

COLLEGE OF SCIENCES

Office of the Dean

Dr. Catherine Atkins **Total: \$256,186**
National Institute of General Medical Sciences: "*Maximizing Access to Research Careers*," \$243,082

University of California at San Diego: "*Institutional Research and Academic Career Development Award*," \$13,104

Dr. Catherine Atkins and Dr. Stanley Maloy **Total: \$2,449**
National Institute of General Medical Sciences: "*Maximizing Access to Research Careers*," \$2,449

Dr. Susan Baxter **Total: \$100,000**
National Science Foundation: "*Type II: California State University Innovation Site*," \$100,000

Dr. Lance Larson **Total: \$7,899**
Vector Planning & Services, Inc: "*Defensive Cyberspace Operations Research, Development, Testing, Engineering, Integration, Maintenance, and Production Support*," \$7,899



The United States Cyber Command unifies the direction of cyberspace operations and strengthens Department of Defense cyberspace capabilities. SDSU researchers help create standard operating procedures and support systems for Defensive Cyber Operators
PI: Dr. Lance Larson
Photo: U.S. Navy

Dr. Estralita Martin **Total: \$45,250**
CSU Sacramento University Enterprises Inc: "*CSU Louis Stokes Alliance for Minority Participation Phase IV*," \$15,000; "*CSU Louis Stokes Alliance for Minority Participation Senior Alliance (2013-2018)*," \$30,250

Dr. Dena Plemmons **Total: \$259,665**
National Center on Minority Health and Health Disparities: "*Minority Health and Health Disparities International Research Training Program*," \$259,665

Dr. Patrick Shoemaker **Total: \$97,882**
U.S. Air Force Office of Scientific Research: "*Mechanisms for Spatiotemporal Visual Feature Detection in Insects*," \$97,882

Astronomy

Dr. Robert Quimby

Total: \$44,980

California Institute of Technology: "*GROWTH: Global Relay of Observatories Watching Transients Happen*," \$7,500

Space Telescope Science Institute: "*Resolving the Connection Between Superluminous Supernovae and Star Formation in Dwarf Galaxies*," \$8,965

University of California at San Diego: "*Panoramic SETI*," \$7,410

University of Kansas: "*Shared Time: Phillips Claud Telescope and the Mount Laguna Observatory 40-inch Telescope*," \$21,105



SDSU's 1.3m Phillips Claud telescope is used to classify and study rare supernovae
PI: Dr. Robert Quimby
Photo: Jeneene Chatowsky

Dr. Eric Sandquist

Total: \$22,369

National Aeronautics and Space Administration: "*The Open Cluster NGC 1817: A Meeting of Asteroseismology, Stellar Pulsation, and Eclipsing Binaries*," \$22,369

Dr. Allen Shafter

Total: \$63,033

Space Telescope Science Institute: "*A Remarkable Recurrent Nova in M31: The Leading Single Degenerate Supernova Ia Progenitor Candidate(?)*," \$23,278; "*The Super-Remnant of the Recurrent Nova M31N 2008-12a - A Signpost to Type Ia Supernovae?*," \$12,533; "*Recurrent Nova M31N 2008-12a: The Surrounding 'Super-Remnant' - A Signpost to Type Ia Supernova Progenitors*," \$27,222

Biology

Dr. Sanford Bernstein

Total: \$664,676

National Institute of Arthritis and Musculoskeletal and Skin Diseases: "*Identification and Functional Analysis of UNC-45 Chaperone Partners in Muscle - D. Smith*," \$60,990; "*Mechanism of Myosin Chaperone UNC-45: Structural, Functional and Genetic Approaches*," \$31,769

National Heart, Lung, and Blood Institute: "*Structural and Biochemical Mechanisms of Myosin-induced Dilated Cardiomyopathy - A. Trujillo*," \$31,224

National Institute of General Medical Sciences: "*Genetics and Molecular Biology of Striated Muscle Myosin*," \$540,693

Dr. Kevin Burns

Total: \$97,000

National Science Foundation: "*Collaborative Research: Admixture Mapping of a Hybrid Zone to Test Tinbergen's Emancipation Hypothesis*," \$51,000; "*The Relative Roles of Natural and Sexual Selection in Speciation: A Case Study in the Tanagers (Thraupidae) - R. Price-Waldman*," \$46,000



Brian Myers, PhD student in Evolutionary Biology, recording hummingbird sounds for his project on the role of hummingbird courtship in speciation.
PI: Dr. Kevin Burns
Photo: Brian Myers

Dr. Richard M. Cripps

Total: \$247,758

National Science Foundation: "*Defining a Molecular Mechanism for Paralogous Compensation*," \$247,758

Dr. Douglas Deutschman

Total: \$30,000

U.S. Department of Interior: "*Hermes copper butterfly translocation, reintroduction, and surveys*," \$30,000

Dr. Douglas Deutschman and Dr. Jeremy D. Long

Total: \$17,026

U.S. Department of the Interior National Park Service: "*Partnership to Provide Student Internships in Field Sciences*," \$17,026

Dr. Matthew Edwards

Total: \$65,493

California Sea Grant College Program: "*Minimizing Disturbance Impacts by California Vessel Mooring Systems on Living Rhodolith Benthos in Catalina MPA's: An Experimental Assessment*," \$65,493

Dr. Kim Finley

Total: \$9,545

Labyrinth Holdings, LLC: "*Assessing the Impact of Generally Regarded as Safe Compounds on Adult Longevity Profiles, Stress and Inflammation Responses using a Drosophila Model*," \$9,545

