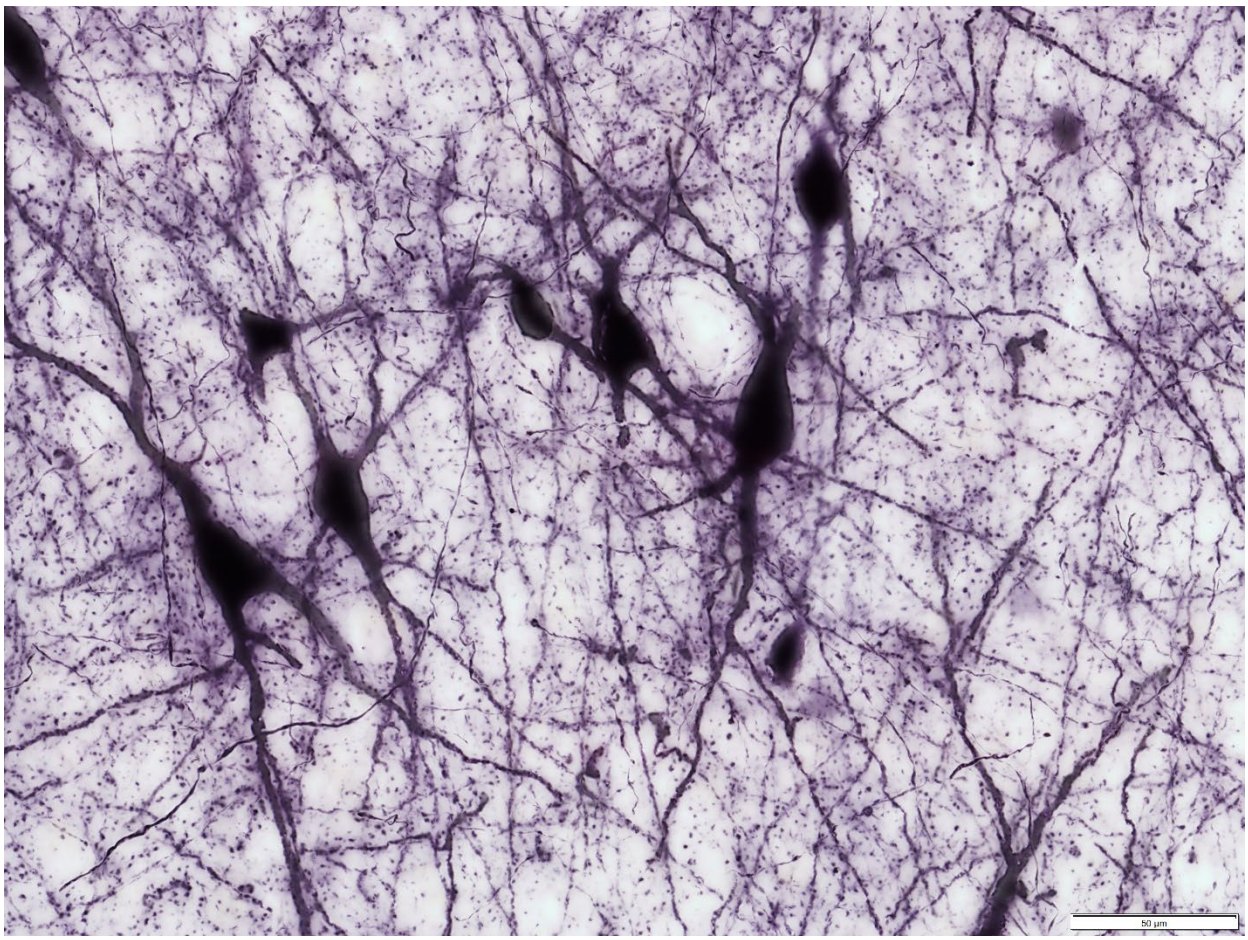
YEAR 2021 REPORT

January 1, 2021 - December 31, 2021

UC Davis – Diversity, Equity and Inclusion

CAMPOS

Center for the Advancement of Multicultural Perspectives on Science



Parvalbumin cells in the dentate gyrus of the human hippocampus by Verónica Martínez-Cerdeño

TABLE OF CONTENTS

I. CAMPOS OVERVIEW

OFFICE OF ACADEMIC DIVERSITY & CAMPOS

The Center for the Advancement of Multicultural Perspectives on Science (CAMPOS) is part of the Office of Academic Diversity (OAD), within the Office of Diversity, Equity and Inclusion (DEI).

