

AWARD TOTAL: \$53,361,004



Dr. Jeffrey T. Roberts, Dean

Office of the Dean



Dr. Catherine Atkins
Total: \$85,000

University of California at San Diego:
"San Diego Institutional Research and Academic Career Development Award (IRACDA): Professors for the Future," **\$85,000**



Dr. Lance Larson
Total: \$250,000

San Diego Cyber Center of Excellence (CCOE): "San Diego Regional Collaborate Cyber Security Clinic Consortium," **\$250,000**



Dr. Jeffrey Roberts
Total: \$43,750

Government of Georgia:
"Graduate Award for SDSU-Georgia Chemistry Program," **\$43,750**



Dr. Jose Castillo and Dr. Karen Campbell
Total: \$394,570

California Department of Conservation:
"Surface Expression Risk Assessment Phase II," **\$394,570**



Dr. Estralita Martin
Total: \$40,000

CSU Sacramento University Enterprises Inc.: "California State University Louis Stokes Science, Technology, Engineering, and Mathematics (STEM) Pathways and Research Alliance (CSU-LSAMP) National Science Foundation (NSF)," **\$15,000**; and "California State University Louis Stokes Science, Technology, Engineering, and Mathematics (STEM) Pathways and Research Alliance (CSU-LSAMP) Senior Alliance," **\$25,000**



Dr. Patrick Shoemaker
Total: \$65,105

U.S. Department of Defense Air Force Office of Scientific Research:
"Integrative Model of Dynamic Facilitation in Insect Vision," **\$65,105**



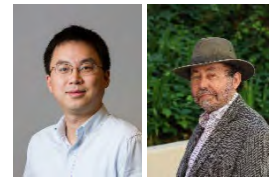
Dr. Eric Frost and Dr. Lance Larson
Total: \$124,999

University of Nebraska Omaha:
"Augmented Reality with Real-Time Artificial Intelligence for Border Security & Department of Homeland Security (DHS) Education and Workforce Development," **\$124,999**



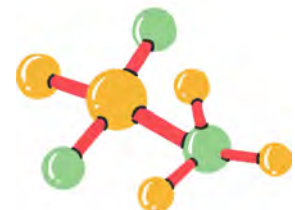
Dr. Stacy Ochoa Mikrut
Total: \$20,000

Stupski Foundation: "SDSU Stupski Advisor Support Collective," **\$20,000**



Dr. Bing Zhu and Dr. Jose Castillo
Total: \$12,108

The Henry Ford: "Web Archiving Service," **\$12,108**



Astronomy



Dr. Kate Rubin
Total: \$59,855

University of California at San Diego: "A Regional Model for Community College Transfer Success in Astronomy Degree Programs," **\$59,855**

Biology

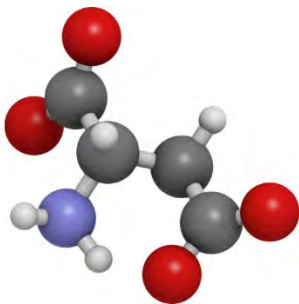


Dr. Sanford Bernstein
Total: \$602,380

National Institute of General Medical Sciences: "Administrative Diversity Supplement to Genetics and Molecular Biology of Striated Muscle Myosin," **\$61,185**; and "Genetics and Molecular Biology of Striated Muscle Myosin (MERIT extension application)," **\$541,195**

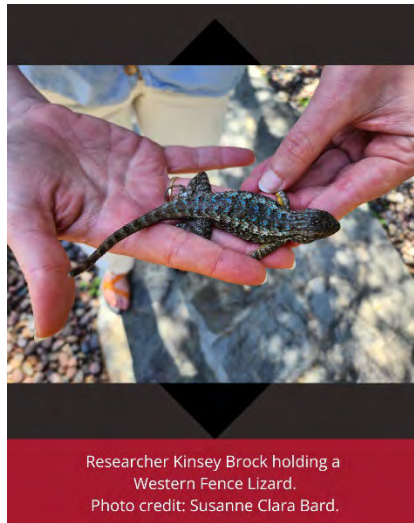


Jared Rafael Camillo, recipient of a diversity supplement from the National Institutes of Health, analyzes the molecular basis of cardiovascular disease.
Photo credit: Jennifer Suggs, Bernstein Lab.



Dr. Kinsey Brock
Total: \$10,000

California Institute for Biodiversity: "Rescuing the Herpetology Collection at San Diego State University," **\$10,000**



Researcher Kinsey Brock holding a Western Fence Lizard.
Photo credit: Susanne Clara Bard.



Dr. Kevin Burns
Total: \$49,000

National Science Foundation: "Migratory Genetics and Subspecies Intergradation in the Allen's Hummingbird (*Selasphorus sasin*) (Fellowship - S. Hood)," **\$49,000**



Dr. Maya Capelson
Total: \$726,314

National Institute of General Medical Sciences: "Nuclear Pore Complexes as Scaffolds for Genome Architecture and Epigenetic Maintenance," **\$651,064**

Icahn School of Medicine at Mount Sinai (ISMMMS): "Rejuvenation of Nuclear Pores During Oogenesis," **\$75,250**



Dr. Rulon Clark
Total: \$59,102

U.S. Department of the Interior Bureau of Reclamation: "Developing Bio-logging Tools for Informed Conservation of a Colorado Desert Flagship Species, the Flat-tailed Horned Lizard," **\$54,102**

San Diego Zoo Wildlife Alliance: "Behavior and Ecology of *Crotalus Ruber*, the Red Diamond Rattlesnake," **\$5,000**



Rulon Clark at SDZWA rattlesnake research site.
Photo credit: Susanne Clara Bard.