Dr. Christopher Glembotski

Total: \$423,930

National Heart Lung and Blood Institute: "*Harnessing the Adaptive ER Stress Response in Myocardial Ischemia*," \$376,250

National Institutes of Health: "*The Adaptive Cardiac Sensor, ATF6, Regulates ANP Secretion and Decreases Hypertensive Stress- E. Blackwood*," \$31,573

University of Cincinnati: "*Molecular Mechanism of Hypertrophic Cardiomyopathy in South Asian Descents*," \$16,107

Dr. Marshal C. Hedin

Total: \$518,999

National Science Foundation: "*Collaborative Research: Phylogenetics, Hybridization and Speciation in Habronattus Jumping Spiders (Salticidae)*," \$518,999

Awards Received July 1, 2017 - June 30, 2018

Dr. Kevin Hovel **Total: \$113,720**
California Department of Fish and Wildlife: "*White Seabass Gillnet Survey 2018 -2019,*" \$113,720

Dr. Marina Kalyuzhnaya **Total: \$215,360**
Intrexon Corporation: "*Intrexon Training Grant,*" \$100,000

San Diego State University: "*Optimization of Methane Utilization,*" \$8,000

Tradewater LLC: "*Bacterial Production of Ectoine and Lipase: Coal Mine Methane Valorization,*" \$107,360

Dr. Scott Kelley **Total: \$48,777**
University of California at San Diego: "*MSI Graduate Fellowship – P. Torres,*" \$23,768

University of Chicago: "*Mechanistic Modeling of Microbial Metabolic Succession in the Built Environment,*" \$25,009

Dr. Rebecca Lewison **Total: \$240,103**
California Department of Fish and Wildlife: "*Climate Resilient Connectivity for the South Coast Province,*" \$59,565; "*Modeling Mule Deer Sightability in San Diego County,*" \$118,696

National Science Foundation: "*Spatial ecology of wild felids in the context of a fragmented and rapidly developing landscape - G. Schmidt,*" \$46,000

University of California at Santa Barbara: "*Center for Excellence and Diversity in Team Science (CREDITS),*" \$15,842



Ecology MS Student, Kylie Curtis, conducts radio telemetry to locate a collared mule deer for a study on deer distribution and conservation in San Diego County in partnership with the California Department of Fish and Wildlife.

PI: Dr. Rebecca Lewison
Photo: Emma Tomaszewski

Dr. Rebecca Lewison and Dr. Douglas Deutschman **Total: \$117,620**
San Diego Association of Governments: "*Task Order 4: Butterfly and Feral Pig Monitoring,*" \$117,620

Dr. Rebecca Lewison and Dr. Megan K. Jennings **Total: \$10,000**
City of San Diego: "*Monitoring of the San Diego Feral Pig Removal Program in San Diego County,*" \$10,000

Dr. David Lipson **Total: \$182,049**
University of Exeter: "*Methane Production in the Arctic: Under-recognized Cold Season and Upland Tundra Methane Sources Arctic Methane Sources (UAMS),*" \$182,049

Dr. Jeremy D. Long

Total: \$46,800

National Science Foundation: *"What You Can't See CAN Hurt You: Interspecific Indirect Genetic Effects, Omnivores Fellowship – S. Rinehart,"* \$46,000

The Wetland Foundation: *"Testing for Latitudinal Variation in Feeding Preferences of the Lined Shore Crab Pachygrapsus Crassipes in California Salt Marshes,"* \$800



Graduate student Jan Walker studies the effects of the lined shore crab, *Pachygrapsus crassipes* on the California salt marsh plant community
PI and photo: Dr. Jeremy Long

Dr. Kathleen McGuire

Total: \$42,240

Vaxiiion: *"Efficacy, Immune Mechanism(s), and Pharmacokinetic/Biodistribution Properties of Vaxiiion's Investigational Minicell Product Intended for Use in Bladder Cancer,"* \$42,240

Dr. Walter Oechel

Total: \$49,990

U.S. Department of Agriculture Foreign Agricultural Service: *"Norman E. Borlaug International Agricultural Science and Technology Fellowship Program,"* \$49,990

Dr. Walter Oechel and Dr. Samuel Shen

Total: \$222,580

City College of New York: *"Cooperative Remote Sensing and Technology Center (CREST),"* \$222,580

Dr. Walter Oechel and Dr. Donatella Zona

Total: \$8,534

Harvard University: *"Multi-scale Data Assimilation and Model Comparison for ABoVE to Identify Processes Controlling CO₂ and CH₄ Exchange and Influencing Seasonal Transitions in Arctic Tundra Ecosystems,"* \$8,534



SDSU/UC Davis PhD student Kyle Arndt troubleshooting equipment in an eddy covariance tower measuring CO₂ and CH₄ fluxes from tundra ecosystems
PIs: Dr. Donatella Zona, Dr. Walter Oechel, Dr. David Lipson
Photo: Josh Hashemi

Dr. Walter Oechel, Dr. Donatella Zona and Dr. David Lipson **Total: \$259,000**
National Aeronautics and Space Administration: *"Temporal and Spatial Patterns of and Controls on Arctic and Boreal Forest CO₂ and CH₄ Fluxes in the ABoVE Domain,"* \$259,000

