

RESEARCH | SAN DIEGO STATE UNIVERSITY



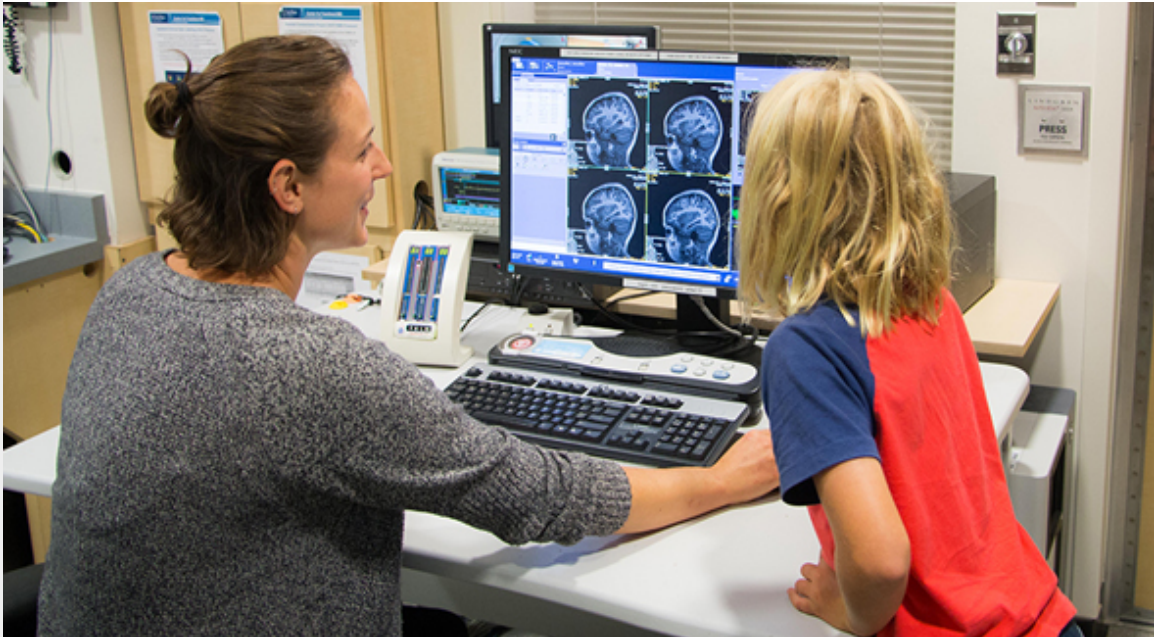
\$20 Million Award Supports Regional Health Disparities Research, Partnerships

The National Institutes of Health award is one of the largest in university history, and will support the creation of the SDSU HealthLINK Center. The center will build collaborative partnerships between the university and community health entities and dramatically enhance research infrastructure at the university, bolstering critical health research and services and improving the well-being of the region's most underserved populations. [Read more.](#)



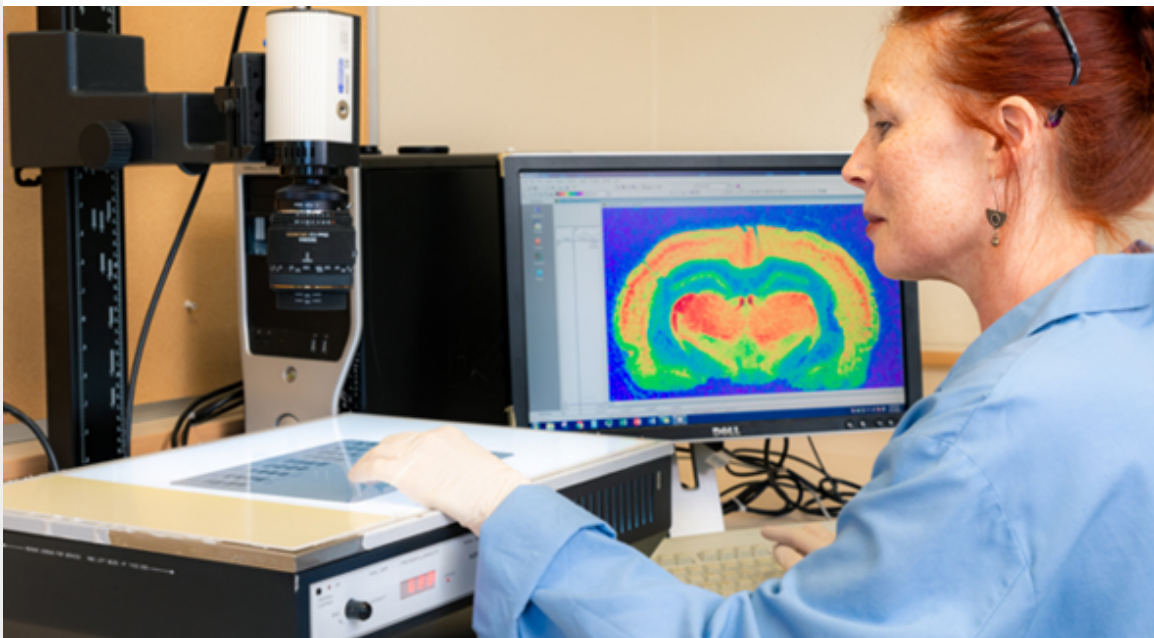
Former NSF Director: SDSU a National Model

