

OFFICE OF SPONSORED PROGRAMS

ANNUAL
REPORT
2017-2018



Dear Colleagues,

The late anthropologist Zora Neale Hurston once said “Research is formalized curiosity. It is poking and prying with a purpose.” Research allows us to use our innate human curiosity to learn something new, gather evidence from the world around us, and use the information gathered to communicate with others. Whether it is the scholar in the classroom, the scientist in the laboratory, the technician in the field, or the artist on the stage, research creates a space to see the world in new ways. It allows us to tap into our curiosity, open our minds, and encourage discussion. The core mission of the Office of Sponsored Programs is to provide quality service and support to the University research and scholarly community.

In this report, I invite you to peruse the remarkable work of our academic, creative, and scholarly community. There is no doubt that the new faculty who have joined our community over the last few years are advancing USD’s mission and the goals outlined in *Envisioning 2024*. As you read through these pages, I invite you to embrace your curiosity, to ask questions, to learn something new, and to share what you learn with others. It is through this inquisitive process that partnerships are formed and collaborative teams are created.

If you are already a member of the research, creative, and scholarly community featured in these pages, I thank you for all of your accomplishments and look forward to seeing what you accomplish moving forward. To all who read this report, I encourage you to discover something that may be new to you and to take action. Converse with someone from another academic unit, invite a new faculty member to lunch and bring them into your conversation. It is by partnering together and engaging scholars across disciplines that groundbreaking discoveries are made. Together, we lead USD into the future and prepare our students to enter the world as curious, compassionate leaders.

I look forward to speaking with each of you as we build our research community together.

Best Regards,



Traci L. Merrill, CRA
Director, Office of Sponsored Programs



Katie Bamburg, Joanne Draper, Traci Merrill, Leisa Rodriguez, Marina Goro

	SUBMISSIONS		AWARDS	
	Number of Proposals	Funding Requested	Number of Awards	Funding Awarded
Total FY 2018	140	\$30,978,301	93	\$11,389,673
Total FY 2017	144	\$25,541,760	109	\$9,935,403