Dr. Joy A. Phillips **Total: \$30,040**
University of Nebraska Medical Center: *"EP67 - Based Targeted Mucosal Vaccines to Prevent Primary Infection with CMV,"* \$30,040

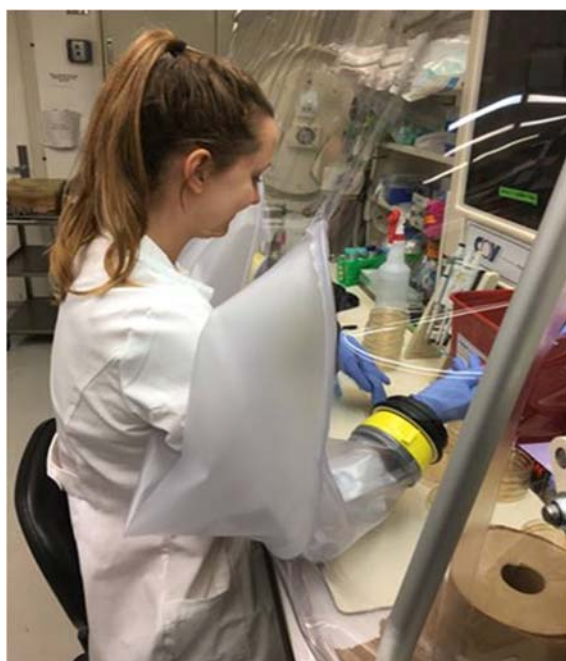


Dr. Joy Phillips presents a poster at the Center for Medicinal Cannabis Research Symposium
PI: Dr. Joy Phillips
Photo: Roberto Gallardo

Dr. Javier Piedrafita **Total: \$709,551**
Torrey Pines Institute for Molecular Studies: *"Novel ROR γ Antagonists for Inflammation and Autoimmune Disease,"* \$709,551

Dr. Forest Rohwer **Total: \$60,000**
Cystic Fibrosis Research Inc: *"Bacteriophage-mediated spread of virulence factors in cystic fibrosis microbiome,"* \$60,000

Dr. Forest Rohwer and Dr. Robert Edwards **Total: \$28,595**
AmpliPhi Biosciences Corporation: *"Metagenomic Analysis of Patient BAL Samples,"* \$28,595



Undergraduate Holly Norman works in the anaerobic chamber growing phages
PI: Dr. Robert Edwards
Photo: Ashelyn Lutrick

Dr. Anca Segall **Total: \$24,505**
Virginia Polytechnic Institute and State University: *"Integrative Genomics Approach to Computational Assessment of Threats,"* \$24,505

Dr. Nicholas Shikuma **Total: \$461,860**
U.S. Office of Naval Research: *"Elucidating the Role of Tailocins in Microbes from the Human Gut,"* \$312,349; *"The Role of Phage Tail-Like Structures in Tubeworm Metamorphosis,"* \$43,511

National Science Foundation: *"Transcriptional Response of Coral Larvae to Known Metamorphosis-Inducing Bacterial Product and its Implication for Natural Coral Repopulation - A. Alker,"* \$46,000

San Diego State University: *"Mechanisms of Bacteria-Induced Animal Metamorphosis,"* \$60,000



Alexandra Strom, an undergraduate majoring in Cell and Molecular Biology in the Shikuma lab PI and photo: Dr. Nicholas Shikuma

Dr. Michael Simpson and Dr. Lluvia H. Flores Renteria **Total: \$25,602**
National Science Foundation: *"Digitization TCN: Collaborative Research: Capturing California Flowers: Using Digital Images to Investigate Phenological Change in Biodiveristy Hotspot,"* \$25,602

Dr. Mark Sussman **Total: \$2,266,233**
American Heart Association: *"Lineage Contribution of Adult c-Kit+ Cardiac Progenitor Cells in Embryonic and Neonatal Development,"* \$26,844

National Heart, Lung, and Blood Institute: *"Chromatin Content and Regenerative Potential of Cardiac Progenitor Cells -K. Broughton,"* \$59,166; *"Restoring Myocardial Healing,"* \$1,742,983; *"Stemness" and Differentiation Potential is Defined by Metabolism in Cardiac Progenitor Cells: D. Kubli,"* \$60,990

National Institutes of Health: *"Regulation of Signal Transduction to Treat Heart Failure,"* \$376,250

Dr. Mark Sussman and Dr. Natalie A. Gude **Total: \$376,250**
National Heart Lung and Blood Institute: *"Resolving Myocardial Regeneration by Tracking Commitment of C-Kit+ Cells,"* \$376,250

Dr. Ricardo Zayas **Total: \$140,000**
National Science Foundation: *"CAREER: Functional Analysis of Ubiquitin-Mediated Pathways Controlling Stem Cell Fate and Tissue Regeneration,"* \$140,000

Dr. Thomas A. Zink **Total: \$408,052**
AECOM Technology Corporation: *"AECOM SDGE Seed Testing - CNF EPM Restoration,"* \$94,162

Awards Received July 1, 2017 - June 30, 2018

U.S. Naval Facilities Engineering Command: *"Development and Implementation of Eradication and Monitoring Methodologies of the Argentine Ant (Linepithema Humile) on Naval Base Coronado, Naval Auxiliary Landing Field, San Clemente Island, CA,"* \$301,485