Rita Colwell, the first female leader of the National Science Foundation, praised SDSU during a recent campus visit as a beacon of diversity and a model for U.S. higher education. Colwell visited campus Oct. 29-30 to emphasize the importance of diversity in science. [Read more.](#)



Understanding the Biology of Autism

A team of San Diego State University researchers, studying MRI scans of school-age children's brains, found unique patterns of neural communication in children with Autism Spectrum Disorder, indicating the presence of biological markers in the brain in children with autism. [Read more.](#)



The Academy Awards of Research

NIH MERIT Awards are not only rare, but also highly prestigious grants given to researchers with well-established records of success in the lab. Just one percent of all NIH grants are MERIT Awards, and SDSU has four of them—a number that is competitive with some of the most active research universities in the nation and that attests to the exceptionalism of SDSU faculty. [Read more.](#)

In the News



The Secret of Super-strong Webs is Traced to Tiny Structures in Spider Glands

The Washington Post considers research by analytical chemist Gregory Holland, who studies the molecular structure of spider silk and whose work could aid in the development of an artificial version that would have unlimited practical applications.



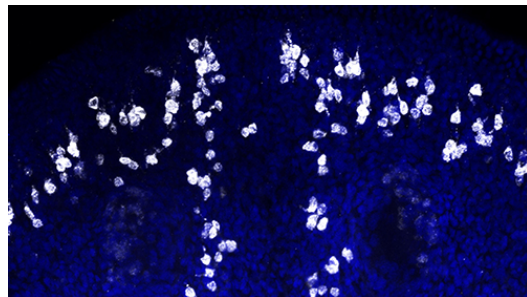
Oldest known footprints in Grand Canyon

National Geographic reports on the discovery and study—in part by SDSU geologist Mario Caputo—of 310-million-year-old reptilian footprints in the Grand Canyon.



The iGen Shift: Colleges Are Changing to Reach the Next Generation

The New York Times talks to professor Jean M. Twenge about her research on America's current crop of college students, the most ethnically diverse generation in history.



These Flatworms Can Regrow A Body From A Fragment. How Do They Do It And Could We?

NPR discusses the flatworm's ability to regenerate with SDSU neurobiologist Ricardo Zayas.

Research Horizons

SDSU's **Research Horizons** series highlights early career faculty and their burgeoning research projects.



Video: Dr. Erica Forsberg's Gut Reaction Lab



Video: Dr. Arianne Miller's Self-Care Psychology

Opportunities

BioCom Life Science Association of California is offering a one-day course designed to help basic scientists become more competitive for industry jobs. Consider encouraging graduate students to attend the training on Dec. 7 in La Jolla.

[Learn More](#)

ZIP Launchpad, SDSU's start-up incubator, is accepting

[Learn More](#)

applications from students, faculty and staff looking for help starting businesses.

Let your students know that registration for the 2019 Student Research Symposium, scheduled for March 1-2, is now open. Last year more than 500 students presented their research!

