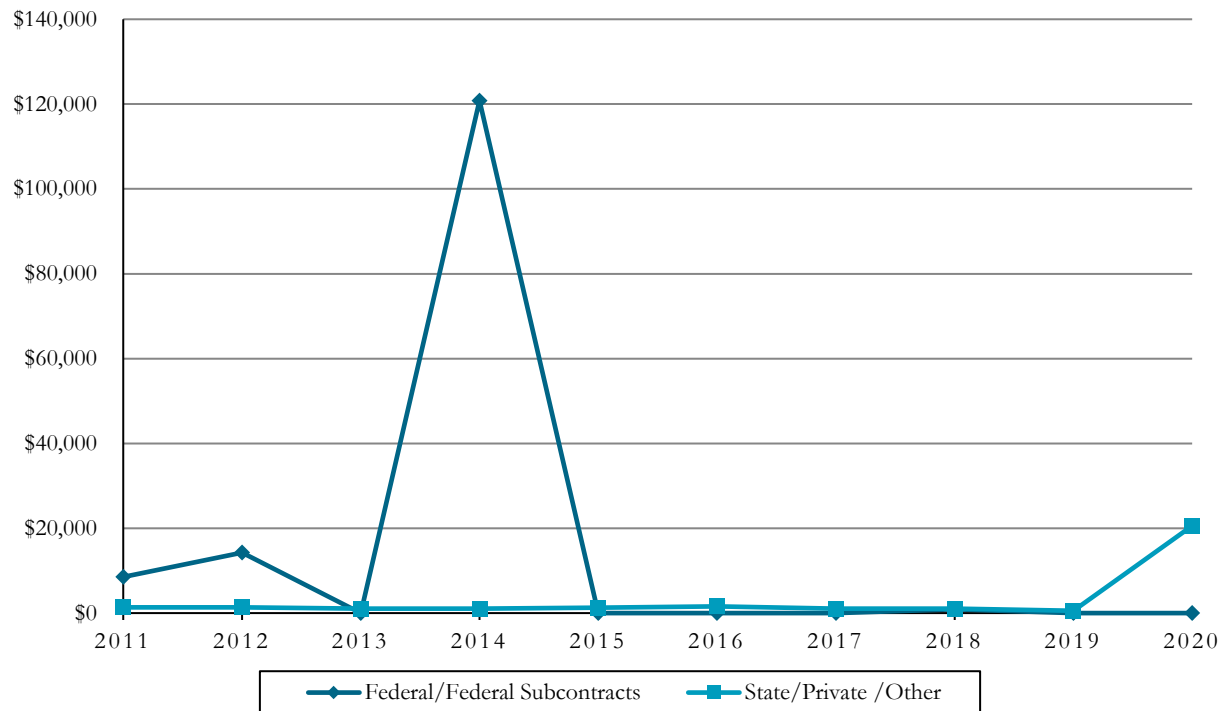
Department	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Harold B. Lee Library	1	1	1	\$20,000
Research Administration Office	0	0	4	\$572
TOTALS	1	1	5	\$20,572

Proposal Submissions



Awards by Sources

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private /Other	
2011	\$8,500	\$1,335	\$9,835
2012	\$14,281	\$1,380	\$15,661
2013	\$0	\$1,047	\$1,047
2014	\$120,816	\$1,066	\$121,816
2015	\$0	\$1,300	\$1,300
2016	\$0	\$1,588	\$1,588
2017	\$0	\$1,045	\$1,045
2018	\$935	\$1,027	\$1,962
2019	\$0	\$550	\$550
2020	\$0	\$20,572	\$20,572



Non-College Units 2020 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Prime Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Account</u>	<u>Amount</u>
Harold B. Lee Library								
Whitchurch, Michael		William and Flora Hewlett Foundation		Developing a Model/Framework for OER Implementation in Higher Education	3/20/2020	1/31/2021	R0502324	\$20,000
Research Administration Office								
Garrett, Sandy		Lost Paws		Vet Practicum	9/11/2006	12/31/2025	R0602182	\$92
Garrett, Sandy		Lost Paws		Vet Practicum	9/11/2006	12/31/2025	R0602182	\$127
Garrett, Sandy		Lost Paws		Vet Practicum	9/11/2006	12/31/2025	R0602182	\$153
Garrett, Sandy		Lost Paws		Vet Practicum	9/11/2006	12/31/2025	R0602182	\$200

Non-College Units Source Breakdown

Sponsor	Total Amount
Private/Other	
Lost Paws	\$572
William and Flora Hewlett Foundation	\$20,000
Total	\$20,572
Grand Total	\$20,572

Compliance Committees



There are a number of federal, state, and university regulations which are intended to ensure the safety and well-being of those associated with research and creative activities at academic institutions. The Research Administration Office specifically supports three university committees and provides other certifications as needed. This page contains a record of official actions taken by these committees during the January 2020 through December 2020 time period. In addition to those official actions, the committee—their individual chairs and members—and the RAO staff actively reviewed facilities, developed and updated policies, and educated the university research community on pertinent issues. The following is a brief description of each committee.