U.S. Space and Naval Warfare Systems Command: *"Habitat Adaptive Management and Monitoring - Oak Woodlands and Gold Spotted Oak Borer, Camp Pendleton,"* \$2,492; *"Historical Precipitation Data Review NWS Detachment Fallbrook,"* \$2,472; *"Installation of Replacement Parts on Camp Pendleton Remote Automated Weather Stations,"* \$2,492; *"Installation of Replacement Parts on Camp Pendleton Remote Automated Weather Stations Las Flores/Talega Ridge,"* \$2,490; *"Range Management Data Collection Naval Weapons Station Seal Beach Detachment Fallbrook,"* \$2,459

Dr. Donatella Zona, Dr. Walter Oechel, Dr. Xiaofeng Xu and Dr. David Lipson **Total: \$350,005**
National Science Foundation: *"Methane at the Zero Curtain,"* \$350,005

Chemistry & Biochemistry

Dr. Bernt Mikael Bergdahl **Total: \$8,000**
Law Offices of Quintin G. Shammam: *"Chemical Synthesis of Lagunamide A, an Important Cyanobacterial Metabolite with Extraordinary High Anti-Cancer Activity,"* \$8,000

Dr. Douglas Grotjahn and Dr. Andrew L. Cooksy **Total: \$180,000**
National Science Foundation: *"Experimental and Computational Studies of Bifunctional Organometallic Catalysis,"* \$180,000

Dr. Douglas Grotjahn and Dr. Diane Smith **Total: \$235,210**
U.S. Department of Energy: *"New Tools and Methods for Measuring Water Oxidation Catalyst Viability,"* \$235,210

Dr. Jeffrey Gustafson **Total: \$766,250**
National Institute of General Medical Sciences: *"MIRA: Atropisomerism as a Means to Increase Target Selectivity and as Inspiration for New Chemistry,"* \$376,250

National Science Foundation: *"Regio- and Enantioselective Electrophilic Aromatic Substitution on Drug-Like Molecules,"* \$390,000

Dr. Gregory P. Holland **Total: \$452,957**
U.S. Air Force Office of Scientific Research: *"DURIP: Acquisition of a T150 Mechanical Testing System for In situ Structural Characterization of Nanoscale Animal Silks Under Strain,"* \$211,653; *"The Molecular Mechanisms Responsible for the Assembly of Spider Silk Fibers,"* \$241,304



Graduate student David Onofrei matches and tunes the Nuclear Magnetic Resonance probe
PI: Dr. Greg Holland
Photo: Dillan Stengal

Dr. Tom Huxford

Total: \$61,679

Inhibrx: "*X-Ray crystallography of InhibRx antibody complexes,*" \$9,000

University of Nebraska Medical Center: "*Development of Quinoxaline-Based IKKbeta Inhibitors for Kras Driven Cancers,*" \$52,679

Dr. John Love

Total: \$61,745

U.S. Department of Agriculture Foreign Agricultural Service: "*Brewing Resource Education Workshop,*" \$61,745



USDA Fellows Watch Hop Harvesting at Star B Hop Farm
PI: Dr. John Love
Photo: John McMillan

Dr. Byron W. Purse

Total: \$544,249

National Science Foundation: "*Bright and Responsive Fluorescent Nucleosides from Structure-Photophysics Relationships,*" \$130,000; "*Next-Generation Fluorescent Nucleosides and Structure-Photophysics Relationships,*" \$414,249



Undergraduate student McKenzie Wyllie works in the Purse lab on creating new fluorescent modifications of DNA for applications in biophysics
PI and photo: Dr. Byron Purse

Dr. Christal D. Sohl

Total: \$219,412

National Cancer Institute: "*The Molecular Mechanism of Isocitrate Dehydrogenase Mutations in Cancer,*" \$219,412

Dr. William Stumph

Total: \$720,998

California Metabolic Research Foundation: "*Arne N Wick Fellowship,*" \$41,000; "*Enzyme Regulation, Lipid and Carbohydrate Metabolism,*" \$80,000

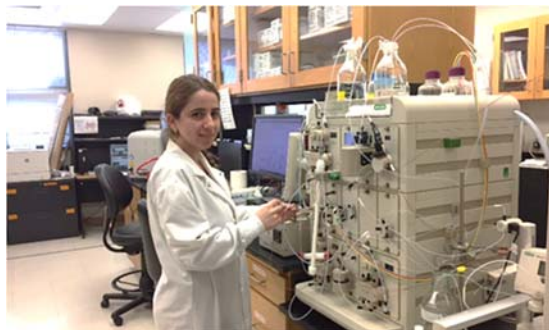
Awards Received July 1, 2017 - June 30, 2018

National Science Foundation: *"Exploring How Protein Conformation Influences Assembly of Transcriptional Complexes on snRNA Gene Promoters,"* \$599,998

Dr. Manal A. Swairjo

Total: \$431,284

National Institute of General Medical Sciences: *"RNA Modification: Structure and Mechanism,"* \$431,284



SDSU graduate student Susan Bayooz conducting purification of ancient enzymes on an FPLC system in the Swairjo Lab
PI: Dr. Manal Swairjo
Photo: Debbie Brighton

Dr. William Tong

Total: \$575,347

American Chemical Society: *"Georgia: Student Travel Award,"* \$2,500

Audentia, Inc.: *"Nonlinear Laser Wave Mixing for Trace Detection of Explosives,"* \$43,000

National Institute of General Medical Sciences: *"SDSU Initiative for Maximizing Student Development,"* \$529,847

Computer Science

Dr. Xiaobai Liu

Total: \$59,875

Avanti R&D, Inc: *"A Comprehensive Investigation on Video-based Traffic Monitoring Systems,"* \$59,875