[Learn More](#)

Recent Grants

Schulze, Mathias / Brown, Christopher P

California Subject Matter Project – CSMP
University of California Office of the President
\$17,500.00
College of Arts & Letters

Imazeki, Jennifer

Transforming College Teaching: Statewide Implementation of the Faculty Learning Program
University of California at Berkeley
\$44,203.00
College of Arts & Letters

Degeneffe, Charles

Rehabilitation Long-Term Training Program-Vocational Rehabilitation Counseling
DED Office of Special Education/Rehabilitation Services
\$200,000.00
College of Education

Hampton, Nan / Sax, Caren

Raising the Bar: Long Term Training in Rehabilitation Counseling
DED Office of Special Education/Rehabilitation Services
\$200,000.00
College of Education

Olney, Marjorie

Psychiatric Rehabilitation Concentration and Certificate Project
DED Office of Special Education/Rehabilitation Services
\$149,999.00
College of Education

Sax, Caren

EFRC Family Empowerment Center 18/19
California Department of Education
\$255,481.00
College of Education

Sax, Caren

EFRC Poway Alternative Dispute Resolution 18/19
Poway Unified School District
\$10,000.00
College of Education

Sax, Caren / Hampton, Nan

Collaborative for Distance Education in Rehabilitation: Comprehensive System of Personal Development Rehabilitation Training

DED Office of Special Education/Rehabilitation Services

\$200,000.00

College of Education

Tucker, Mark

Arizona Comprehensive Statewide Needs Assessment Project

Arizona Department of Economic Security

\$82,424.00

College of Education

Dickson, Kelsey

Adapting an ASD Executive Functioning Intervention for Implementation in Children's Mental

Health Services

DHHS National Institute of Mental Health

\$168,472.00

College of Education

Park, Vicki

Co-constructing Continuous Improvement for Equity and Excellence: The Role of Adaptive

Assistance Partners for Organizational Learning in Low-Performing Schools

Spencer Foundation

\$31,088.00

College of Education

Lamb, Lisa / Soto, Melissa M

San Diego Math Project - CSMP

University of California Office of the President

\$24,000.00

College of Education

Verbyla, Matthew L

Human-associated HF183 Bacteroides 16S rRNA genetic marker at NCWRP and the Pure

Water Facility

Trussell Technologies

\$4,996.00

College of Engineering

Aksanli, Baris

NRI: FND: COLLAB: Distributed Bayesian Learning and Safe Control for Autonomous Wildfire

Detection

National Science Foundation

\$75,000.00

College of Engineering

Camacho, Joaquin

EAGER: Flame-Assisted Chemical Vapor Deposition for Energy Storage Electrode Fabrication

National Science Foundation

\$79,999.00

College of Engineering

Katira, Parag

Heterogeneous Cancer Cell Mechanics Differentially Drives Mechanosensing and Migration

National Science Foundation

\$191,607.00

College of Engineering

Naseradinmousavi, Peiman

Decentralized Adaptive and Extremum Seeking Control of High-DOF Manipulators with Image

Processing
National Science Foundation
\$230,377.00
College of Engineering

Oren, Eyal

A randomized cross-over clinical trial of unfiltered cigarettes
California Tobacco Related Disease Research Program
\$631,324.00
College of Health & Human Services

Pan, Amy

Data to Action - Reducing Child Injury and Death
The Children's Initiative
\$16,229.00
College of Health & Human Services

Tucker-Tatlow, Jennifer

SB Org Health Series Training FY 18-19
Casey Family Programs
\$12,172.00
College of Health & Human Services

Friedrichs, Charles

Southern Counties Arts Project (CSMP)
University of California Office of the President
\$52,000.00
College of Professional Studies and Fine Arts

House, Carrie D

Role of NF-kB signaling in supporting ovarian cancer tumor-initiating cells responsible for cancer
recurrence
DHHS National Cancer Institute
\$249,000.00
College of Sciences

Long, Jeremy D

Cooperative research and training program concerning the resources of Cabrillo National
Monument for students at San Diego State University
DOI National Park Service
\$17,026.00
College of Sciences

Stumph, William

High-Speed Preparative Centrifuge and Rotor
California Metabolic Research Foundation
\$27,000.00
College of Sciences

Olsen, Kim

Phase : Enhanced Loss Calculation Based on 3D Ground Motion Calculations for the Pacific
Northwest
Willis Limited
\$65,386.00
College of Sciences

Nollett, Kenneth M

Quantum Monte Carlo and fewer-body approaches to scattering, reactions, and related
properties of nuclei
US Department of Energy
\$51,000.00
College of Sciences

Hushen, W Timothy

Student Support Services
DOD Space and Naval Warfare Systems Command
\$18,918.00
Office of Graduate and Research Affairs

Hushen, W Timothy

Student Support Services
DOD Space and Naval Warfare Systems Command
\$945.00
Office of Graduate and Research Affairs