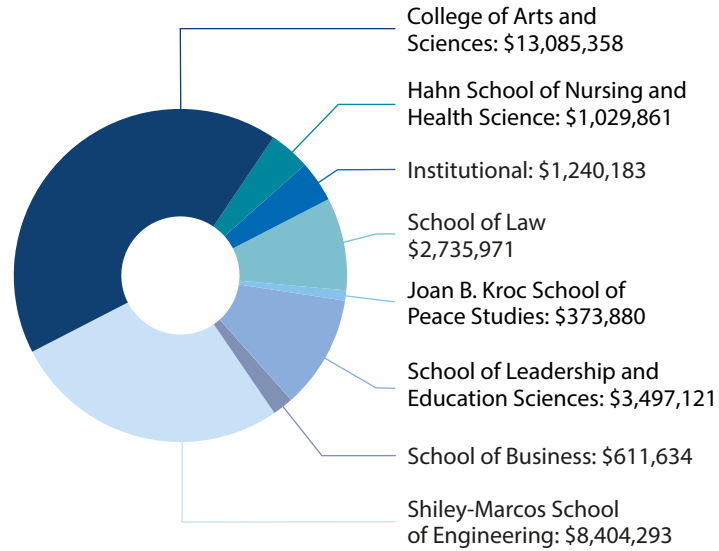
PROPOSALS

140 PROPOSALS VALUED AT \$30,978,301

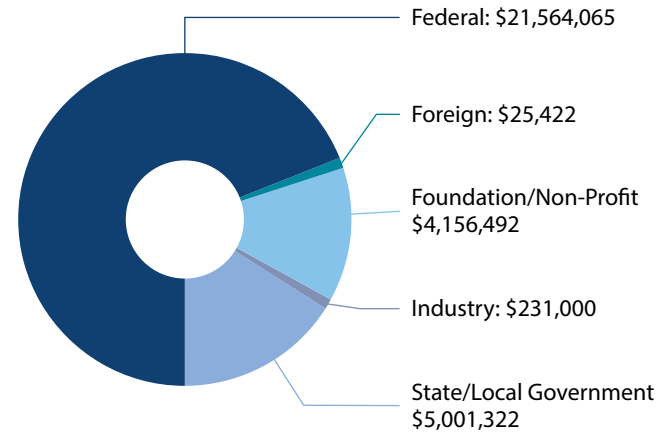
AWARDS

93 AWARDS VALUED AT \$11,389,673

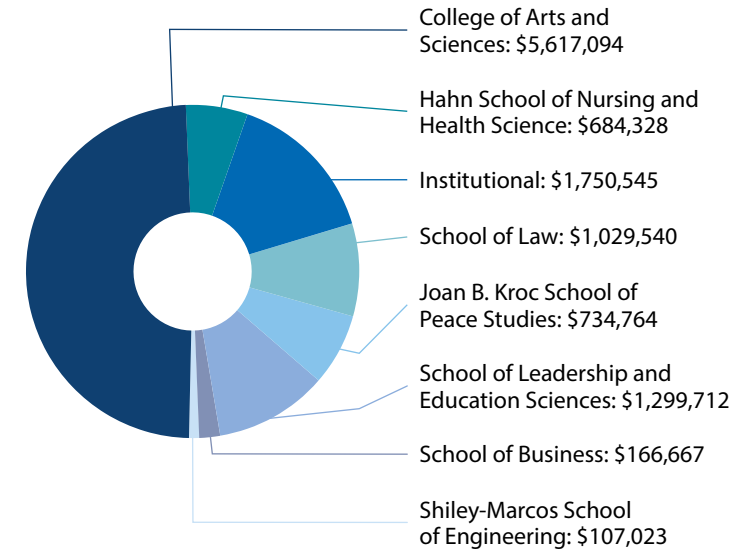
BY SCHOOL



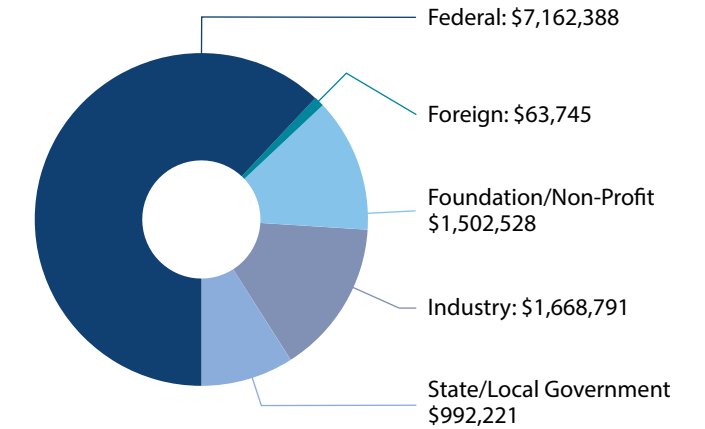
BY SPONSOR



BY SCHOOL



BY SPONSOR





College of Arts and Sciences: Art, Architecture + Art History

Maxim, Juliana

College of Arts and Sciences: Biology

Boersma, Kate*

Danos, Nicole*

Fleming-Davies, Arietta*

Morse, Geoffrey

College of Arts and Sciences: Chemistry and Biochemistry

Bell, Anthony*

Bell, Jessica

Bell, John

Benz, Lauren

Clark, Timothy

De Haan, David

Gillette, Eleanor*

Provost, Joseph

Schellinger, Joan

College of Arts and Sciences: Environmental and Ocean Sciences

Boudrias, Michel

Prairie, Jennifer

Reyns, Nathalie

Talley, Drew

College of Arts and Sciences: Ethnic Studies

Diaz, Josen*

College of Arts and Sciences: History

Barton, Thomas

College of Arts and Sciences: Mathematics

Devadoss, Satyan*

Hoffoss, Linda*

Myers, Perla

Price, Candice*

College of Arts and Sciences: Physics and Biophysics

Kishimoto, Chad*

Robertson-Anderson, Rae

Severn, Gregory

College of Arts and Sciences: Political Science and International Relations

Rodriguez Ferreira, Octavio*

Shirk, David

College of Arts and Sciences: Psychological Sciences

Blaser, Rachel

Hales, Jena*

Sitaraman, Divya

College of Arts and Sciences: Sociology

Martinez, Cid

College of Arts and Sciences: Theology and Religious Studies

Babka, Susan*

Hahn School of Nursing and Health Science

Connelly, Cynthia

Fry-Bowers, Eileen

Fuller, Martha*

Georges, Jane

Macauley, Karen

Marsh, Kathyann

Roth, Patricia

Institutional: Center for Health and Wellness Promotion

Lynch, Stephanie*

Institutional: Facilities Management

Catanzaro, Michael

Institutional: Institute for College Initiatives

Villis, Cynthia

Institutional: Mission and Ministry

Bishop, Erin

Institutional: Office of the President

Harris, James*