Leadership Team in 2021

Lorena Oropeza
Associate Vice Chancellor for Academic Diversity
Professor of History
lboropeza@ucdavis.edu

Mariel Vazquez
CAMPOS Faculty Director
Professor of Mathematics and of Microbiology & Molecular Genetics
mrlvazquez@ucdavis.edu

Staff in 2021

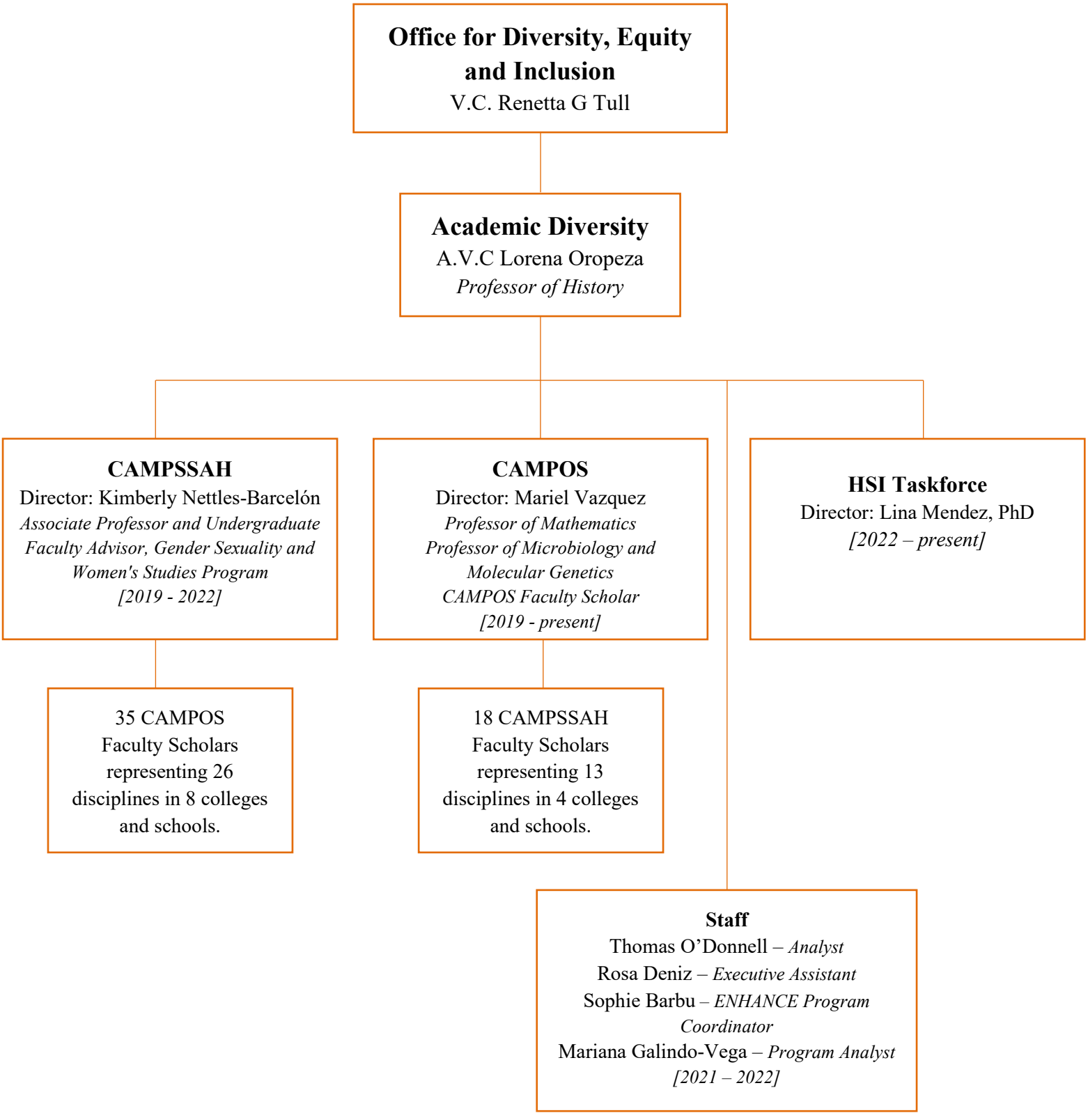
Thomas O'Donnell
Analyst – Diversity, Equity and Inclusion
twodonnell@ucdavis.edu