Stow, Douglas

Landscape-Level Measurements of and Controls on Wildfire Spread Rates
NSF Division of Social Behavioral and Economic Research
\$48,160
College of Arts & Letters

Herman, Thomas

Evaluation of First 5 Targeted Home Visiting Program
South Bay Community Services
\$42,000
College of Arts & Letters

Herman, Thomas

South Region Evaluation: First 5-Healthy Development Services for Children
South Bay Community Services
\$79,344
College of Arts & Letters

Schulze, Mathias / Brown, Christopher P

Iraqi Language Immersion
US Department of Defense
\$78,940
College of Arts & Letters

Schulze, Mathias / Brown, Christopher P

Levantine Immersion Program
US Department of Defense
\$418,797
College of Arts & Letters

Schulze, Mathias / Brown, Christopher P

Pashto Immersion Project
US Department of Defense
\$85,872
College of Arts & Letters

Schulze, Mathias / Brown, Christopher P

Persian Farsi Immersion Program
US Department of Defense

\$170,680
College of Arts & Letters

Tucker, Mark

Intra-Agency Master Agreement for Employment Partnership Training
California Department of Rehabilitation
\$660,000
College of Education

Hall, Laura / Turan-Qian, Yasemin

Project PIPELINES - Preparing Intervention Personnel as Early Learning Navigators using
Evidence-based Strategies
DED Office of Special Education/Rehabilitation Services
\$149,879
College of Education

Suhrheinrich, Jessica

Exploring Multi-level System Factors Facilitating Teacher Training and Implementation of EBP
University of California at Davis
\$107,347
College of Education

Myers-Bowman, Karen S

San Diego CARES Program
YMCA of San Diego County
\$1,065
College of Education

Kumar, Sunil

Quality-of-Autonomy (QoA)-Oriented and QoS-Aware Transport and Routing Protocols for
Contested Airborne Swarm Networks
DOD Air Force Research Laboratory
\$100,000
College of Engineering

Zink, Thomas A

San Clemente Island Botanical Program Implementation, NALF San Clemente Island, Naval
Base Coronado, California.
DOD Army Corps of Engineers
\$368,719
College of Engineering

Sharma, Satish

Design and Development of Ku-band Phased Array Antenna Network Using Heat Sink Radiator
and Reflector Element for Beam Steering Applications
DOD Space and Naval Warfare Systems Command
\$179,916
College of Engineering

Mladenov, Natalie

Increasing Preparedness in the San Diego River Watershed for Potential Contamination Events
San Diego River Conservancy
\$187,115
College of Engineering

Hovell, Melbourne

Women, Infants and Children

California Department of Health Services

\$7,508,376

College of Health & Human Services

Kiene, Susan M

Development and Pilot Testing of a Combination Intervention to Reduce Heavy Drinking and Improve HIV Care Engagement among Fisherfolk in Uganda

DHHS National Institute on Alcohol Abuse and Alcoholism

\$191,422

College of Health & Human Services

Asmus, Lisa

Minority AIDS Initiative (MAI) Integrated Care Coordination Program Evaluation

Family Health Centers of San Diego

\$9,000

College of Health & Human Services

Asmus, Lisa

Project Pride Evaluation Services

Family Health Centers of San Diego

\$7,000

College of Health & Human Services

Arredondo, Elva

Linking Churches with Parks to Increase Physical Activity Among Latinos

RAND Corporation

\$22,376

College of Health & Human Services

Tucker-Tatlow, Jennifer / Baum, Jennifer N

Cultural Competency Academy FY 18/19

San Diego County Health and Human Services Agency

\$140,725

College of Health & Human Services

Hornberger, Steven

Age Friendly Communities

The San Diego Foundation

\$69,000

College of Health & Human Services

Riley, Edward / Thomas, Jennifer

Congresses of the International Society for Biomedical Research on Alcoholism

DHHS National Institute on Alcohol Abuse and Alcoholism

\$74,502

College of Sciences

Zink, Thomas A

Dune Restoration at Naval Base Coronado

DOD US Navy

\$18,496

College of Sciences

Zink, Thomas A

Naval Base Coronado Dune Restoration and Sensitive Plant Species Surveys

DOD US Navy

\$36,580

College of Sciences

Long, Jeremy D

Rocky Intertidal Non-native Species Surveys and Grazing Experiments in Support of the Black Abalone on Naval Auxiliary Landing Field San Clemente Island
DOD US Navy
\$132,500
College of Sciences