Dr. Marie Roch

Total: \$799,656

U.S. Naval Facilities Engineering Command: *"Acoustic Metadata Management for Navy Fleet Operations,"* \$140,000

U.S. Office of Naval Research: *"Using Context to Improve Marine Mammal Classification,"* \$551,283;
"Unsupervised Learning (Clustering) of Odontocete Echolocation Clicks," \$108,373

Dr. Marie Roch and Dr. Roger Whitney

Total: \$250,000

U.S. Department of Interior: *"Phase II Development of the Tethys PAM Metadata System,"* \$250,000

Dr. Wei Wang

Total: \$100,000

National Science Foundation: *"NeTS: EAGER: Exploring Smart Media Pricing In QoE-Driven Network Economics To Revitalize Wireless Multimedia Resource Allocation,"* \$100,000

Dr. Tao Xie

Total: \$336,873

National Science Foundation: *"CSR:Small: A File System Bypassing Volatile Main Memory: Towards a Single-Level Persistent Store Architecture,"* \$336,873

Dr. Bing Zhu and Dr. Jose Castillo

Total: \$11,520

The Henry Ford: *"Web Archiving Service,"* \$11,520

Geological Science

Dr. Shuo Ma

Total: \$91,860

U.S. Geological Survey: *"Further Validation of a Dynamic Earthquake Model to Produce Realistic Near-Field Ground Motion,"* \$56,860

University of Southern California: *"Can Fault Gouge Reduce Effects of Fault Roughness on Rupture Dynamics?,"* \$25,000; *"A Collaborative Project: Rupture Dynamics, Validation of the Numerical Simulation Method,"* \$10,000

Dr. Jillian M. Maloney

Total: \$6,498

California Sea Grant College Program: *"Investigation of Blind Faults in the Sacramento-San Joaquin Delta – S. Klotsko,"* \$6,498

Dr. Kim Olsen

Total: \$299,827

U.S. Air Force Research Laboratory: *"3D Regional Wave Propagation with $Q(f)$ in East Asia for North Korea Nuclear Tests,"* \$132,441

University of Southern California: *"Community Software for Extreme-Scale Computing in Earthquake System Science,"* \$77,000; *"SDSU BBP Module Extension: Ground Motion Correlation, Duration, and Multi-Segment Ruptures,"* \$25,000

Willis Limited: *"Phase 1: Enhanced Loss Calculation Based on 3D Ground Motion Calculations for the Pacific Northwest,"* \$65,386

Dr. Kim Olsen and Dr. Daniel Roten

Total: \$180,408

National Science Foundation: *"PREEVENTS Track 2: 3D Nonlinear Simulation of Large Earthquakes on the Southern San Andreas Fault,"* \$180,408

Dr. Thomas Rockwell

Total: \$137,220

U.S. Geological Survey: *"Testing Recurrence Models for a Simple Plate Boundary Fault: Paleoseismic Study of the Imperial Fault in the Region of Large 1940 Displacement,"* \$66,720



Dr. Tom Rockwell in Santorini Caldera, Greece. On his left is the GPS and seismic equipment. The volcano last erupted in 1950, but it is the CA 1600 BC eruption that is attributed to causing the demise of the Minoan civilization.

PI: Dr. Tom Rockwell

Photo: Kim Rockwell

Awards Received July 1, 2017 - June 30, 2018

University of Southern California: *"Collaboration to Construct a SCEC Community Paleoseismic Model,"* \$33,000; *"Crustal Architecture of the Western Transverse Ranges, Southern California: The Potential for Great Earthquakes,"* \$30,000; *"Refining the earthquake chronology of the last millennium along the Cholame segment of the San Andreas fault,"* \$7,500

Dr. Daniel Roten **Total: \$10,000**

University of Southern California: *"A Collaborative Project: Rupture Dynamics, Validation of the Numerical Simulation Method,"* \$10,000

Dr. Daniel Roten and Dr. Kim Olsen **Total: \$29,999**

University of Southern California: *"A Multi-surface Plasticity Model for 3D Wave Propagation Simulation Using AWP,"* \$29,999

Dr. Stephen Schellenberg **Total: \$27,000**

National Science Foundation: *"Investing in the Future of Paleoclimate Research: U.S. Graduate Student Fellowships for the Urbino Summer Schools in Paleoclimatology,"* \$27,000

Mathematics & Statistics

Dr. Barbara Bailey **Total: \$23,866**

University of California at San Diego: *"Spatial Identification of Lung Abnormalities in CF Via a Probabilistic Library of MRI Measures of Lung Water Density,"* \$23,866

Dr. Ricardo Carretero **Total: \$40,931**

National Science Foundation: *"OP: Collaborative Research: Non-Hamiltonian Wave Dynamics in Atomic Optical Models,"* \$40,931

Dr. Christopher Curtis **Total: \$99,706**

National Science Foundation: *"Collaborative Research: Nonlinear Waves and Vorticity in Oceanic Flows,"* \$99,706

Dr. Jerome Gilles **Total: \$43,246**

U.S. Air Force Office of Scientific Research: *"Image Processing Algorithms for Imaging through Atmospheric Turbulence,"* \$43,246

Dr. Antonio Palacios **Total: \$168,699**

U.S. Office of Naval Research: *"2018 International Conference on Theory and Applications in Nonlinear Dynamics,"* \$27,756; *"Complexity and Scaling Laws of Phase Drift in Symmetric Networks of Crystal Oscillators for Precision Timing,"* \$99,990

