

INTERDISCIPLINARY PROGRAMS



Dr. Daniel Sousa, Dr. Trent Biggs, and Dr. Natalie Mladenov
Total: \$200,000

National Aeronautics and Space Administration:
"Hyperspectral Remote Sensing of Estuarine and Inland Water
Quality: Empirical Line Method-based Atmospheric Correction and
Data Fusion with Manifold Learning," **\$200,000**



**Dr. Saul Maldonado, Dr. Cristina Alfaro,
and Dr. Sera Hernandez**
Total: \$749,068

U.S. Department of Education Office of Postsecondary Education:
"Developing Effective Bilingual Educators with Resources," **\$749,068**



**Dr. Trent Biggs, Dr. Nicolas Lopez-Galvez,
Dr. Penelope J.E. (Jenny) Quintana, Dr. Samuel Shen,
Dr. Daniel Sousa, and Dr. Miguel-Angel Zavala-Perez**
Total: \$1,894,339

University of California Office of the President:
"Rural Heat Islands in the Imperial Valley," **1,894,339**



Dr. Elizabeth Pollard and Ms. Pamela Jackson
Total: \$175,000

National Endowment for the Humanities:
"Using Comics to Teach Social Justice," **\$175,000**



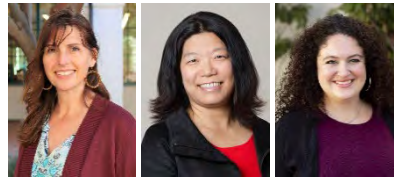
Dr. Saul Maldonado and Dr. Cristina Alfaro
Total: \$584,415

U.S. Department of Education Office of English Language
Acquisition: "Project LEAL - Leadership, Equity and Access for
Languages," **\$584,415**



Dr. Junfei Xie, Dr. Jun Chen, and Dr. Bryan Donyanavard
Total: \$700,000

National Science Foundation: "PARTNER: Expanding AI Capacity at
San Diego State University: A Strategic Collaboration with The
Institute for Learning-enabled Optimization at Scale (TILOS) at UC
San Diego," **\$700,000**



Dr. Natalie Mladenov, Dr. Eunha Hoh, and Dr. Karilyn Sant
Total: \$419,889

National Science Foundation: "Sunlight and Tire Wear Particles - A
Toxic Combination? Evaluating Mechanisms for Mobilization and
Degradation of Tire Particle Compounds," **\$419,889**



Dr. Hassan Tavakol-Davani and Dr. Megan Welsh
Total: \$47,218

University of South Carolina: "SCC-PG: Intelligent Flood Detection
and Warning System to Assist Homeless Communities and
Emergency Management Entities," **\$47,218**



Dr. Karen May-Newman, Ms. Sarah Richards Axford, and Dr. Norah Shultz
Total: \$99,985

National Science Foundation: "Planning: Broadening Participation in Engineering Track 1 - Foundational Mathematics for Engineers at San Diego State University," **\$99,985**



Dr. Sonja Pruitt, Dr. Carol Robinson-Zañartu, and Dr. Patricia Sánchez Lizardi
Total: \$250,000

U.S. Department of Education Office of Special Education and Rehabilitation Services: "PUEDE2: Interdisciplinary Collaboration to Enhance Outcomes for High Needs MLs," **\$250,000**



Dr. Hala Madanat and Dr. Richard Cripps
Total: \$1,206,257

National Cancer Institute: "1/2 Cancer Research and Education to Advance Health Equity (CREATE) Partnership," **\$1,206,257**



Dr. Hala Madanat and Dr. Stanley Maloy
Total: \$138,900

Arizona State University: "Desert and Pacific Region I-Corps Hub," **\$138,900**



Dr. Guadalupe Ayala and Dr. Kristen Wells
Total: \$447,134

National Institute on Minority Health and Health Disparities: "SDSU HealthLINK Center: Low-Cost Extension Administrative Supplement," **\$447,134**



Dr. Karen Emmorey and Dr. Phillip Holcomb
Total: \$468,452

National Institute on Deafness and Other Communication Disorders: "Assessing the Neural Dynamics of Reading in Deaf Adults," **\$468,452**