Joan B. Kroc School of Peace Studies: Center for Peace and Commerce

Kakkad, Amitkumar

Joan B. Kroc School of Peace Studies: Institute for Peace and Justice

Blum, Andrew

Bradshaw, Jennifer*

Medina, Tina*

School of Business

Gomez, Jaime

Kannan-Narasimhan, Rangapriya

Mueller, Jennifer

Rusk, Mysty

School of Law

Fox, Dov

Sichelman, Ted

School of Law: Legal Clinics

Austin, Eric

Muth, Robert

School of Law: Center for Public Interest Law

Anders, Scott

Fellmeth, Robert

Silva-Send, Nilmini

Weichel, Elisa

School of Leadership and Education Sciences

Callahan, Wendell*

Lattimer, Heather

Patterson, Jo Ellen

Popov, Vitaliy*

School of Leadership and Education Sciences: Nonprofit Institute

Deitrick, Laura

Green, Zachary*

Schumann, Mary Jo

Sulpizio, Lorri

Shiley-Marcos School of Engineering

Abbasi, Shaghayegh

Dalrymple, Odesma

Hoople, Gordon*

Khalil, Imane

Kim, Jae

Kohl, James

Mejia, Joel*

Roberts, Chell

Romney, Gordon*

Shastri, Subramanian*

*Individuals who submitted an outgoing proposal as lead principal investigator through OSP for the first time during FY 2017-2018.

NEW FACULTY SUBMITTERS

"It is no surprise that USD is home to some of the best and brightest faculty members, invested in the rich exploration of discovering the world that surrounds us. We are honored to recognize the work of 11 intellectually adventurous new faculty members who come to us with the curiosity and compassion necessary to address the many real and immediate challenges we face as an academic community. Submitting grant proposals as lead Principal Investigators in their very first year as faculty at USD is quite the challenge. USD is proud to support their academic journey."
— Dr. Gail F. Baker, Vice President and Provost



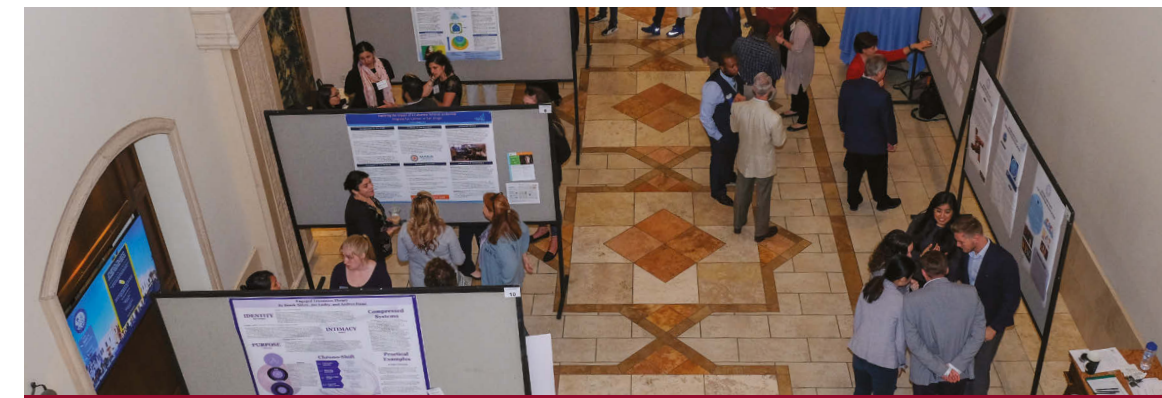
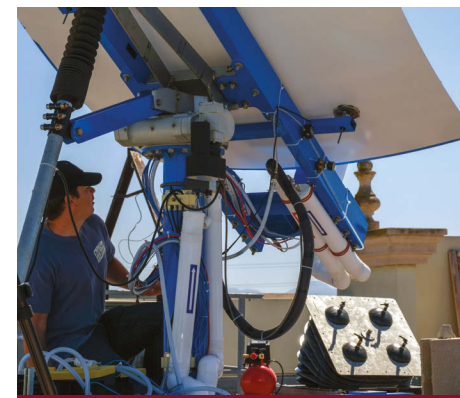
Anthony Bell, Nicole Danos, Subramanian "Venkat" Shastri, Kate Boersma, Chad Kishimoto, Arietta Fleming-Davies, Gordon Romney, Eleanor Gillette, Satyan Devadoss, (not pictured: Joel "Alex" Mejia, Candice Price)