U.S. Space and Naval Warfare Systems Command: *"Synchronization of Nonlinear Oscillators and Nonlinear Signal Reconstruction,"* \$40,953

Dr. Daniel Reinholz **Total: \$76,621**

University of Colorado Boulder: *"Collaborative Research: Access Network: Supporting Retention and Representation in Physics Through an Alliance of Campus-Based Diversity Programs,"* \$14,324; *"Departmental Action Teams: Sustaining Improvements in Undergraduate STEM Education Through Faculty Engagement,"* \$62,297

Awards Received July 1, 2017 - June 30, 2018

Dr. Peter Salamon

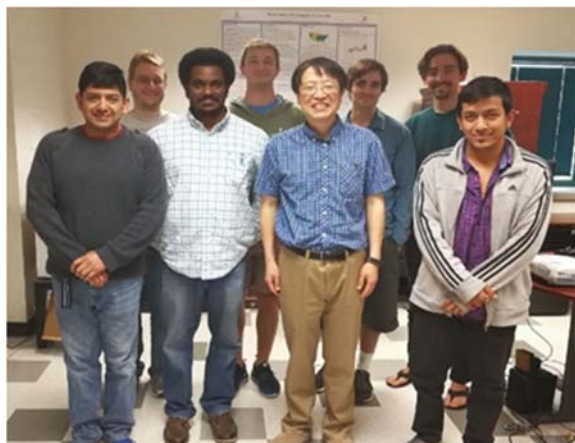
Total: \$17,000

U.S. Department of Energy Oak Ridge Institute for Science and Education: *"Autonomous Behavior Guided by Invariant Imaging in Broad Band Infra-Red,"* \$17,000

Dr. Samuel Shen

Total: \$40,000

University of Washington: *"Collaborative Research: RNMS: Statistical Methods in Atmospheric and Oceanic Sciences,"* \$40,000



The Shen Lab
PI: Dr. Samuel Shen
Photo: Amy Gonsalves

Dr. Naveen Vaidya

Total: \$78,027

National Science Foundation: *"Mathematical Models to Study the Effects of Drugs of Abuse on HIV Infection and Neurocognitive Disorder,"* \$78,027

Dr. William Zahner

Total: \$283,413

National Science Foundation: *"CAREER: Fostering Productive and Powerful Discussions among Linguistically Diverse Students in Secondary Mathematics,"* \$175,106

SRI International: *"Collaborative Research: Investigating How English Language Learners Use Dynamic Representational Technology to Participate in Middle School Mathematical Practices"* \$108,307

Physics

Dr. Calvin Johnson

Total: \$293,000

National Nuclear Security Administration: *"Ab Initio Calculation of Neutron-Capture Reactions on Light Nuclei,"* \$75,000

U.S. Department of Energy: *"Nuclear Forces, Structures, and Transitions: Computational Studies,"* \$198,000

University of North Carolina-Chapel Hill: *"Nuclear Theory for Double-Beta Decay and Fundamental Symmetries,"* \$20,000

Dr. Lyubov P. Kuznetsova

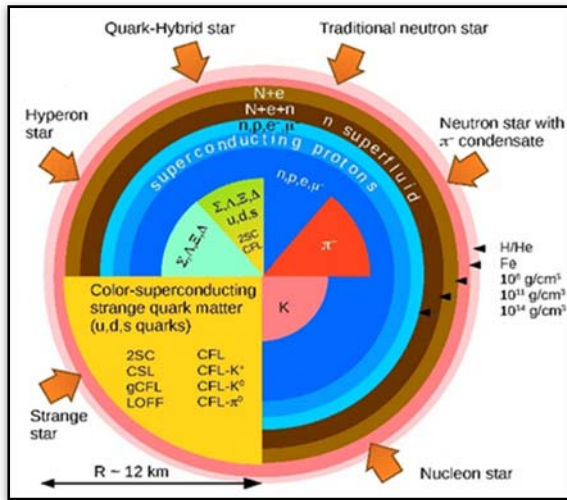
Total: \$46,000

National Science Foundation: *"Designing Optical Metamaterial Devices with Hyperbolic Dispersion Using Al/Dielectric Nanolayers - P. Kelly,"* \$46,000

Dr. Fridolin Weber

Total: \$89,999

National Science Foundation: "Quark Matter and its Role in the Evolution of Proton-Neutron Stars to Neutron Stars," \$89,999



Competing structures and novel phases of subatomic matter predicted by theory to make their appearance in the cores of neutron stars
PI and image: Fridolin Weber

Psychology

Dr. Nader Amir

Total: \$485,634

National Institute of Mental Health: "Behavioral and Neurobiological Mechanisms of Treatment Response in Pediatric OCD," \$31,224; "Behavioral and Neurobiological Mechanisms of Treatment Response in Pediatric OCD: J. Kuckertz," \$948

Florida State University: "Attention Training to Modify ERN and Risk for Anxiety in Adolescence," \$453,462

Dr. Aaron Blashill

Total: \$1,758,081

American Cancer Society: "Skin Cancer Prevention among Sexual Minority Men," \$396,000

National Center on Minority Health and Health Disparities: "A Brief, Peer Co-Led, Group-Based Eating Disorder Prevention Program for Sexual Minority Young Adult Men," \$677,278