Dr. Karen Emmorey, Dr. Phillip Holcomb, Dr. Emily Kappenman, and Dr. Tracy Love-Geffen
Total: \$154,395

National Science Foundation: "Identifying Neurocognitive Mechanisms of Reading through Co-registration of Electroencephalography (EEG) and Eye Movements," **\$154,395**



Dr. María Zúñiga and Dr. Eileen Pitpitan
Total: \$32,982

National Institute on Drug Abuse: "SDSU FUERTE: Faculty United towards Excellence in Research and Transformational Engagement," **\$32,982**



Dr. María Zúñiga and Dr. Mark Reed
Total: \$4,813,369

National Cancer Institute: "SDSU FUERTE: Faculty United towards Excellence in Research and Transformational Engagement," **\$4,813,369**



Dr. Lourdes Martinez and Dr. Ming-Hsiang Tsou
Total: \$126,547

Merck Pharmaceutical: "Vaccine Acceptance in the U.S.-Mexico Border Region," **\$126,547**



**Dr. Megan Welsh, Dr. Jerel Calzo, Dr. Jennifer Felner,
Dr. Natalie Mladenov, Dr. Madison Swayne,
and Dr. Matthew Verbyla**
Total: \$279,840

California Department of Public Health: "SDSU Proposal to Develop Statewide Guidance for WaSH Services for People Living in Encampments and Shelters in California," **\$279,840**



**Dr. Megan Jennings, Dr. Olivia Chilcote, Dr. Alex DeNoble,
Dr. Lluvia Flores Renteria, Dr. Janet Franklin,
Dr. Rebecca Lewison, Dr. David Lipson, and Dr. Esme Murdock**
Total: \$3,687,931

University of California Office of the President:
"Collaborative of Native Nations for Climate Transformation & Stewardship (CNNCTS)," **\$3,687,931**



Dr. Salvador Espinosa and Dr. Henry Villegas
Total: \$599,810

U.S. Department of Education Office of Postsecondary Education:
"SDSU IV Building Bridges between Community and Careers: A New Type of Hispanic-Serving Institution (HSI)," **\$599,810**



Dr. Uduak Georg and Dr. Karilyn Sant
Total: \$175,148

National Institute of Diabetes and Digestive and Kidney Diseases:
"Integrating Computational and Experimental Models to Predict Toxicity of the Pancreas," **\$175,148**



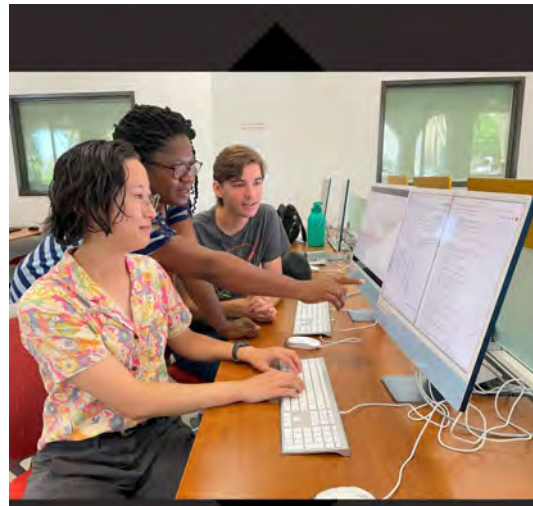
Dr. Madison Swayne and Dr. Jessica Barlow
Total: \$230,230

California EPA Toxic Substances Control Department:
"Statewide Inventory of Brownfields in California," **\$230,230**



Dr. Megan Jennings and Dr. Douglas Stow
Total: \$140,199

National Aeronautics and Space Administration:
"Spatial Decision Support for Fire Management in Indigenous Cultural and Stewardship Practices," **\$140,199**

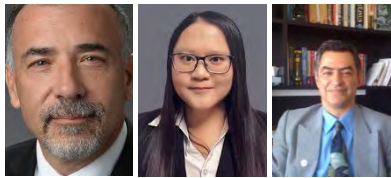


**Dr. Uduak George and her PhD students
Christine Cho and Gianni Pucillo analyze
data from computer simulations.
Photo credit: George Lab.**