EXTERNALLY FUNDED AWARDS

93 AWARDS RECEIVED FOR A TOTAL OF \$11,389,673

Department	PI/Co-PIs	Sponsor	Project Title	Award
College of Arts and Sciences: Art, Architecture + Art History	Maxim, Juliana	Massachusetts Institute of Technology	Church Architecture in the Principality of Moldova, 1457-1600	3,300
	Maxim, Juliana	Massachusetts Institute of Technology	Wood Architecture in Eastern Europe, Russia, Scandinavia	2,300
	Maxim, Juliana	Graham Foundation	Architecture and the Housing Question	7,500
College of Arts and Sciences: Biology	Fleming-Davies, Arietta	Radford University / National Science Foundation	Biology undergraduate mathematics attitudes and anxiety program (BioMAAP)	62,167
College of Arts and Sciences: Chemistry and Biochemistry	Bell, Jessica	American Chemical Society	USD ACS SEED Program 2018	4,500
	Bell, Jessica	American Chemical Society, San Diego Section	USD ACS SEED Program 2018	3,000
	Bell, John; Bell, Jessica; Provost, Joseph	National Science Foundation	MDH CUREs Community, A Protein-Centric Approach	605,916
	Benz, Lauren	Research Corporation	Surface and Interfacial Chemistry of MOFs and MMMs	3,000
	Benz, Lauren	The Camille and Henry Dreyfus Foundation, Inc.	Surface Chemistry of Complex Materials	60,000
	Benz, Lauren	National Science Foundation	CAREER: Fundamental Investigation of Supported Materials: ZIFs and Nanocluster	17,616
	Clark, Timothy	Organic Syntheses Inc.	Phosphine-Directed meta-C-H Borylation: Facile Synthesis of Functionalized Phosphines	8,000
	Iovine, Peter	Northern Kentucky University Research Foundation / National Science Foundation	The TIM Consortium: A Dispersed REU Site in Theoretically Interesting Molecules	431
	Malachowski, Mitchell	Council on Undergraduate Research / National Science Foundation	Integrating and Scaffolding Research into Undergraduate STEM Curricula: Probing Faculty, Student, Disciplinary, and Institutional Pathways to Transformational Change	22,555
Schellinger, Joan	The Regents of the University of California, San Diego / National Aeronautics and Space Administration	Triphosphorylation Ribozymes for an RNA World: Peptide cofactors and nucleoside triphosphorylation	16,241	

Department	PI/Co-PIs	Sponsor	Project Title	Award
College of Arts and Sciences: Environmental and Ocean Sciences	Gray, Sarah	The University of Puerto Rico Sea Grant College Program / National Oceanic and Atmospheric Administration	Assessment of the Impact of Watershed Development and Restoration on Marine Sediment Dynamics, St. John, USVI	18,500
	Gray, Sarah	National Science Foundation	Collaborative research: GP-EXTRA: oceanographic shipboard and lab research for diverse students: experiential learning as a gateway to geoscience careers	160,793
	Kaufmann, Ronald	Antarctic Wildlife Research Fund	Reconstructing mesopelagic fish populations from biological samplers: a missing link in ecosystem based feedback management	49,796
	O'Shea, Bethany	Ninyo and Moore / The City of San Diego	Assessing the arsenic risk at Black Mountain Open Space Park, San Diego	2,437
	Prairie, Jennifer	National Science Foundation	CAREER: Small-scale plankton-aggregate dynamics and the biological pump: Integrating mathematical biology in research and education	53,800
	Prairie, Jennifer	Consortium For Ocean Leadership / National Oceanic and Atmospheric Administration	National Ocean Sciences Garibaldi Bowl (NOSB) 2018	9,000
	Reyns, Nathalie	The ALSAM Foundation a Utah Trust	Continuation and Enhancement of "Bridging the Gap"	125,000