Rosa Deniz
Executive Assistant – Diversity, Equity and Inclusion
rdeniz@ucdavis.edu

Sophie Barbu
ENHANCE Program Coordinator
sjbarbu@ucdavis.edu

Mariana Galindo-Vega
Program Analyst– Diversity, Equity and Inclusion
mgalindovega@ucdavis.edu

OFFICE OF ACADEMIC DIVERSITY
2021 ORGANIZATION TREE



CAMPOS FACULTY DIRECTOR: MARIEL VAZQUEZ

Mariel Vazquez is a Professor of Mathematics and of Microbiology & Molecular Genetics and a CAMPOS Faculty Scholar. She was appointed as CAMPOS Faculty director in October 2019. As a Faculty Director, Vazquez' vision for CAMPOS is centered on the success and retention of its faculty. She believes that in order to achieve true diversity in STEMM one must level the playing field and focus the efforts on supporting research excellence. Her goal is to strengthen the community of CAMPOS Faculty Scholars, who bring gender and multicultural perspectives to STEMM, and give them the tools to succeed in the academic environment. Under her leadership, CAMPOS continues to provide opportunities to its faculty. CAMPOS Faculty have access to formal mentorship via the LAUNCH Committees, they are also given opportunities to mentor others (trainees and other faculty) and to develop their leadership skills. The CAMPOS Office organizes regular programming that supports networking, sharing of common experiences, discussion of issues of common concern, and fosters interdisciplinary collaboration. Vazquez aims to ensure that CAMPOS continues to create a broader community of scholars by creating new team science opportunities through partnerships with CAMPOS affiliates and other researchers at UC Davis and beyond.

Vazquez obtained a B.Sc. in Mathematics from the National University of Mexico (UNAM) and a Ph.D. in Mathematics from Florida State University. Vazquez' doctoral studies were supported by fellowships from DGAPA UNAM and the Program for Mathematics and Molecular Biology/Burroughs Wellcome Fund. Between 2000 and 2005, Vazquez held appointments as a Postdoctoral Fellow and Visiting Assistant Professor at UC Berkeley, where she received a Project NExT Fellowship. After spending nine years in the faculty at San Francisco State University, she joined UC Davis as Professor with joint appointments in Mathematics and Microbiology and Molecular Genetics. In 2014 she was inducted to the inaugural cohort of CAMPOS Faculty Scholars.

Vazquez' research focuses on the applications of topological and discrete methods to the study of nucleic acids, with an emphasis on the topological changes affected by DNA packing and by cellular processes such as DNA replication and transcription. She has studied chromosome packing in viruses and in cells, and chromosomal rearrangements. Her most recent focus is on the study the evolution and dynamics of coronaviruses and the entanglement of R-loops. Vazquez has received extensive recognition for her contributions to research and to increasing the participation of members from groups underrepresented in STEMM. These include the NSF CAREER Award (2011), the PECASE Award (2012) and the 2016 Blackwell Tapia Prize. She is Fellow of the American Mathematical Society and of the Association for Women in Mathematics.

During her time as CAMPOS Faculty Director, Vazquez has launched several key initiatives. In 2021 the center received funding from the Alfred P. Sloan Foundation for the ENHANCE Program. ENHANCE supports CAMPOS faculty through individualized research development support and through Dependent Care grants. Also, in 2021 CAMPOS launched its Jump-Start grants to support pilot initiatives by its faculty and help boost productivity during the pandemic. Between 2019 and 2021 CAMPOS inducted twelve new Faculty Scholars, nine of whom identify as women.

MISSION STATEMENT

CAMPOS

Support the discovery of knowledge by promoting women in science, starting with Latina STEM scholars and expanding to all underrepresented groups in STEM through building an inclusive environment that is diversity-driven, mentorship-grounded, and career-success focused.

HISTORY

In 2012 UC Davis was awarded an ADVANCE Institutional Transformation grant from the National Science Foundation (Katehi, PI; Stanton, co-PI; Rodriguez, co-PI; McDonald, co-PI; de la Torre, co-PI). CAMPOS was launched in 2013 as a key initiative of UC Davis ADVANCE and blossomed under the helm of its founding faculty director Mary Lou de Leon Siantz, Professor Emerita at the Betty Irene Moore School of Nursing.