The Human Research Protections Program (HRPP)/Institutional Review Board (IRB)

The purpose and responsibility is to protect the rights and welfare of human subjects. The HRPP provides administrative and regulatory support to the IRB and collaborates with ancillary committees across campus who develop, approve and facilitate human research. IRB reviews and oversees such research to ensure that it meets well established ethical principles and that it complies with federal regulations at 45 CFR 46 and 21 CFR 50 and 56, that pertain to human subject protection.

The HRPP/IRB are established to review all BYU human subjects research regardless of the source of funding. All research involving human subjects/human materials, and all other activities which even in part involve such research, regardless of sponsorship, are subject to these policies and procedures if one or more of the following apply:

- The research is sponsored by institutional authorities; and/or
- The research is conducted by or under the direction of any employee, faculty, staff, student or agent of the Institution in connection with his or her institutional responsibilities.

In 2020, the IRB reviewed 511 new protocols and approved 460 studies. There were also approximately 91 on-going approved studies. 2020 marked the first complete year all human research applications were submitted, tracked, and stored on iRIS, the new online submission system. Studies were not automatically transitioned to the online system; principal investigators were required to enter on-going studies from 2019 to the system for IRB review. Although the COVID-19 pandemic may have affected some research activities, investigators were still active transitioning their studies to iRIS.

The Institutional Animal Care and Use Committee (IACUC)

The IACUC ensures appropriate housing, care, and humane treatment of animals used in research or other academic activities. RAO supports this committee and maintains the university's "Assurance" status with federal agencies. The "Assurance" document is a way of accrediting BYU to maintain and work with laboratory animals. During 2020, there were 95 active IACUC protocols. The IACUC reviewed 17 new protocols and 22 amendments; there were also over 200 other administrative actions.

The Institutional Biosafety Committee (IBC)

The IBC supervises the use of recombinant DNA and other biological safety and hazard issues at BYU. The Institutional Biosafety Committee must review all proposed experiments and approve such in advance of actual work. As with the other committees listed above, IBC has jurisdiction over any recombinant DNA experiments on campus—be they a part of funded or unfunded research or part of instructional activities. During 2020, there were 62 active IBC protocols. The IBC reviewed 17 new protocols and 18 amendments; there were also 25 other administrative actions.

Appendix 1



The Research Administration Office

Purpose

The office exists to support students, staff, faculty, and BYU administration in their efforts to encourage and support research, creative activities, and other expressions of academic scholarship.

Functional Organization

The office is organized to provide service to sponsored research and creative activities and to provide supportive leadership to such policy matters as appropriate. The office is under the direction of the Associate Academic Vice President for Research and Graduate Studies. The office has a close relationship with the Technology Transfer Office and the Creative Works Office for coordination of certain pre-award contracts, with the Grants & Contracts Accounting Office for post-award grant and contract administration, and with the Faculty Personnel Office for payment of research compensation.