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Department	PI/Co-PIs	Sponsor	Project Title	Award
College of Arts and Sciences: Mathematics	Hoffoss, Linda; Devadoss, Satyan	San Diego Collaborative Arts Project	Unfolding Humanity	10,000
	Myers, Perla; Dalrymple, Odesma; Li, Yaoran; Popov, Vitaliy; Spencer, Joi	National Science Foundation	Bridging the World of Work and Informal STEM Education (STEMWoW)	300,000
	Price, Candice	National Science Foundation	Directed Reading Program	74,623
	Price, Candice	University of Nebraska-Lincoln / National Science Foundation	USTARS Collaboration Travel Grants	3,000



Department	PI/Co-PIs	Sponsor	Project Title	Award
College of Arts and Sciences: Mathematics	Shulman, Michael	Carnegie Mellon University / Department of the Air Force	Homotopy Type Theory: Unified Foundations of Mathematics and Computation	111,711
College of Arts and Sciences: Physics and Biophysics	Robertson-Anderson, Rae	National Science Foundation	CAREER: Elucidating the Material Properties of Complex Turnable Biopolymer Networks Using Single-Molecule Nono Stress-strain Transducers	100,000
	Robertson-Anderson, Rae	Department of the Air Force	Mapping molecular-level dynamics to mesoscale mechanics in composite DNA-based biomaterials	146,665
	Robertson-Anderson, Rae	Henry Luce Foundation	Clare Boothe Luce Professorship in Physics and Biophysics	499,998
	Severn, Gregory	U.S. Department of Energy	Collaborative Research: Understanding Sheaths and Presheaths in Magnetized and Unmagnetized Plasmas	55,000
College of Arts and Sciences: Political Science and International Relations	Shirk, David	U.S. Department of State: Bureau of INL	Continuation II: Oral Adversarial Skill-Building Immersion Seminar (OASIS)	2,400,000
College of Arts and Sciences: Psychological Sciences	Blaser, Rachel	Acadia Pharmaceuticals Inc.	Assessment of the Procognitive Effect of Pimavanserin in a Rat Model of Alzheimer's Disease	16,000
	McCabe, Kristen	National Institutes of Health	Personalizing Parent Training Interventions for Culturally Diverse Families	206,564
	Sitaraman, Divya	Howard Hughes Medical Institute	Neural control of sleep and arousal in Drosophila	11,585
	Sitaraman, Divya	National Institutes of Health	Dopamine modulation of sleep and arousal	366,409
College of Arts and Sciences: Sociology	Martinez, Cid	The California Endowment	Gun Violence	25,000
	Martinez, Cid	City of Sacramento	Sacramento Community Police Perceptions	54,688
Hahn School of Nursing and Health Science	Bush, Ruth	Agency for Healthcare Research and Quality	Adolescent Disease Autonomy using Patient Portal Technology (ADAPPT)	248,997
	Connelly, Cynthia	Farus, LLC / National Institutes of Health	Mobile Universally Compatible Fetal Monitoring System	47,680
	Fry-Bowers, Eileen; Forde, Dorothy	Western Institute of Nursing	The Association of Kangaroo Mother Care, Energy Conservation, and Bonding in Preterm Neonates	5,000
	Macauley, Karen	Office of Statewide Health Planning and Development	Imperial Valley Health Professions Career Fair	12,000