Dr. Uduak George and Dr. Melody Schiaffino
Total: \$100,000

University of North Texas Health Science Center at Fort Worth: "Centering Artificial Intelligence (AI) on Diverse Older Adults with Cancer to Address Inequities in Care Delivery and Survivorship," **\$100,000**



Dr. Jerry Sheehan, Dr. Luwen Huangfu, and Dr. Faramarz Valafar
Total: \$991,749

National Science Foundation: "CC* Regional Computing: California State University (CSU) Technology Infrastructure for Data Exploration (TIDE)," **\$991,749**



Dr. Paul Gilbert and Dr. John Elder
Total: \$229,186

University of California at San Diego: "San Diego Resource Center for Advancing Alzheimer's Research in Minority Seniors," **\$229,186**



Dr. Rebecca Lewison, Dr. Jessica Barlow, and Dr. Douglas Stow
Total: \$1,100,000

Environmental Protection Agency: "SDSU Thriving Communities Technical Assistance Center (TCTAC) for Environmental Protection Agency (EPA) Region 9: Center for Community Climate Action, Energy and Environment Justice," **\$1,100,000**



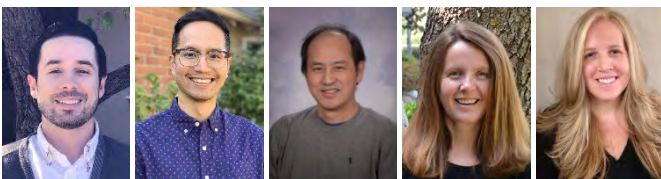
Dr. Kristen Wells and Dr. Susan Kiene
Total: \$475,000

University of California at Los Angeles: "Share, Trust, Organize, Partner: The COVID-19 California Alliance (STOP COVID-19 CA) - Phase 3," **\$475,000**



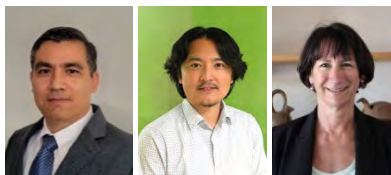
Dr. Gena Sbeglia, Mr. Lott Hill, and Dr. Stacy Ochoa Mikrut
Total: \$499,997

National Science Foundation: "Enhancing Disciplinary Learning to Diversify Biology Degree Pathways and Career Pursuits at San Diego State University," **\$499,997**



Dr. Aaron Blashill, Dr. Jerel Calzo, Dr. Chii-Dean Lin, Dr. Vanessa Robin Weersing, and Dr. Kristen Wells
Total: \$724,430

National Institute of Mental Health: "Suicide Prevention for Sexual and Gender Minority Youth - R33 Phase," **\$724,430**



Dr. Miguel Angel Zavala Perez, Dr. Atsushi Nara, and Dr. Penelope J.E. (Jenny) Quintana
Total: \$99,428

California Air Resources Board: "Improving Mexico Biomass Burning Estimates," **\$99,428**



Dr. Jose Castillo, Dr. Miguel Dumett Canales, and Dr. Christopher Paolini
Total: \$300,000

National Science Foundation: "POSE: Phase I: An Open Source Ecosystem for the Mimetic Operators Library Enhanced (MOLE)," **\$300,000**



Mr. John McMillan, Dr. Bryan Donyanavard, and Dr. Miranda Parker-Sheffield
Total: \$159,995

Foundation for California Community Colleges: "Border Region Talent Pipeline K-16 Collaborative - CS Capstone," **\$159,995**



Dr. Emilio Ulloa and Dr. Stacy Ochoa Mikrut

Total: \$780,301

U.S. Department of Education Office of Postsecondary Education:
"SDSU Hispanic Serving Institution (HSI) Science, Technology,
Engineering, and Mathematics (STEM) and Articulation Program,"
\$780,301



STEM Pathways Scholars present their summer research at the STEM Pathways Summer Research Symposium on July 26, 2024, at the Donald P. Shiley BioScience Center, SDSU. Photo credit: STEM Pathways parent.