Xu, Xiaofeng

Data Model Integration for Methane (CH₄) at the S1 Bog and CH₄ Module Incorporation into the Energy Exascale Earth System Model
DOE Oak Ridge National Laboratory
\$37,500
College of Sciences

Hedin, Marshal C

Resolving the species status of *Texella reyesi* (Opiliones, Phalangodidae) using sequence capture of ultra-conserved elements
DOI United States Fish and Wildlife Service
\$11,000
College of Sciences

Baxter, Susan

Type II: California State University Innovation Site
NSF Dir for Computer and Information Science and Engineering
\$100,000
College of Sciences

Olsen, Kim / Roten, Daniel

PREEVENTS Track 2: 3D Nonlinear Simulation of Large Earthquakes on the Southern San Andreas Fault
NSF Directorate of Geosciences
\$180,407
College of Sciences

Reinholz, Daniel

Collaborative Research: Expanding Access: Furthering a Network of Diversity-Focused Programs in the Physical Sciences
National Science Foundation
\$22,543
College of Sciences

Quimby, Robert

FUV Spectral Evolution of a Superluminous Supernova
Space Telescope Science Institute
\$14,195
College of Sciences

Grotjahn, Douglas / Smith, Diane

New tools and methods for measuring water oxidation catalyst viability
US Department of Energy
\$152,314
College of Sciences

Reinholz, Daniel

Departmental Action Teams: Sustaining Improvements in Undergraduate STEM Education Through Faculty Engagement
University of Colorado Boulder

\$30,117

College of Sciences

Yeh, May

Personalizing Parent Training Interventions for Culturally Diverse Families

University of San Diego

\$105,306

College of Sciences

Boarman, William

Analysis of Common Raven Data

Upgrade Professional Solutions Corporation

\$14,320

College of Sciences

Larson, Lance

Defensive Cyberspace Operations Research, Development, Testing, Engineering, Integration,
Maintenance, and Production Support

Vector Planning & Services, Inc

\$919

College of Sciences

Segall, Anca

Integrative Genomics Approach to Computational Assessment of Threats (IGACAT)

Virginia Polytechnic Institute and State University

\$10,502

College of Sciences

Ayala, Guadalupe X / Wells, Kristen J

SDSU HealthLINK Center for Transdisciplinary Health Disparities Research

DHHS Nat Center on Minority Health and Health Disparities

\$4,364,734

Interdisciplinary Programs

An, Li / Stow, Douglas / Lewison, Rebecca

CNH-L: People, Place, and Payments in a Complex Human-Environment System

National Science Foundation

\$1,450,000

Interdisciplinary Programs

Castaneda, Sheila F / Talavera, Gregory / Gallo, Linda

Nightly Fasting and Eating Patterns and Cardiometabolic Risk in Hispanic/Latina Women

University of California at San Diego

\$13,526

Interdisciplinary Programs

Starr, Pamela

Workability IV

California Department of Rehabilitation

\$96,000

Student Affairs

Rikard, Jennifer

Great Plays Grant

Responsible Retailing Forum

\$10,000

Student Affairs

Stow, Douglas

Follow-on Study: Shrub Cover Monitoring and Sensitivity Analyses of Vegetation Community
Maps for San Clemente Island
DOD Army Corps of Engineers
\$226,861
College of Arts & Letters

Guang, Lei

China Data Lab: Understanding China's Changing Politics, Society and Economics in the
Information Age
University of California at San Diego
\$34,085
College of Arts & Letters

Vasquez Urias, Marissa / Harris, Frank / Wood, J. Luke

CCEAL - Cabrillo Community College
Cabrillo College
\$75,000
College of Education

Harris, Frank / Wood, J. Luke / Vasquez Urias, Marissa

Advancing Educational Equity for Community College Men of Color
College Futures Foundation
\$150,000
College of Education

Sax, Caren

Customized Employment Training - Idaho VR's Portion
Idaho Division of Vocational Rehabilitation
\$11,484
College of Education

Johnson, Joseph F

Educational Leadership High-Performing Schools Equity Audit
Iftin Charter School
\$26,000
College of Education

Garoma, Temesgen

A New Approach for Seawater Desalination
Metropolitan Water District of Southern California
\$10,000
College of Engineering

Youssef, George

In-situ Characterization of the Dynamic Behavior of Impact Mitigating Polymers
US Department of Defense
\$594,883
College of Engineering



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The banner image this week is of students working in a teaching lab at the new Engineering and Interdisciplinary Sciences Complex.