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Department	PI/Co-PIs	Sponsor	Project Title	Award
Hahn School of Nursing and Health Science	Macauley, Karen	Office of Statewide Health Planning and Development	Exploring Primary and Mental Health Careers for Linda Vista Youth	14,904
	Macauley, Karen	Office of Statewide Health Planning and Development	Song Brown Health Care Workforce Training Program	96,000
	Macauley, Karen; Sietsma, Alexandra	Office of Statewide Health Planning and Development	Public Mental/Behavioral Health Pipeline Program	150,000
	Mayo, Ann	The Regents of the University of California, San Diego / California Department of Public Health	Cognitive Decline in Hispanic Verses Non-Hispanic Alzheimer Caregivers	15,876
	Roth, Patricia	U.S. Health Resources and Service Administration	University of San Diego, Nurse Faculty Loan Program (NFLP)	93,871
Institutional: Facilities Management	Catanzaro, Michael	San Diego Gas and Electric Company	USD-SDG&E Partnership Program	1,186,681
	Catanzaro, Michael; Engeman, Laura	The San Diego Foundation	Collaboration for a Climate Smart San Diego	40,000
Institutional: Institute for College Initiatives	Villis, Cynthia	California Department of Education	Summer Food Service Program	9,187
	Villis, Cynthia	U.S. Department of Education	The Rock, The River, The Tree: USD Student Support Services	5,945
	Villis, Cynthia	U.S. Department of Education	The Rock, The River, The Tree: USD Upward Bound	263,938
	Villis, Cynthia	Institute for Mexicans Abroad	IME-Becas for Higher Education 2018	7,250
	Villis, Cynthia	U.S. Department of Education	The Rock, the River, the Tree: USD McNair Program	237,544
Joan B. Kroc School of Peace Studies	Blum, Andrew	U.S. Institute of Peace	RESOLVE Network Summer Institute Pilot	37,500
	Blum, Andrew; Carpenter, Ami	U.S. Department of Homeland Security	The Connected Youth-Resilient Communities Initiative: A Project to Build Resilience and Undermine Violent Extremist Recruitment in San Diego and El Cajon	634,769
	Freeman, Jennifer	Queen's University / North Atlantic Treaty Organization	Gender-Awareness Training and Best Practices within NATO	56,495
	Kakkad, Amitkumar	San Diego Diplomacy Council / Institute of International Education	Leveraging Strategic Innovation & Entrepreneurship for Long-Term Success	6,000



Department	PI/Co-PIs	Sponsor	Project Title	Award
School of Law	Ferruolo, Stephen	QUALCOMM Incorporated	The Qualcomm Intellectual Property Scholarship Program	225,000
	Sichelman, Ted	Google LLC	Support for Center for Intellectual Property Law and Markets (CIPLM) Activities	70,000
	Austin, Eric	U.S. Department of Treasury	USD Low Income Taxpayer Clinic (LITC)	100,000
	Austin, Eric	The State Bar of California	Support for USD Legal Clinics	67,550
	Austin, Eric	The State Bar of California	Support for USD Legal Clinics	111,630
	Austin, Eric; Muth, Robert	The State Bar of California	SD United: Increasing Access to Legal Services for Low Income Veterans	255,000
	Anders, Scott	Ascent Environmental, Inc. / County of San Diego	County Climate Action Plan Benefit Cost Analysis	11,000
	Anders, Scott; Silva-Send, Nilmini	Ascent Environmental, Inc.	Ascent Environmental Master Services Agreement	26,110
	Anders, Scott; Silva-Send, Nilmini	San Diego Association of Governments / Department of Transportation	SANDAG Climate Action Planning Support	75,250
	Fellmeth, Robert; Weichel, Elisa	The Barbara McDowell and Gerald S. Hartman Foundation	Right to Council Litigation	25,000
Weichel, Elisa	Price Philanthropies Foundation	Consulting/Research on Matters Impacting San Diego County Children and Youth	63,000	

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Department	PI/Co-PIs	Sponsor	Project Title	Award
School of Business	Gomez, Jaime; Lemon, Jason	Southwestern Community College District / U.S. Small Business Administration	2017 San Diego Technology Small Business Development Center	66,667
	Gomez, Jaime; Lemon, Jason	Southwestern Community College District / U.S. Small Business Administration	2018 San Diego Technology Small Business Development Center	100,000
School of Leadership and Education Sciences	Deitrick, Laura	Metropolitan Area Advisory Committee on Anti-Poverty	MAAC Leadership Development Pilot Program	15,000
	Deitrick, Laura	The City of San Diego	Evaluation of Commission of Arts and Culture's Requests for Qualifications Process	49,450
	Green, Zachary	IMAGO Global Grassroots	Zachary Green Consulting Services	75,000
	Lattimer, Heather	Da Vinci Schools / Educational Credit Management Corporation Foundation	DVX Post-secondary Pathways	50,000
	Lattimer, Heather	Perris Union High School District	Perris Union District Professional Learning	56,000
	Lattimer, Heather	San Diego Workforce Partnership	San Diego Workforce Partnership WoW Workshop	2,299
	Lattimer, Heather	Oceanside Unified School District	El Camino High School Summer Cohort 2017	15,000
	Lattimer, Heather	Oceanside Unified School District	El Camino High School 2017-2018 Professional Learning	8,000
	Lattimer, Heather	Monarch School	Monarch School	40,000
Lattimer, Heather; Yoder-Clark, Andrea	USS Midway Museum	Midway Youth Program Evaluation	30,000	