Personnel

Director: Gene Larson

Associate Director, Sponsored Projects: Debbie Silversmith

Research Administrator: Susie Quartey

Research Administrator: Jeff Ballew

Associate Director, HRPP: Sandee Aina

IRB Administrator: Wayne Larsen

IRB Secretary: Stephanie Coyne

IRB Secretary: Emily Gneiting

Associate Director, IACUC/IBC: Jason Jay

IACUC/IBC Secretary: Regina McCarthy

University Veterinarian & Associate Director, LARC: Sandy Garrett

Lab Animal Resource Center (LARC) Manager: Russ Matheson

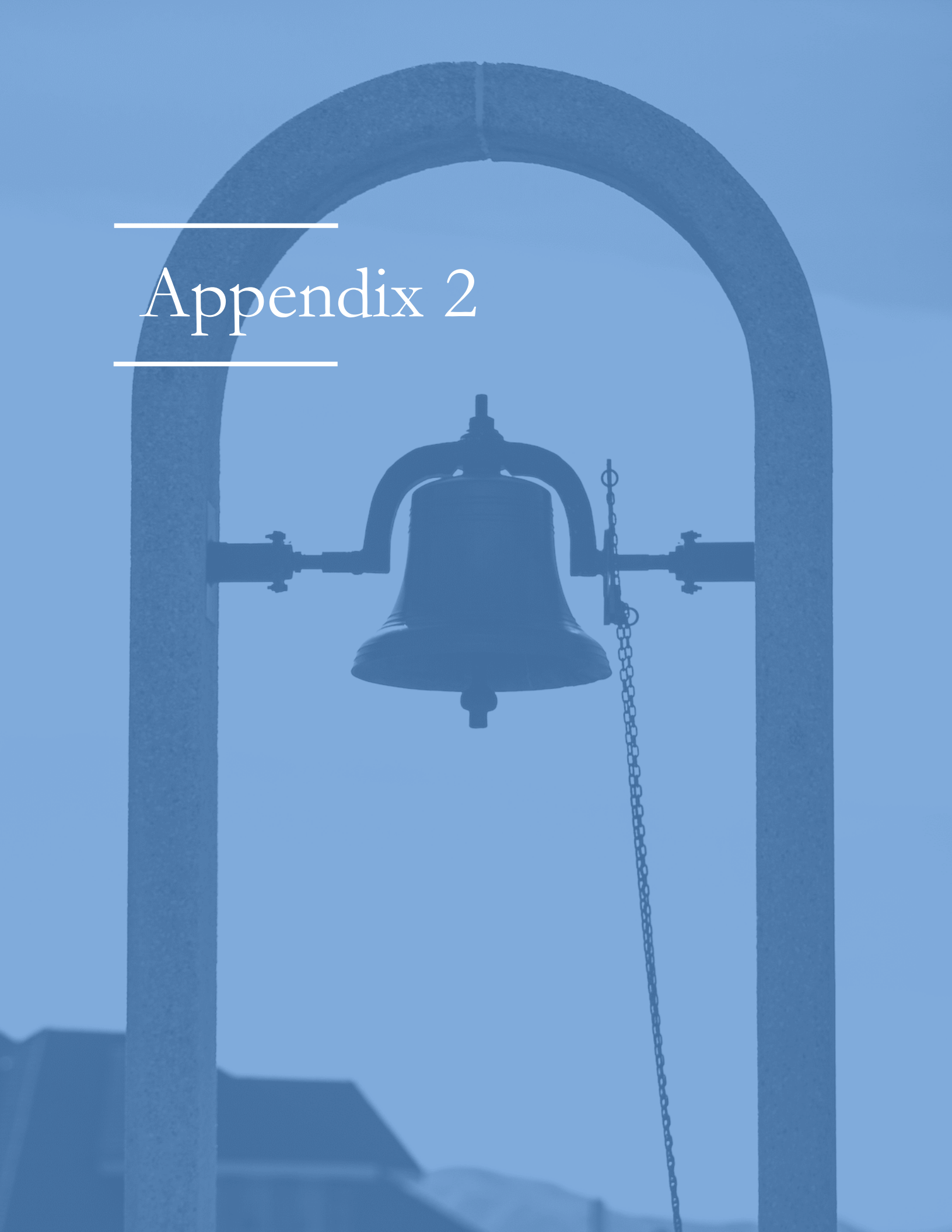
Assistant LARC Manager: Sarah O'Laughlin

Systems Administration Manager: Rachel Teki

- 1) Policy Review and Development
 - ◆ Develop policies and procedures to foster research.
 - ◆ Publish policy brochures for dissemination to campus community.
 - ◆ Update BYU policies relevant to research and creative activities in the electronic handbook.
 - ◆ Monitor research accounts in conjunction with Grants & Contracts Accounting (GCA) to assure compliance with contract requirements, government regulations, and BYU policy.
- 2) Opportunity Coordination
 - ◆ Represent the university's research program to other research organizations, funding agencies, and other universities.
 - ◆ Monitor requests for proposals and deadlines.
 - ◆ Work with Research Development to disseminate information on funding opportunities to faculty.
 - ◆ Maintain PIVOT subscription to assist faculty in research funding searches.
- 3) Proposal Preparation and Submission
 - ◆ Provide support for faculty in using Kualu.
 - ◆ Coordinate the preparation of large, inter-collegiate, and inter-institutional research proposals.
 - ◆ Assist with proposal budgets and proposal processing for signatures.
 - ◆ Assist in developing process/software for budgets and forms.
 - ◆ Assist in creating, reviewing, approving, and submitting proposals in Kualu and to sponsors.
- 4) Negotiating and Interacting with Sponsors
 - ◆ Negotiate and manage grants and contracts.
 - ◆ Interface with sponsoring agencies to maintain awareness of research funding trends.
- 5) Compliance with Federal Regulations and Other Requirements
 - ◆ Monitor government regulations pertaining to federal grants and contracts.
 - ◆ Work with the Inventory Office to manage government property to assure compliance with federal regulations.
 - ◆ Assure compliance with reporting requirements and manage closeout documentation.
 - ◆ Oversee three compliance committees and assist them through secretarial support for meetings, correspondence, and proposal approval.
- 6) Negotiating and Interfacing with Subcontractors and Independent Contractors/Consultants
 - ◆ Negotiate terms of agreements or subcontracts.
 - ◆ Monitor agency regulations and BYU policy and procedures for stipulations concerning subcontracts and/or independent consultants/contractors.
 - ◆ Prepare contracts, amendments, payment documents, and initiate processing through the university.
 - ◆ Administer contractual terms between prime contractor (BYU) and subcontractors and or/consultants.