Dr. Richard Cripps
Total: \$531,685

National Institute of General Medical Sciences: "Molecular Genetic Analysis of MEF2 Function in *Drosophila*," **\$431,685**

Saving Tiny Hearts Society: "Defining Mechanisms of Second Heart Field Development and Disease," **\$100,000**



Dr. Matthew Edwards
Total: \$233,945

California Sea Grant College Program: "Universal Hatchery System for Developing New Seaweed Strains for Land-based Aquaculture Production," **\$33,509**

Dr. Matthew Edwards cont.
 U.S. Department of Education
 Discoveries: "Training Catalina Island
 Marine Institute (CIMI) Staff in
 Underwater Survey Techniques," **\$6,900**

San Diego Unified Port District:
 "Positive Species Interactions: Measuring
 Effects on Eelgrass Growth and
 Restoration," **\$104,820**

University of Southern California:
 "Research and Restoration of Giant Kelp
 at Catalina Island, Proof of Principle,"
\$88,716



Dr. Svasti Haricharan
Total: \$1,507,817

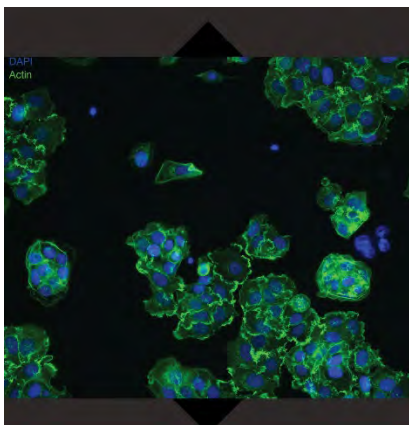
American Cancer Society: "DNA Damage
 Repair and CHEK2 Mediated Endocrine
 Therapy Resistance in Breast Cancer,"
\$626,938

Burnham Institute for Medical Research:
 "A Role for DNA Repair Proteins in
 Regulating Cancer Cell Stemness and the
 Immune Microenvironment to Prevent
 Metastasis," **\$21,671**

National Cancer Institute: "Regulation of
 the Tumor Microenvironment by DNA
 Damage Repair Proteins," **\$584,209**

The Conrad Prebys Foundation:
 "Social Determinants of Disparity in
 Breast Cancer Outcome," **\$25,000**

University of California at San Diego:
 "SDSU-UCSD MCC Recruitment via
 FUERTE Grant," **\$250,000**



Loss of some proteins can cause dysregulation of cell
 shape, potentially resulting in increased metastasis.
 Photo credit: Megha Raghunathan.



Dr. Marshal Hedin
Total: \$167,864

California Institute for Biodiversity:
 "Research Training in Biological
 Collections at the San Diego State
 University Biodiversity Museum," **\$24,633**

Texas Parks and Wildlife Department:
 "Texas Cave Invertebrate Phylogenomics
 and Databasing," **\$143,231**



Dr. Carrie House
Total: \$526,463

Burnham Institute for Medical Research:
 "Role of TWEAK in the Development of
 Ovarian Cancer Stem-like Cells - L.
 Santiago," **\$54,240**

National Cancer Institute: "Alternative NF-
 kB Activation in Post-chemotherapy
 Setting to Elucidate Novel Mechanisms of
 Ovarian Cancer Relapse," **\$387,223**

The Conrad Prebys Foundation:
 "Role of Preadipocytes in Ovarian Cancer
 Progression and Obesity Related
 Outcomes," **\$25,000**

Vaxiion: "Efficacy, Immune Mechanism(s),
 and Pharmacokinetic/Biodistribution
 Properties of Vaxiion's Investigational
 Minicell Product Intended for use in
 Cancer," **\$60,000**



Dr. Kevin Hovel
Total: \$49,000

National Science Foundation:
 "Indirect Effects of Climate Change on
 Blue Mussels via Changes to Mussel
 Parasitism - J. Griffin," **\$49,000**



Dr. Megan Jennings
Total: \$95,000

U.S. Department of the Interior United
 States Geological Survey:
 "Southern California Innovation
 Landscapes Coordination," **\$75,000**

University of California Office of the
 President: "Strategic Growth Council
 Community Engagement S/Hero
 Supplement," **\$20,000**



**Dr. Megan Jennings
 and Dr. Rebecca Lewison**
Total: \$257,039

U.S. Department of Commerce National
 Oceanic and Atmospheric Administration:
 "An Integrated Framework for Drought
 Response in Southern California's Natural
 Landscapes," **\$257,039**



Dr. Marina Kalyuzhnaya
Total: \$331,186

PharmaIN Corporation: "C1 SmartBiomes:
 Performance and Scale-Up," **\$331,186**



**Dr. Marina Kalyuzhnaya
 and Dr. Elizabeth Waters**
Total: \$237,682

U.S. Department of Energy Office of
 Science: "BER-RENEW iSAVE: New Energy
 Sciences Workforce to Advance
 Innovations in Sustainable Arid
 Vegetation," **\$237,682**



Dr. Scott Kelley
Total: \$34,765

University of California at San Diego:
"Investigating the Role of Puberty in the Sex-Specific Maturation of the Gut Microbiome - L. Sisk-Hackworth," **\$34,765**



Dr. Chun-Ta Lai
Total: \$38,263

Orange County: "Stable Water Isotope Analysis to Quantify Potable Water Contribution to Outfall and Stream Water Flows in Orange County, California," **\$38,263**



Dr. Rebecca Lewison
Total: \$566,977

Auburn University: "CNH-L: People, Place, and Payments in Complex Human-Environment Systems," **\$96,759**

Coastal States Stewardship Foundation:
"FaCeT/NROC collaboration on Open Science for Highly Migratory Species," **\$82,233**

National Cancer Institute:
"San Diego State University Advancing Cancer Careers for Excellence (ACCEL)," **\$322,757**

Woods Hole Oceanographic Institute:
"Operationalizing Dynamic Ocean Management Tools to Support a Climate-ready Network of Protected Areas in the North Atlantic," **\$65,228**



Dr. Rebecca Lewison and Dr. Megan Jennings
Total: \$61,575

California Department of Fish and Wildlife: "Evaluating Population Persistence for Desert Bighorn Sheep in the Peninsular Ranges, California," **\$61,575**



Dr. Jeremy Long
Total: \$85,444

U.S. Department of Defense U.S. Navy:
"Studying the Impacts of Non-native Species on Native Marine Invertebrates in Support of Black Abalone on San Nicolas Island," **\$36,444**

National Science Foundation:
"Determining the Driving Factors of the Corynactis Associational Refuge - Fellowship X. Boone," **\$49,000**