CAMPOS initially prioritized the hiring of UC Davis faculty whose exceptional contributions to STEM research, teaching and service, addressed issues affecting Latinas in STEM. Over time the vision grew to include all underrepresented voices with the aim to change the face of STEM science. To achieve ADVANCE's goals, UC Davis matched federal funds with an investment of over $3 million in incentive monies to support the hiring and development of faculty who individually and collectively transform STEM education at UC Davis and contribute research and service to help solve society's vexing problems.

UC Davis extended its commitment to increase faculty diversity beyond the period of NSF funding (2012-17). Currently, CAMPOS is part of the Office of Academic Diversity (AD) within the Office of Diversity, Equity and Inclusion (DEI). In 2021 the center was overseen by Mariel Vazquez, the CAMPOS Faculty Director, by Lorena Oropeza, Associate Vice Chancellor for Academic Diversity, and by Renetta Tull, Vice Chancellor of Diversity, Equity and Inclusion.

Most academic diversity initiatives focus on student intervention. CAMPOS is unique in that it centers its efforts on elevating STEM faculty. The center provides opportunities to support the scholarship of CAMPOS faculty through networking, collaboration, mentorship and the development of leadership skills. Throughout the year, the center offers programming for faculty to disseminate their research, share experiences, and discuss issues of common concern. CAMPOS creates a broader community of scholars by inviting other UC Davis STEM faculty to become CAMPOS Affiliates and/or participate in many of the CAMPOS-sponsored activities. CAMPOS faculty develop team science strategies, create new collaborations, participate in teaching and training opportunities, and partner with the surrounding communities. Through their work at UC Davis, CAMPOS Faculty train and inspire the next generation of STEM scientists.

OVERVIEW – YEAR 2021

Between 2014 and 2021, thirty-seven exceptional ladder-rank faculty across 27 STEM disciplines have joined CAMPOS as Faculty Scholars, including the four new faculty scholars who joined in 2021.

2021 was a very successful year for CAMPOS faculty. Collectively, they received 25 Awards and recognitions, published over 196 peer reviewed scientific publications, and had 61 ongoing grants where the CAMPOS faculty is listed as lead-PI. In the year 2021 CAMPOS Faculty were awarded 43 grants (as PI or co-PI). Beyond their research accomplishments, CAMPOS faculty continue thriving for excellence in teaching and mentoring and were active in their outreach and science communication efforts. *See Section III. Accomplishments – Year 2021.*

The CAMPOS Research Colloquia are research seminars that aim to showcase the research done by CAMPOS's faculty. After being postponed in 2020 due to the COVID-19 pandemic, the series returned in 2021 as weekly virtual presentations in Winter and Spring. This new format increased accessibility for members outside of our community. In Fall 2021, campus reopened and the CAMPOS Research Colloquia changed to a hybrid format for people to attend in person as long as they followed proper campus COVID protocols. CAMPOS hosted 10 Research Colloquia in 2021. *See Section IV. Programming.*

In late spring 2021, the CAMPOS Selection Committee evaluated nominations and selected the 2021-2022 cohort of CAMPOS Faculty Scholars. Four new faculty were welcomed into our community:

- Anya Brown (Assistant Professor, Evolution and Ecology, Bodega Marine Lab[1]);
- Kristen George (Assistant Professor, Public Health Sciences);
- Marco I. González (Associate Professor, Neurology, School of Medicine);
- Joseph Teran (Professor, Mathematics).