- 7) Project and Account Management (Post-Award)
 - ◆ Control assignment of account numbers and coordinate activation with GCA.
 - ◆ Monitor research accounts in conjunction with GCA to assure compliance with contract requirements, government regulations, and BYU policy.
 - ◆ Assist GCA with audits of project accounts.
 - ◆ Assure compliance with reporting requirements and manage closeout documents.
 - ◆ Act as a liaison between researchers and sponsors to facilitate management of projects.
 - ◆ Coordinate re-budget requests with GCA, PI, and Sponsors.
- 8) Financial Management
 - ◆ Document cost sharing processes and approvals.
 - ◆ Prepare and publish yearly financial reports in RAO Annual Report.
 - ◆ Monthly financial reports available on demand in Kual.
 - ◆ Process incoming funds from sponsors.
 - ◆ Monitor university compliance with appropriate federal and state financial regulations.
 - ◆ Assist with completion of annual audits.
- 9) University Negotiations/Trouble Shooting
 - ◆ Participate in DHHS indirect costs justification.
 - ◆ Direct negotiations with sponsors on problems such as termination or nonpayment of invoices.
- 10) Office Management
 - ◆ Host Annual Sponsored Research Luncheon and present Sponsored Research Award.
 - ◆ Assist in budget management and accounting of RAO accounts.
 - ◆ Compile an annual report of university research activities.
 - ◆ Monitor and compile Full-time Equivalency reports.
 - ◆ Assist in preparation of reports, NCE, and closeouts.
 - ◆ Maintain RAO website (<http://rao.byu.edu>).
 - ◆ Maintain back-up of RAO files.
 - ◆ Reconcile and merge CITI training records.
 - ◆ Grant access to users of iRIS.

Appendix 2



Compliance Obligations (As Per Federal Statute or Regulation)

The following pages list those areas where formal compliance to federal statutes and regulations is required to participate in federal funding. The full list is included to illustrate the range of possible certification or other compliance. Specific grants and contracts may involve only a subset of these compliance obligations.

Regulatory Framework

- Uniform Guidance
- Federal Acquisition Regulations (FAR)
- Defense Federal Acquisition Regulations (DFAR)
- Department of Energy Acquisition Regulations (DEAR)
- USAID Acquisition Regulations (AIDAR)
- HIPPA
- FFATA
- ITAR/EAR
- RCR – NSF
- E-Verify
- The Coordinated Review Process-Executive Order 12372
- Rights to Inventions Made by Nonprofit Organizations and Small Business Firms
- Compliance Information for Specific Circumstances
 - Facilities Management
 - Historic Preservation
 - Paperwork Reduction Act

Individual Rights

- Antidiscrimination
 - Civil Rights Act of 1964—Title VI
 - Employment of the Handicapped-Rehabilitation Act of 1973
 - Americans with Disabilities Act
 - Title IX—Sex Discrimination
 - Age Discrimination
 - Equal Employment Opportunity
 - Affirmative Action for Special Disabled and Vietnam Era Veterans
 - Utilization of Women-Owned Small Business
 - Utilization of Labor Surplus Area Concerns
 - Utilization of Small and Small Disadvantaged Business Concerns

Privacy

- Privacy Act of 1974
- Freedom of Information Act
- Confidentiality of Patient Records

Protection Issues

- Environmental Protection
 - Clean Air Act and Clean Water Act
 - Hazardous Materials

- Protection of Living Organisms
 - Human Subjects Compliance
 - Use of Animals in Research
 - Marine Mammal Act
 - Research Involving Recombinant DNA Molecules

Employee Directives

- Drug-free Workplace
- Drug-free Work Force
- Drug-free Schools and Campuses Act
- Lobbying
- Occupation Safety and Health
- David Bacon Act
- Walsh-Healey Public Contracts Act
- Service Contract Act
- Contract Work Hours and Safety Standards Act of 1962

Fraud, Waste, and Abuse

- Misconduct in Science
- Procurement Integrity
- Debarment and Suspension
- Covenant Against Contingent Fees
- Anti-Kickback Act of 1986
- Officials Not to Benefit

Specific Administrative Requirements

- General Requirements
 - Buy American Act
 - Fly American Act
 - Competition in Contracting
 - Export Administration Act and Arms Export Control Act
 - Insurance-Immunity from Tort Liability
 - Prompt Payment
 - Non-delinquency of Federal Debt
 - Certificate of Current Cost and Pricing Data
 - Acknowledgment of Federal Grant Support (Stevens Amendment)