Dr. Robert Lualien
Total: \$575,213

National Institute of General Medical Sciences: "Understanding the Mechanisms of Intracellular Filamentation by Bacteria," **\$376,250**

National Science Foundation:
"CAREER: Examining Bacterial Filamentation as a Mechanism for Cell-to-cell Spreading in an Animal Host," **\$198,963**



Dr. Luke Miller
Total: \$195,603

University of Michigan:
"Habitat Heartbeats: Incorporating Bivalve Biosensors into Estuary Monitoring Infrastructure to Inform Water Quality Monitoring and Management Decisions," **\$195,603**



Dr. Teresa Monkkonen
Total: \$25,000

University of California at San Diego:
"Cancer Associated Fibroblast Response to Chemotherapy in Triple Negative Breast Cancer," **\$25,000**



Dr. Walter Oechel
Total: \$151,177

City College of New York: "National Oceanic and Atmospheric Administration (NOAA) Cooperative Science Center for Earth System Sciences and Remote Sensing Technologies-II," **\$151,177**



Dr. Angelica Riestra
Total: \$250,000

The Conrad Prebys Foundation:
"Investigating Molecular Mechanisms of Trichomonas Vaginalis Pathogenesis," **\$250,000**





Dr. Dwayne Roach
Total: \$364,374

CFD Research: "Flexible Microfluidic Process Technology for Biopharmaceutical Purification of Bacteriophages," **\$176,874**; and "Portable Phage Preparation Technology for Field Application," **\$187,500**



Dr. Ty Roach
Total: \$91,179

Michigan State University: "The Role of Betaine Lipid Biochemistry in Coral Thermal Tolerance," **\$91,179**



Dr. Forest Rohwer
Total: \$182,017

U.S. Department of Defense Naval Information Warfare Center (NIWC): "Coral Reef Arks: A Cost-effective and High-return Tool for Restoration and Conservation of Coral Reef Resources on DoD Submerged Lands," **\$135,996**

National Science Foundation: "Collaborative Research: ECO-CBET: From Molecules to Sustainable Reef Platforms: Engineering Ecosystems for Coral Recruitment and Survival," **\$16,021**

The Gordon and Betty Moore Foundation: "Desert Arks Meeting," **\$30,000**



Dr. Anca Segall
Total: \$243,922

Washington University in St. Louis: "Novel Experimental and Computational Resources for Virome Analysis in Inflammatory Bowel Disease," **\$243,922**



Dr. Arun Sethuraman
Total: \$124,190

National Science Foundation: "CAREER: Developing New Computational Methods to Address the Missing Data Problem in Population Genomics," **\$124,190**



Dr. Nicholas Shikuma
Total: \$595,526

National Institute of General Medical Sciences: "Examining a Unique Contractile Injection System Mediating Host-Microbe Interactions," **\$373,321**

National Science Foundation: "CAREER: Determining How Bacteria Stimulate Animal Metamorphosis," **\$222,205**



Dr. Elizabeth Waters
Total: \$47,118

Santa Barbara Botanical Garden: "Understanding and Protecting Boechera Bodiensis using Genetics, Morphological Characterization, and Conservation Seed Bank," **\$47,118**



Dr. Xiaofeng Xu
Total: \$278,428

National Science Foundation: "CAREER: Integrating a Microbial Data System with an Earth System Model for Evaluating Microbial Biogeochemistry," **\$139,191**

University of California at Davis: "Translating Carbon Accumulation from Soil Aggregates into Agricultural Practices," **\$139,237**



Dr. Ricardo Zayas
Total: \$95,386

Burnham Institute for Medical Research: "A BRN3/POU4 Homolog is Required for Mechanosensory Neuron Regeneration in Planarians - M. Auwal," **\$41,146**; and "SoxB1-mediated Chromatin Remodeling in Stem-cell-based Tissue Regeneration - M. Cathell (Palatucci)," **\$54,240**



Mr. Thomas Zink
Total: \$139,243

U.S. Department of Defense Army Corps of Engineers: "San Clemente Island Botany Program Implementation," **\$136,346**

TideWater, Inc.: "Erosion Control at IR Site 1 on San Clemente Island," **\$2,897**



Dr. Donatella Zona and Dr. Walter Oechel
Total: \$149,457

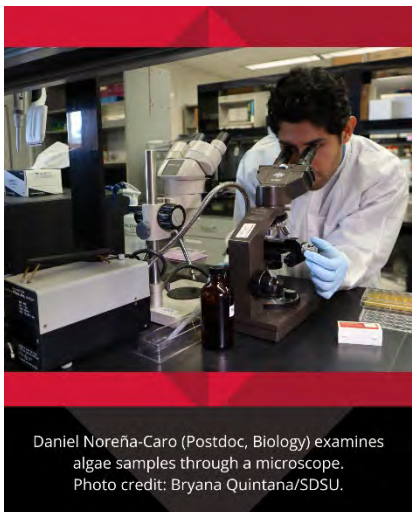
National Science Foundation: "Multi-decadal Year-round CO₂ and CH₄ Fluxes to Understand Long-term Impact of Climate Change on the Arctic Carbon Balance," **\$149,457**





Dr. Nancy Zuniga Pena
Total: \$50,000

NASA Office of Stem Engagement:
"Better Space Parties with Algae-Enriched Guacamole," **\$50,000**



Daniel Noreña-Caro (Postdoc, Biology) examines algae samples through a microscope.
Photo credit: Bryana Quintana/SDSU.