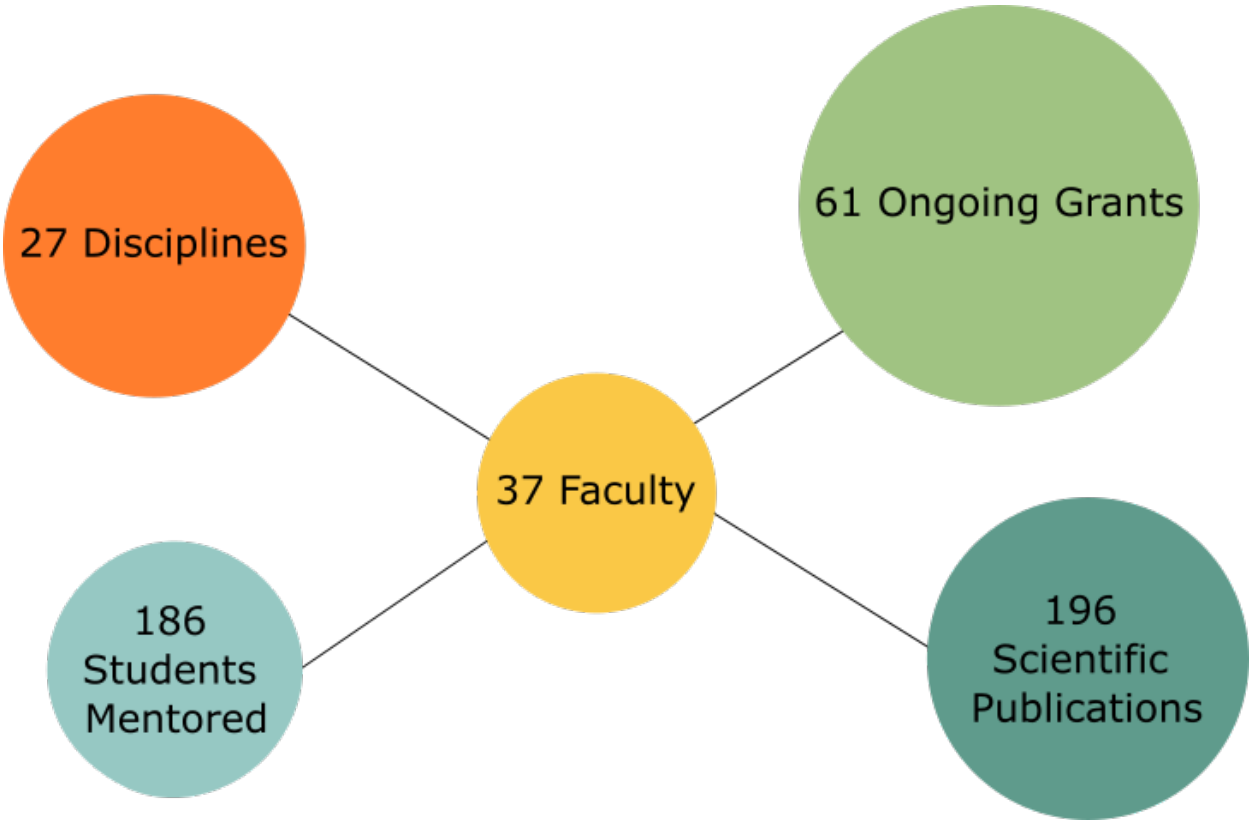
CAMPOS hosts an induction ceremony each year to welcome and recognize its newest faculty scholars, and to disseminate their accomplishments. The 2020 and 2021 ceremonies had to be postponed due to the COVID-19 pandemic. In 2021 we began preparations for an induction event in Winter 2022 for the 2020 and 2021 cohorts of CAMPOS Faculty Scholars.

[1] Professor Brown will arrive at UC Davis in summer 2022

In June 2021, the ADVANCE Selection Committee evaluated nominations and announced the two 2021 ADVANCE Scholar Awardees: Diane M. Beckles (Professor of Plant Sciences) and Luis G. Carvajal-Carmona (Professor of Biochemistry and Molecular Medicine). The ADVANCE Scholars Symposium was planned for Spring 2022 and was designed to honor the 2020 and 2021 ADVANCE Award recipients to present their research.

In September 2021, CAMPOS and its sister program CAMPSSAH hosted their New Faculty Orientation. *See Section IV. Programming.*

SNAPSHOT OF CAMPOS FACULTY SCHOLARS IN 2021



2021 CAMPOS FACULTY SCHOLARS

Anya Brown

Assistant Professor, Evolution and Ecology, Bodega Marine Lab

After finishing her Ph.D. in 2018 at the University of Georgia, Dr. Brown held the John J and Katherine C Ewel Postdoctoral Fellow at the University of Florida and a Woods Hole Oceanographic Institution Postdoctoral Scholar. Dr. Brown's research combines ecological experiments with genetic analysis of microbiome composition using DNA sequence data to test the indirect effects of microbes in modulating host phenotypes. Dr. Brown has published 9 papers (lead author on 8), including papers in strong disciplinary journals in her field such as Ecology, Oecologia, and Marine Ecology Progress Series.