Department	PI/Co-PIs	Sponsor	Project Title	Award
School of Leadership and Education Sciences	Lebensohn-Chialvo, Florencia; Garland, Ann	U.S. Health Resources and Service Administration	Improving access to effective child and family services through integrated primary care	406,213
	Schumann, Mary Jo	Communities of Excellence 2026	Communities of Excellence Program Evaluation Planning	36,000
	Schumann, Mary Jo	Mitsubishi UFJ Financial Group, Union Bank Foundation	2017-2018 Refinement of Grantmaking Goals and Application Questions	7,450
	Schumann, Mary Jo	Zoological Society of San Diego	San Diego End Extinction Phase 1	129,500
	Schumann, Mary Jo	Social Advocates for Youth	San Diego Military Connected Ecosystem	20,000
	Schumann, Mary Jo	Elderhelp	HomeShare Program Evaluation	41,300
	Schumann, Mary Jo	San Diego County Office of Education	Local Child Care Policy Baseline Research	23,500
	Schumann, Mary Jo	California Association of Nonprofits	CalNonprofits Causes Count 2.0	140,000
	Sulpizio, Lorri	Academy of Our Lady of Peace, San Diego	High School Leadership Workshop	10,000
	Young, Emily	San Diego Gas and Electric Company	San Diego Climate Collaborative	145,000
	Shiley-Marcos School of Engineering	Mejia, Joel	TERC / National Science Foundation	Conference on Literacies in Engineering for Access and Participation
Mejia, Joel		Angelo State University / National Science Foundation	EAGER: PPER Developing Drought-Resilient Communities by Utilizing Acrylic Concrete Structures for Rainwater Harvesting	4,551
Roberts, Chell		National Security Agency	2018 GenCyber Academy of Excellence	98,096



The Strategic Planning Steering Committee launched the Strategic Initiative Funding Program in fall 2017. The program is open to all USD faculty, staff, and students. It creates an environment that fosters and rewards creativity, innovation and interdisciplinary opportunities. The fall 2017 awardees are highlighted on the Visionaries of 2024 website. These visionaries are now engaged in planning or implementing their initiatives that align with USD's mission, vision, strategic goals, and pathways. Various stakeholder groups throughout the campus community support the efforts of this program, OSP being one of them. OSP works with strategic initiative awardees to document their USD award and to develop future proposals for the furtherance of projects in support of USD's vision.

Department	PI/Co-PIs	Project Title
College of Arts and Sciences: Ethnic Studies	Lewis, Persephone	Goal 1 Western Science Meets Indigenous Ways of Knowing: Creating a Core Scientific Inquiry Course with Integration and Indigenous Science Resources
College of Arts and Sciences: Environmental and Ocean Sciences	Prairie, Jennifer; Maldonado, Elisa; Frausto, Ramiro	Goal 2 A Transformational Change: Undergrad Research
School of Leadership and Education Sciences: Nonprofit Institute	Young, Emily	Goal 3 Environment and Social Justice Leadership Hub
Institutional: Mulvaney Center	Loggins, John	Goal 3 Mapping the Pathways
School of Business	Kelly, Deborah; Vamosiu, Adriana	Goal 3 Paying it Forward
Institutional: Mulvaney Center	Silva, Maria	Goal 5 Bridging the Town and Gown
Shiley-Marcos School of Engineering	Mejia, Joel	Goal 5 Discovering the Engineer Within: Asset-based Approaches for Teaching and Revealing Engineering Knowledge for Low-income Students
School of Leadership and Education Sciences	Lattimer, Heather	Goal 5 E2E STEM Incubator
Shiley-Marcos School of Engineering	Lord, Susan	Goal 5 Engineering Exchange
College of Arts and Sciences: Ethnic Studies	Pulido, Alberto	Goal 5 The Turning Wheels Project



Novel Biopolymers

Hoffman
Engineering

University
of San Diego

Drug release profile in PBS solution
at 37°C, 150 rpm stirring

Drug Release

Preliminary