Chemistry and Biochemistry



Dr. Rees Garmann
Total: \$50,000

Regents of the University of California:
"Mirror" Cloaking of Therapeutic Payloads," **\$50,000**



Dr. Douglas Grotjahn
Total: \$187,908

U.S. Department of Energy Office of Science: "Improving and Measuring Water Oxidation Catalyst Viability," **\$187,908**



Dr. Jing Gu and Dr. Yong Yan
Total: \$220,335

U.S. Department of Energy Office of Science: "Manipulate Spin Selectivity via Chiral Molecules in Solar Energy Conversion," **\$220,335**



Dr. Jeffrey Gustafson
Total: \$394,962

National Institute of General Medical Sciences: "MIRA: Atropisomerism as an Inspiration for Drug Discovery and New Chemistry," **\$374,962**

Pfizer Inc.: "Utilizing Dihedral Angle Control to Obtain Selective Diarylamine Kinase Inhibitors (Fellow Alyssa Gomez)," **\$20,000**



Dr. Gregory Holland
Total: \$885,581

U.S. Department of Defense Air Force Office of Scientific Research: "Elucidating the Intrinsically Disordered State, Supramolecular Assembly and Protein Condensates in Natural Materials Formation," **\$799,901**



Dragline spider silk is collected from a black widow. Photo credit: Dr. David Onofrei, a research scientist in the Holland Lab.

U.S. Department of Defense U.S. Army: "Structural Biology of Aciniform Spider Silk Guides Biomimetics for a New Class of Biomaterials," **\$85,680**



Dr. Tom Huxford
Total: \$436,858

California Metabolic Research Foundation: "Arne N. Wick Fellowship for Evan Wood," **\$49,508**; and "Arne N. Wick Predoctoral Fellowship for JDP Student Paata Burnadze," **\$47,250**

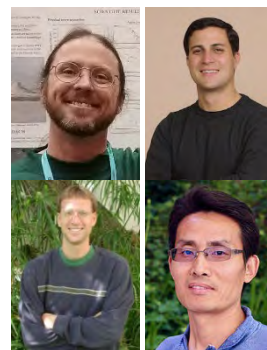
California Metabolic Research Foundation: "Enzyme Regulation, Lipid and Carbohydrate Metabolism," **\$200,100**

Rees-Stealy Research Foundation: "2023-25 Rees-Stealy Research Foundation Fellowship," **\$140,000**



Dr. Youngkwang Lee
Total: \$222,620

National Science Foundation: "CAREER: Mechanisms Controlling Signaling Reactions on Membranes through Molecular Assembly at Multiple Length Scales," **\$222,620**



Dr. David Lipson, Dr. Nicholas Barber, Dr. Scott Kelley, and Dr. Xiaofeng Xu
Total: \$982,308

National Science Foundation: "Collaborative Research: Linking Microbial Social Interactions Within Soil Aggregate Communities to Ecosystem C, N, and P Cycling," **\$982,308**



Dr. John Love
Total: \$300,000

National Institute of Food & Agriculture:
"Using Artificial Intelligence and Robust Protein Design Methods for Highly Efficient Production of Milk Proteins via Bacterial Fermentation," **\$300,000**



Dr. Laura-Isobel McCall
Total: \$3,518,672

Baylor School of Medicine:
"Mechanisms of Myocarditis and Progressive Cardiac Fibrosis in Chronic Trypanosoma Cruzi Infection," **\$139,336**

Burroughs Wellcome Fund:
"Role of Spatial Metabolic Heterogeneity in Disease Tropism," **\$257,054**

Chan Zuckerberg Initiative:
"Bystander Metabolic Effects of Infection Across Scales," **\$499,996**

National Institute of Allergy and Infectious Diseases: "Deciphering the Mechanism of Action of Carnitine, a Novel Treatment for Chronic Chagas Disease," **\$757,592**; "Novel Single-cell Mass Spectrometry Methods to Assess the Role of Intracellular Drug Concentration and Metabolism in Antimicrobial Treatment Failure," **\$726,154**; "An LCMS-guided Bioanalytical Approach for Rational Natural Product Library Design and Optimization," **\$470,777**

National Science Foundation:
"OSIB: Metabolic Cartography of Influenza A Virus Infection and Host-pathogen Interaction in the Natural and Accidental Host." **\$667,763**



Dr. Christal Sohl
Total: \$890,157

National Institute of General Medical Sciences: "Isocitrate Dehydrogenase (IDH) Mutations as Drivers of Organelle Stress and Dysfunction," **\$376,250**; and "Maximizing Access to Research Careers (MARC) at San Diego State University," **\$513,907**



Sohl lab members present their work on the role of enzymes in cancer at SDSU's S3.
Photo credit: Elene Albekioni.



Dr. Manal Swairjo
Total: \$542,431

National Institute of General Medical Sciences: "RNA Modification: Mechanism and Links to Other Metabolic Pathways," **\$416,431**

Portland State University:
"7-deazaguanines in DNA: Mechanism and Structure of Complex Genome Modification," **\$126,000**



Dr. William Tong
Total: \$418,546

National Science Foundation:
"Collaborative Research: Micro Level Oxygen Transport Mechanisms in Elite Diving Mammals: Capillary Red Blood Cell (RBC) to Myofiber," **\$418,546**



Dr. Yong Yan
Total: \$659,970

National Institute of General Medical Sciences: "Light-Induced Atroposelective N-Heterocyclization via Chiral Perovskite Nanocrystals," **\$376,250**

National Science Foundation:
"CAREER: Tuning Perovskite with Transition Metal Cation-Exchange/Doping Towards Photoredox Complex Organic Synthesis," **\$283,720**



Dr. Yong Yan and Dr. Jing Gu
Total: \$115,000

Alliance for Sustainable Energy LLC:
"Center for Hybrid Organic Inorganic Semiconductors for Energy (CHOISE)," **\$115,000**

Computer Science



Dr. Bryan Donyanavard
Total: \$175,000

National Science Foundation:
"Predicting Perception Failure in Realtime Mobile Autonomous Systems," **\$175,000**



Dr. Hajar Homayouni
Total: \$40,000

Computing Alliance of Hispanic Serving Institutions (CAHSI): "SUDeC: A Scalable Framework for User-defined Spatial Clustering Queries on S2 Spherical Coordinate System," **\$40,000**



Dr. Kai Li
Total: \$228,071

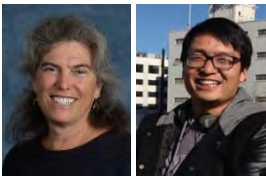
Ethereum Foundation: "Discovering DoS Attacks in Peer Discovery Protocols of Ethereum P2P Networks," **\$53,144**

National Science Foundation: "Towards a Secure and Efficient Blockchain P2P Network with Client Diversity," **\$174,927**