National Institutes of Health: "A Brief, Peer Co-Led, Group-Based Eating Disorder Prevention Program for Sexual Minority Young Adult Men," \$684,803

Dr. Aaron Blashill and Dr. Kristen J. Wells

Total: \$413,547

National Institute of Mental Health: "Developing a Patient Navigation Intervention for PrEP Continuum of Care among Young Latino MSM," \$413,547

Dr. Theresa Cronan

Total: \$390,640

Magee-Womens Research Institute and Foundation: "Frontiers in Aging and Regeneration Research," \$12,641

National Institute on Aging: "SDSU ADAR Program," \$377,999

Awards Received July 1, 2017 - June 30, 2018

Dr. Mark Ehrhart **Total: \$11,157**
University of California at San Diego: *"Testing the Leadership and Organizational Change for Implementation Intervention in Substance Abuse Treatment,"* \$11,157

Dr. Inna Fishman **Total: \$544,583**
National Institute of Mental Health: *"Multimodal Imaging of Early Neural Signature in Autism Spectrum Disorder,"* \$529,583

University of California at San Diego: *"Community Partnership to Evaluate Clinical Outcomes of Improv Theater Intervention for Teens with Autism,"* \$15,000



A child participating in Dr. Fishman's MRI studies
PI: Inna Fishman
Photo: Jiwan Kohli

Dr. Linda Gallo **Total: \$1,293,850**
Michigan State University: *"Study of Latinos-Investigation of Neurocognitive Aging,"* \$188,227

Scripps Research Institute: *"Dulce Digital-ME: An Adaptive mHealth Intervention for Underserved Hispanics with Diabetes,"* \$180,278; *"Scripps Translational Science Institute,"* \$84,437

University of California at Davis: *"MRI Measures of Cerebrovascular Injury and AD Atrophy in a Study of Latinos,"* \$425,355

University of California at San Diego: *"Neighborhood Environments and Cardiometabolic Disorders in Hispanics/Latinos,"* \$329,274; *"Study of Latinos-Investigation of Neurocognitive Aging,"* \$86,279

Dr. Linda Gallo and Dr. Scott Roesch **Total: \$236,526**
Scripps/Whittier Institute for Diabetes: *"Medical Assistant Health Coaching for Diabetes in Diverse Primary Care Settings,"* \$236,526

Dr. Phillip J. Holcomb **Total: \$70,250**
National Institutes of Health: *"Investigating the Neural Dynamics of Single-Word Reading in Deaf Readers - L. Schwarz-Glezer,"* \$65,250

National Science Foundation: *"NSF Graduate Research Opportunities Worldwide (GROW) - G. Meade,"* \$5,000

Dr. Phillip J. Holcomb and Dr. Katherine Midgley **Total: \$376,250**
National Institute of Child Health and Human Development: *"The Neuro-Cognition of Word Comprehension,"* \$376,250

Dr. Ruth J. Keehn **Total: \$195,916**
National Institute of Mental Health: *"Impact of Multisensory Function on Symptomatology in Young Children with ASD,"* \$195,916

Dr. Alan Litrownik **Total: \$15,730**
University of Maryland: *"Drug Use Trajectories and the Transition to Adulthood among Maltreated Youth,"* \$15,730

Dr. Vanessa Malcarne **Total: \$62,804**
Regents of the University of California: *"Creating Scientists to Address Cancer Disparities Program,"* \$62,804

Dr. Ksenija Marinkovic **Total: \$371,138**
National Institute on Alcohol Abuse and Alcoholism: *"Spatiotemporal Brain Imaging of Alcohol Effects on Inhibitory Control,"* \$371,138

Dr. David Marx **Total: \$30,479**
National Science Foundation: *"Investigating the Use of Peer Role Models to Inspire Women to Thrive in STEM,"* \$30,479

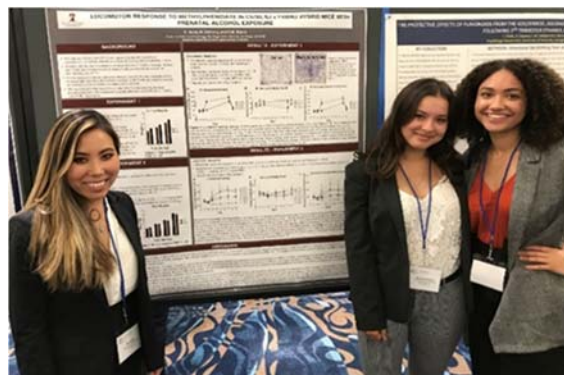
Dr. Georg Matt **Total: \$405,697**
California Tobacco Related Disease Research Program: *"Effects of Thirdhand Smoke Exposure on the Microbiome of Young Children,"* \$361,180

Cincinnati Children's Hospital: *"An Intervention to Reduce Second Hand Smoke Exposure among Pediatric Emergency Patients,"* \$27,517

U.S. Department of Housing and Urban Development: *"Thirdhand Smoke as a Source of Lead in Settled House Dust and on Surfaces,"* \$17,000

Dr. Sarah Mattson **Total: \$777,106**
National Institute on Alcohol Abuse and Alcoholism: *"A Multisite Neurobehavioral Assessment of Fetal Alcohol Spectrum Disorders,"* \$741,489; *"Language and Communication Abilities in Adolescents with Fetal Alcohol Spectrum Disorder – L. Doyle,"* \$35,617