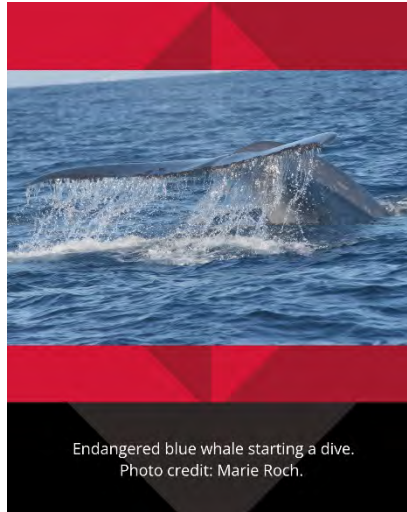
Dr. Marie Roch
Total: \$142,553

U.S. Department of Defense U.S. Navy: "Capability Enhancements for Tethys," **\$142,553**



Dr. Marie Roch and Dr. Xiaobai Liu
Total: \$151,715

U.S. Department of Defense Office of Naval Research: "Machine Learning Detection of Cetacean Tonal Calls Without Human Annotations," **\$151,715**



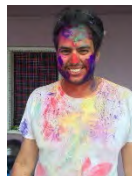
Endangered blue whale starting a dive.
Photo credit: Marie Roch.



Dr. Hoa Vu
Total: \$200,000

National Science Foundation: "Algorithms and Machine Learning in Data Intensive Models," **\$200,000**

Earth and Environmental Sciences



Dr. Rafael Almeida
Total: \$69,981

U.S. Department of the Interior United States Geological Survey: "Geologic Mapping of the West Mountain Peak and Castle Cliff 7.5 Quadrangles in the Beaver Dam Mountains, SW Utah," **\$69,981**



Dr. Samantha Bova
Total: \$239,554

National Science Foundation: "Collaborative Research: Long Term Perspective on the Holocene CO2 Conundrum: The Role of Southern Westerly Winds," **\$239,554**



Dr. David Kimbrough
Total: \$15,000

University of Wisconsin - Eau Claire: "IRES: Track 1: RUI: Collaborative Research: The Permo-Triassic Choiyoi Silicic Large Igneous Province: Regional Volcanic Framework and Potential Impact on Global Climate," **\$15,000**



Dr. Shuo Ma
Total: \$13,750

University of Southern California: "Generation of Near Source Broadband Ground Motion from Physics-based Dynamic Rupture Simulations: Continuing A Group Modeling Approach Towards Better Characterizing Seismic Hazard for Engineering Applications," **\$13,750**



Dr. Jillian Maloney
Total: \$46,809

Oregon State University: "Archaeological Investigation of Washington Continental Shelf," **\$46,809**



Dr. Kim Olsen
Total: \$211,729

California Department of Conservation: "Calibration of the Near-surface Seismic Structure in the Southern California Earthquake Center (SCEC) Community Velocity Model Version S," **\$39,442**

U.S. Department of the Interior United States Geological Survey: "Investigation of Basin Structure Models Developed with Chronostratigraphic, Lithological, and Seismic Data through Ground Motion Simulations: Collaborative Research with SDSU and CalTech," **\$63,972**

Dr. Kim Olsen cont.

University of Southern California:
"CyberShake Study 22.12," **\$35,000**;
"Generation and Validation of a Southern California Earthquake Center (SCEC) Multi-scale Community Velocity Model," **\$34,279**; "Validation of 3D Broadband (0-25 Hz) Ground Motion Simulations for Northern, Central and Southern California," **\$29,036**; "Validation of SDSU Module on Southern California Earthquake Center (SCEC) Broadband Platform (BBP) for Large-magnitude Earthquakes," **\$10,000**

Mathematics and Statistics



Dr. Christopher Curtis
Total: \$30,000

U.S. Department of Defense Office of Naval Research: "Mathematical Data Science in the Ionosphere," **\$30,000**



Dr. Kyle Hasenstab and Dr. Henry Scharf
Total: \$157,724

University of California at Santa Barbara: "PALiSaDS: Pacific Alliance for Low-Income Inclusion in Statistics & Data Science," **\$157,724**



Dr. Richard Levine, Dr. Kyle Hasenstab, and Dr. Henry Scharf
Total: \$34,180

University of California at Santa Barbara: "Southern California Consortium for Data Science," **\$34,180**



Dr. Antonio Palacios
Total: \$195,865

U.S. Department of Defense Naval Information Warfare Center (NIWC): "Synchronization of Coupled Nonlinear Oscillators and Signal Reconstruction," **\$195,865**



Dr. Mary Pilgrim
Total: \$426,170

National Science Foundation: "Collaborative Research: Mathematics Graduate Teaching Assistant Professional Development Focused on Engaged Learning, Inclusive Teaching, and Equity (ELITE PD) – Supplement," **\$426,170**



SDSU PI Mary E. Pilgrim, USD research consultant Hayley Milbourne, VCU PI Pablo Duran Oliva, and OSU PI Mary Beisiegel at the 2024 Conference on Research in Undergraduate Mathematics. Photographer unknown.



Dr. Chris Rasmussen
Total: \$749,651

National Science Foundation: "Making Upper Division Mathematics Courses More Relevant for Future High School Teachers: The Case of Inquiry-Oriented Dynamical Systems and Modeling," **\$748,901**

Dr. Chris Rasmussen cont.

San Jose State University Foundation: "Developing Virtual Reality-Mediated Representational Tools for Supporting and Enhancing Deep Mathematical Understanding of Linear Algebra Relationships," **\$750**



Dr. Samuel Shen
Total: \$1,572,358

National Science Foundation: "AI2ES Expansion on 4D Space-time Organization of Geophysical Processes, Visualization Tools, and Workforce Development," **\$1,572,358**



Dr. Osvaldo Soto
Total: \$200,000

Jewish Community Foundation San Diego: "Continued Support for Summer Math Teacher PD and Student Math Academies," **\$200,000**



Dr. Xin Wang
Total: \$219,249

National Science Foundation: "Clustered Regression Models Based Estimators in Small Area Estimation," **\$214,625**

University of Virginia: "Heterogeneous Impacts of the USDA ReConnect Broadband Program on Broadband Speeds, Housing Values, and New Housing Construction," **\$4,624**





Dr. William Zahner
Total: \$496,012

National Science Foundation:
"A Sample Study of College Calculus
Education Ecosystem: The Supply from
Community and 4-Year Colleges and the
Demand from Engineering Programs,"
\$352,772

University of Rochester Warner School of
Business: "Creating a Model for
Sustainable Ambitious Mathematics
Programs in High-Need Settings:
A Researcher-Practitioner Collaboration
AWD00003651," **\$143,240**

Physics



Dr. Sanjay Behura
Total: \$63,651

University of Arkansas at Pine Bluff:
"Temperature-Dependent Topological
Moiré Excitons in Twisted Transition
Metal Dichalcogenides for Quantum
Photonics," **\$63,651**

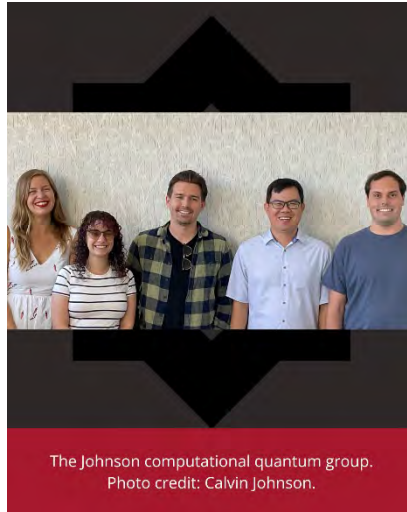


Dr. Calvin Johnson
Total: \$391,000

U.S. Department of Energy Lawrence
Livermore National Laboratory: "New
Predictive Capability for Reaction and
Decay Properties of Fission," **\$121,000**

U.S. Department of Energy Office of
Science: "Extending the Application of the
Interacting Nuclear Shell Model,"
\$200,000

University of Wisconsin-Madison:
"Detection of Dark Matter and Neutrinos
Enhanced through Quantum
Information," **\$70,000**



The Johnson computational quantum group.
Photo credit: Calvin Johnson.



Dr. Kenneth Nollett
Total: \$75,000

U.S. Department of Energy Office of
Science: "Quantum Monte Carlo and
Fewer-body Approaches to Scattering,
Reactions, and Related Properties of
Nuclei," **\$75,000**



**Dr. Kenneth Nollett
and Dr. Calvin Johnson**
Total: \$300,000

National Nuclear Security Administration:
"Scattering and Reactions in a Shell Model
Framework," **\$300,000**



Dr. Usha Sinha
Total: \$45,126

University of California at San Diego:
"Role of the Extracellular Matrix in Age-
Associated Force Loss: Integrating
Imaging, Biochemistry, and Multi-Scale
Mesh-free Modeling," **\$45,126**

Psychology



Dr. Nader Amir
Total: \$381,987

McLean Hospital: "Leveraging Machine
Learning Approaches to Understand
Mechanisms of Exposure Therapy in Real-
World Settings," **\$381,987**



Dr. Elva Arredondo
Total: \$1,428,381

Baylor School of Medicine:
"Efficacy Trial of a Program for Weight
Loss for Hispanic Fathers and Increased
Physical Activity for Their Children:
'Healthy Dads, Healthy Kids,'" **\$17,741**

National Heart, Lung, and Blood Institute:
"Enhancing Capacity in Faith-based
Organizations to Implement and Sustain
Multilevel Innovations to Improve
Physical Activity," **\$1,123,185**; and
"Mentoring Trainees from Diverse
Backgrounds in Community Engaged
Research to Promote Cardiovascular
Health," **\$115,414**



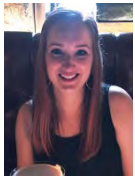
Classes are designed for parishioners of all ages and
fitness levels, fostering community wellness.
Photo credit: The Southern Cross/Diocese of San Diego.

Dr. Elva Arredondo cont.
Kaiser Permanente Medical Center:
"Community Partnership for Telehealth
Solutions to Counter Misinformation and
Achieve Equity (MINT)," **\$122,296**

RAND Corporation: "Linking Churches
with Parks to Increase Physical Activity
among Latinos," **\$24,682**

Seattle Children's Hospital & Regional
Medical Center: "InSPACE Consortium,"
\$9,030

University of California at San Diego:
"Improving Family Functioning in Obesity
Treatment for Mexican American
Women," **\$16,033**



Dr. Jessica Baker
Total: \$202,626

National Institute on Alcohol Abuse and
Alcoholism: "Translational Research to
Accelerate Interventions for Fetal Alcohol
Spectrum Disorders: Evaluation of
Physical Activity at Basic and Clinical
Levels," **\$202,626**



Dr. Larissa Barber
Total: \$30,000

Centers for Disease Control and
Prevention: "Impact of Digitalization and
Flexible Work Arrangements in the
Services Sector," **\$30,000**



Dr. Aaron Blashill
Total: \$49,000

National Science Foundation:
"Longitudinal Reporting of Children's
Gender Identity and Sexual Orientation
among Parent-Child Dyads," **\$49,000**



Dr. Ruth Carper
Total: \$801,343

National Institute of Mental Health:
"The Autistic Brain Over 45: The
Anatomic, Functional, and Cognitive
Phenotype," **\$752,343**

National Science Foundation:
"Identifying Neurocognitive Subtypes of
Executive Function Across Autism
Spectrum Disorder (ASD) and Attention-
deficit Hyperactivity Disorder (ADHD) - M.
Cordova," **\$49,000**



Dr. Delwyn Catley
Total: \$161,416

Children's Mercy Kansas City:
"Addressing Health Disparities on the
Eastside," **\$22,362**; and "Consulting and
Mentoring for Children's Mercy Research
Institute," **\$33,000**

University of Colorado Anschutz Medical
Campus: "PCOM2 - The Physician
Communication Intervention, Version
2.0," **\$84,430**

University of Missouri Kansas City:
"Faithful Response II: COVID-19 Rapid
Test-to-Treat," **\$21,624**