Dr. Eileen Moore **Total: \$614,692**
National Institute on Alcohol Abuse and Alcoholism: *"Brain Maturation in Adults with FASD,"* \$346,339; *"Utility of Olfactory Function Measures in Children with Prenatal Alcohol Exposure,"* \$238,353



Master's student Ami Ikeda, Undergraduates Marissa DeVinny and Alicia Green at the Research Society on Alcoholism meeting
PI and photo: Dr. Eileen Moore

Awards Received July 1, 2017 - June 30, 2018

University of California at San Diego: *"Pharmacological Treatment to Improve White Matter Plasticity in FASD,"* \$30,000

Dr. Ralph-Axel Müller

Total: \$683,056

National Institute of Mental Health: *"Integrity and Dynamic Processing Efficiency of Networks in ASD,"* \$637,056

National Science Foundation: *"Too Much Information: Neural Mechanisms of Efficient Filtering - L. Mash,"* \$46,000

Dr. Ralph-Axel Müller and Dr. Inna Fishman

Total: \$32,000

Autism Speaks: *"Neural Correlates of Psychological Well-being in ASD Throughout the Transition to Young Adulthood- M. Reiter,"* \$32,000



Members of the Brain Development Imaging Labs tour the new SDSU MRI Center
PIs: Dr. Inna Fishman and Dr. Ralph-Axel Müller
Photo: Inna Fishman

Dr. Edward Riley

Total: \$861,200

National Institute on Alcohol Abuse and Alcoholism: *"Administrative Core of the CIFASD,"* \$830,410;
"Congresses of the International Society for Biomedical Research on Alcoholism," \$30,790

Dr. Edward Riley and Dr. Susan Tapert

Total: \$413,443

National Institute on Alcohol Abuse and Alcoholism: *"Alcohol Research in the Science/Practitioner Model,"* \$413,443

Dr. Scott Roesch

Total: \$294,631

University of California at Davis: *"2/2 Effectiveness of a Multi-Level Implementation Strategy for ASD Interventions,"* \$21,094

University of California at Los Angeles: *"Sustainment of Multiple EBP's Fiscally Mandated in Children's MH Services,"* \$21,123

University of California at San Diego: *"Effectiveness and Implementation of a Mental Health Intervention for ASD,"* \$17,182; *"Identifying Quality Indicators within Multiple EBP Delivery in Child Mental Health Services,"* \$85,099; *"Impact of Privacy Environments for Personal Health Data on Patients,"* \$24,245; *"System of Care Evaluation,"* \$102,917; *"Testing the Leadership and Organizational Change for Implementation Intervention in Substance Abuse Treatment Programs,"* \$22,971

Awards Received July 1, 2017 - June 30, 2018

Dr. Dustin B. Thoman

Total: \$368,681

University of Virginia: "*Fostering Resilient Mindsets Through Customized Interventions,*" \$33,255

University of Wisconsin-Madison: "*Promoting Motivation in Undergraduate Biology and Chemistry Courses,*" \$335,426



The Thoman Lab
PI and photo: Dr. Dustin Thoman

Dr. Jennifer Thomas

Total: \$601,010

National Institute on Alcohol Abuse and Alcoholism: "*Fetal Alcohol Effects and Choline Intervention,*" \$364,195; "*Fetal Alcohol Spectrum Disorders Study Group Annual Meeting*" \$20,650; "*The Effects of Combined Developmental Ethanol and THC Exposure on Behavioral Development in Rats,*" \$216,165



Dr. Jennifer Thomas discusses areas in the brain that may be targeted by the nutrient choline with undergraduate student Jacob Lopez.
PI: Dr. Jennifer Thomas
Photo: Admon Dallo

Dr. Vanessa Robin Weersing

Total: \$343,378

National Institute of Mental Health: "*2/2-Family Cognitive Behavioral Prevention of Depression in Youth and Parents,*" \$343,378

Dr. Vanessa Robin Weersing and Dr. Nader Amir

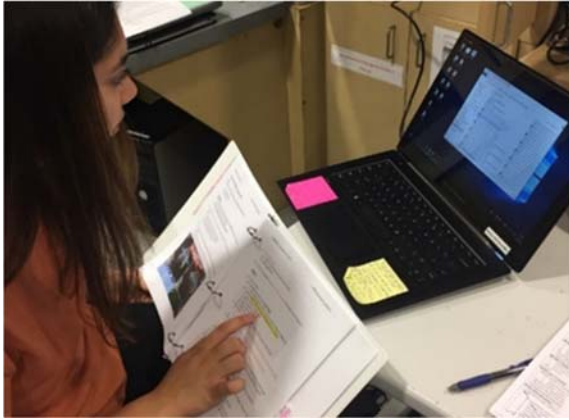
Total: \$299,995

Kaiser Foundation Research Institute: "*Effectiveness Trial of Cognitive Bias Modifications for Adolescent Anxiety,*" \$299,995

Dr. Jillian L. Wiggins

Total: \$35,000

Brain & Behavior Research Foundation: *"Pathways of Risk and Resilience: Neural Predictors of Irritability in At-Risk Offspring of Mothers with Depression,"* \$35,000



Ysabella Panggat sets up a cognitive test for a participant to perform during an MRI scan
PI: Dr. Jillian Lee Wiggins
Photo: Translational Emotion Neuroscience & Development Laboratory

Dr. May Yeh

Total: \$102,265

University of San Diego: *"Personalizing Parent Training Interventions for Culturally Diverse Families,"* \$102,265