Dr. Theresa Cronan
Total: \$411,021

National Institute on Aging:
"SDSU Advancing Diversity in Aging
Research (ADAR) Program," **\$405,000**

Magee-Womens Research Institute and
Foundation: "Frontiers in Substance
Abuse Disorders during Pregnancy,
Postpartum, and Pediatrics (FrSADP3),"
\$6,021



Dr. Linda Gallo
Total: \$714,025

Albert Einstein College of Medicine:
"New York Regional Center for Diabetes
Translation Research," **\$63,783**

Children's Mercy Kansas City:
"Characterization of Sedentary Patterns
and Cardiovascular Disease Risk Markers
in Hispanics/Latinos," **\$60,637**

Scripps Research Institute:
"Scripps Clinical and Translational Science
Hub," **\$134,804**

University of California at San Diego:
"Identifying Digital Phenotypes of Risk for
Alzheimer's Disease and Related
Dementias among Hispanics/Latinos,"
\$143,867

University of Illinois at Chicago:
"Hispanic Community Health Study/Study
of Latinos (HCHS/SOL) Ancillary Study (AS)
on Coronary Artery Calcium and its
Association with Protective/Risk Factors
and Epigenetic Patterns," **\$271,833**

University of North Carolina-Chapel Hill:
"Cardiovascular Health of Sexual and
Gender Minorities in the Hispanic
Community Health Study/Study of Latinos
(SGM HCHS/SOL)," **\$16,949**

University of Washington:
"SOLAir: Environmental Factors and
Diabetes Development in Latinos,"
\$22,152



Dr. Kathleen Goggin
Total: \$205,395

Children's Mercy Kansas City:
"Awareness and Access to Care for
Children and Youth with Epilepsy,"
\$14,595; "Diversity, Equity and Inclusion
(DEI) in Pediatric Cancer Research
Toolkit," **\$40,409**; "Enhancing
Communication on Relationship
Preservation, Safer Conception and PrEP
to Promote Human Immunodeficiency
Virus (HIV) Testing," **\$39,764**; "Research
Consulting Services; Letter of
Engagement," **\$50,000**

Dr. Kathleen Goggin cont.

University of Kansas: "Implementing and Evaluating the Cancer Tracking System (CATSystem): A Systems Level Intervention to Improve Cervical Cancer Screening, Treatment Referral and Follow up in Kenya," **\$39,875**

University of Kansas Medical Center: "Evaluating the HITSystem to Improve Prevention of Mother-to-child Transmission of Human Immunodeficiency Virus (HIV) (PMTCT) Retention and Maternal Viral Suppression in Kenya," **\$20,752**



Dr. Janice Hau
Total: \$851,302

National Institute of Mental Health: "Mapping Lifespan Trajectories of White Matter in Autism and Improving Reproducibility through Shared Diffusion Magnetic Resonance Imaging (MRI) Data," **\$169,313**

U.S. Department of Defense U.S. Army: "Mapping White Matter Connectivity of the Developing Superior Temporal Sulcus in Autism," **\$681,989**



Dr. Jonathan Helm
Total: \$9,439

University of California at San Diego: "BRain Aging and Cognition in Epilepsy (BRACE): A Longitudinal Investigation of Vascular, Genetic, and Biomarker Risk Profiles in Elderly Patients with Epilepsy," **\$9,439**



Dr. Keith Horvath
Total: \$954,304

National Institute on Drug Abuse: "Minority Stress, Stimulant Use, and Human Immunodeficiency Virus (HIV) among Sexual Minority Men: A Biopsychosocial Approach," **\$37,528**

Dr. Keith Horvath cont.

Emory University: "Understanding of Human Immunodeficiency Virus (HIV)/Sexually Transmitted Disease (STD) Risk & Enhancing PrEP Implementation Messaging in a Diverse Community-Based Sample of Gay, Bisexual, & Other Men Who Have Sex with Men in a Transformational Era," **\$282,412**

Florida International University: "Supporting Treatment Adherence for Resilience and Thriving (START)," **\$390,621**

Florida State University: "Adolescent Medicine Trials Network for Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) Interventions (ATN) Scientific Leadership Center – LYPS," **\$158,970**; and "Adolescent Medicine Trials Network for Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) Interventions (ATN) Scientific Leadership Center – SLG," **\$49,618**

University of California at San Francisco: "Developing a U.S. National Cohort to Improve Virologic Suppression among Stimulant-using Men Living with Human Immunodeficiency Virus (HIV)," **\$12,442**

University of Colorado at Denver: "Proud to Quit (P2Q): A Person-centered Mobile Technology Intervention for Smoking Cessation among Transgender Adults," **\$22,713**



Dr. Emily Kappenman
Total: \$31,334

University of California at Davis: "Yearly Workshop in the Event-Related Potential Technique," **\$31,334**



Dr. Ruth Keehn
Total: \$1,495,772

National Institute of Mental Health: "Neurobiobehavioral Markers of Stress, Saliency, and Multisensory Dysfunction in Autism," **\$1,495,772**



Dr. Vanessa Malcarne
Total: \$5,800

University of California at San Diego: "Hopetimize™: Hope Enhancement Training with Mobile Application to Combat Burnout and Increase Job Satisfaction in Pediatric Oncology Staff," **\$5,800**



Dr. Georg Matt
Total: \$1,565,013

California Tobacco-Related Disease Research Program: "Tobacco Policy Research Center for Tobacco and the Environment," **\$1,036,863**

Cincinnati Children's Hospital: "Assessment, Detection, and Validation of Clinical Associations of Thirdhand Smoke Exposure," **\$146,628**

University of California at San Francisco: "Collaborative Consortium on Thirdhand Smoke Core: Dissemination, Outreach, and Resource Center," **\$381,522**



Dr. Sarah Mattson
Total: \$496,536

National Institute on Alcohol Abuse and Alcoholism: "Assessment of Fetal Alcohol Spectrum Disorders (FASD) Using Novel Web-Based Tools," **\$442,223**; and "Assessment of Fetal Alcohol Spectrum Disorders (FASD) Using Novel Web-Based Tools - Diversity Supplement C. Estrada," **\$54,313**





Dr. Jessica McCurley
Total: \$207,318

National Heart, Lung, and Blood Institute:
"Be Well at Work-Plus: Engaging Low-wage Workers in the Design and Implementation of a Depression and Physical Activity Intervention," **\$191,850**

Massachusetts General Hospital:
"Impact of Medicaid Accountable Care Organizations (ACO) Funding for Health-related Social Needs on Dietary Quality and Health," **\$15,468**



Dr. Edward Riley
Total: \$900,055

National Institute on Alcohol Abuse and Alcoholism: "Administrative Resource of the Collaborative Initiative on Fetal Alcohol Spectrum Disorders (CIFASD)," **\$515,415**; and "Alcohol Research in the Science/Practitioner Model," **\$384,640**



Dr. Scott Roesch
Total: \$111,257

University of California at San Diego:
"CRC-HUB-SPOKE: A ColoRectal Cancer Screening Hub for Southern California Community Health Centers," **\$68,180**; and "Center for Team Effectiveness to Accelerate Evidence Based Practice (EBP) Implementation in Children's Mental Health Services,"



Dr. Ariana Stickle
Total: \$153,990

National Institute on Aging:
"Risk Factors for Alzheimer's Disease among Latinos: Relationships Between Cardiovascular Disease Risk, Acculturation, Small Vessel Disease, and Alzheimer's Biomarkers," **\$153,990**



Dr. Gregory Talavera
Total: \$1,656,537

Albert Einstein College of Medicine:
"Epidemiology of Diet, Metabolism and Non-alcoholic Fatty Liver Disease in Hispanic/Latino Adults," **\$64,339**;
"Epidemiology of the Gut Microbiome, Prediabetes and Diabetes in Latinos," **\$20,000**; "Vascular Determinants of Stage B HF among Hispanics: The Role of the Heart-Vascular Interaction (Heart-Vascular Study)," **\$197,089**

National Heart, Lung, and Blood Institute:
"Hispanic Community Health Study/Study of Latinos (HCHS/SOL)," **\$994,027**

Northern California Institute for Research and Education: "Non-Alcoholic Fatty Liver Disease and Cardiovascular Disease in Hispanics/Latinos," **\$42,962**

University of California at San Diego:
"Activity Levels, Myosteatosis and Insulin Resistance/Diabetes Mellitus View Text," **\$102,035**; "Mechanisms of Disparities in Adverse Neurocognitive Outcomes among Hispanics Aging with Human Immunodeficiency Virus (HIV)," **\$65,034**;
"UCSD Alzheimer's Disease Research Centers P30," **\$30,100**

University of Minnesota: "Cognitive Aging, Brain Morphology, and Arrhythmias in Hispanics/Latinos: Implications for Prevention and Management of Alzheimer's Disease-Related Dementias," **\$140,951**



Dr. Gregory Talavera and Dr. Linda Gallo
Total: \$593,162

National Institute on Minority Health and Health Disparities:
"Latinos Understanding the Need for Adherence in Diabetes using Care Coordination, Integrated Medical and Behavioral Care and E-Health (LUNA-E)," **\$593,162**



Dr. Dustin Thoman
Total: \$127,248

National Science Foundation:
"Project CURE: Postdoctoral Scholar Funding Supplement," **\$127,248**



Dr. Jennifer Thomas
Total: \$411,123

National Institute on Alcohol Abuse and Alcoholism: "Fetal Alcohol Effects and Choline Intervention," **\$356,198**; "Fetal Alcohol Spectrum Disorders Study Group Annual Meeting," **\$24,925**; "International Society for Biomedical Research on Alcoholism (ISBRA)," **\$25,000**

Research Society on Alcohol:
"Sleep Characteristics in Adolescents and Young Adults with Prenatal Alcohol Exposure," **\$5,000**





Dr. Arjan van der Star
Total: \$522,428

National Institute of Mental Health: "The Mental Health Consequences of Life Course-Varying Exposure to Structural Sexual Minority Stigma: Advancing Causal Inference Using Longitudinal Models Moderated by Sexual Orientation," **\$75,250**; and "The Socioecology of Sexual Minority Stigma: Data Harmonization to Address Confounding Bias and Investigate Cross-Level Mental Health Effects," **\$447,178**



Dr. Sylvanna Vargas
Total: \$48,636

AIM Youth Mental Health: "Using Artificial Intelligence to Support Teen Peer Provider Training of an Evidence Based Intervention," **\$48,636**



Dr. Miguel Villodas
Total: \$1,129,188

U.S. Department of Education Institute of Education Sciences: "Extending the Reach of Evidence-based Practices to Support Student Attention and Behavior through Technology," **\$558,901**

National Science Foundation: "In Search of Mechanisms Underlying Parental Maltreatment History and Parenting - K. Hong," **\$49,000**

U.S. Department of Veteran Affairs: "Effectiveness and Implementation of eScreening in Post 9/11 Transition Programs," **\$19,895**

University of California at San Diego: "Enhancing Team Effectiveness for a Collaborative School-based Intervention for Attention-deficit/Hyperactivity Disorder (ADHD)," **\$501,392**



Dr. Vanessa Robin Weersing
Total: \$2,115,885

National Institute of Mental Health: "Behavioral Telehealth in Low-resource Primary Care Settings for Anxiety and Depression in Youth: A Randomized Effectiveness-implementation Study," **\$2,115,885**



Dr. Kristen Wells
Total: \$25,868

Moffitt Cancer Center: "A Stepped-Care Psychosocial Intervention for Brain Tumor Family Caregivers," **\$15,634**

University of Arizona: "Ethnicity and Lung Cancer Survival: A Test of the Hispanic Sociocultural Hypothesis," **\$10,234**



Dr. Jillian Wiggins
Total: \$1,878,920

National Institute of Mental Health: "Diversity Supplement for Training Erin Peterson," **\$178,293**; "Neural Mechanisms of Risk and Resilience in Early Childhood Irritability," **\$1,357,556**; "Neural Mechanisms of Risk for Irritability Across the Transition to Adolescence," **\$343,071**



A research assistant experiencing the process of being put into the MRI machine. Photo credit: Reese Castle.