Her contributions to DEI are impressive for her career stage. In the classroom she has been committed to creating a welcoming environment by showcasing case studies from scientists from a diversity of backgrounds. She is also a committed mentor and founded a group dedicated to this at her Ph.D. institution, UGA Women in Science. Currently, she is a member of SciAll.org, a group that seeks to "de-mystify science, counteract scientist stereotypes and capture the attention of the public to encourage entry into the sciences". She was an organizer of the 2020 Unity in Diversity virtual meeting of the International Society for Microbial Ecology.

Professor Brown will join UC Davis in Summer 2022.

2021 CAMPOS FACULTY SCHOLARS

Kristen George

Assistant Professor, Public Health Sciences

Dr. George is an epidemiologist whose research focuses on racial/ethnic disparities in lifecourse cardiovascular disease (CVD) risk factors and their contributions to disparities in cognitive impairment and aging, particularly among Black Americans. Her project assessing adolescent and early adulthood CVD risk factors and late life cognition in an all-Black cohort of older adults, the first study to do this, was featured at the Alzheimer's Association International Conference in July of 2020 as part of their media campaign and was just published in Journal of Gerontology: Medical Sciences. During her time as a postdoctoral scholar at U.C. Davis, she has published 7 first author papers.

Additionally, during her time at U.C. Davis, Dr. George has leveraged opportunities to mentor graduate and undergraduate students in research, guest lecture in the Fundamentals of Epidemiology course, and participate as a member of the Alzheimer's Disease Research Center's diversity, equity, and inclusion committee.

2021 CAMPOS FACULTY SCHOLARS

Marco I. González

Associate Professor, Neurology, School of Medicine

Before joining U.C. Davis this summer, Dr. González was an Associate Professor at the University of Colorado in the Department of Pediatric Division of Neurology. Dr. González received his MS and Ph.D. at Centro de Investigación y Estudios Avanzados del IPN, Mexico (1994 and 2000, respectively). From 2005-2008, he served as a Research Associate at the Children's Hospital of Philadelphia, Philadelphia, PA. From 2008-2010, Dr. González served as an Instructor of Pediatrics at the University of Colorado, Denver, CO and from 2010-2017, he served as an Assistant Professor of Pediatrics at the University of Colorado Denver, School of Medicine until his promotion in 2017 to Associate Professor of Pediatrics. His research focuses on the molecular mechanisms of epileptogenesis to develop disease-modifying therapies to prevent epilepsy.

Dr. González's background as an immigrant and underrepresented minority make him keenly aware of the challenges that URM students face in academia. Dr. González has demonstrated his commitment to the recruitment and mentoring of URM students as evidenced through his participation as a mentor in the Graduate Experience for Multicultural Students (GEMS) at University of Colorado, the Child Health Research Internship at University of Colorado, the Pre-K and K-to-R Program at the Colorado Clinical and Translational Sciences Institute, and the Mentoring Institute for Neuroscience Diversity Scholars (MINDS).

2021 CAMPOS FACULTY SCHOLARS

Joseph Teran

Professor, Mathematics

Professor Joseph Teran is a world leader in computational mathematics, using novel, physically accurate, numerical methods to simulate the motion of materials in complex situations such as snow in avalanches, baking bread, and virtual surgery. His research creates tools for scientists, movie animators, and surgeons to visualize (in real-time) physical systems with a level of detail and accuracy that was previously impossible.

Professor Teran is Mexican-American, born and raised in Northern California, with a bachelor's degree from UC Davis. In 2005 he received his PhD in Computer Science from Stanford University under the direction of Professor R. Fedkiw. From 2005-2007 he was a postdoctoral fellow at the prestigious Courant Institute of Mathematical Sciences at New York University. This postdoctoral position was followed by an Assistant Professorship of Mathematics at UCLA.

Professor Teran is also an outstanding mentor. He has already graduated 22 PhD students and is currently mentoring another 5. From these, 6 are women and 4 are from underrepresented minorities (LatinX). Professor Teran's contributions to diversity have also been significant. From 2016 to 2018 he was member of the Mathematical Sciences Research Institute (MSRI) human resources advisory committee to develop programs and recruit students from underrepresented minorities and since 2017 he has been member of the UCLA physical sciences diversity committee to develop diversity requirement for majors in the physical sciences. In recognition for his work and commitment to diversity work he was plenary or invited speaker at Blackwell-Tapia 2012, SACNAS 2014, 2016 ACM Richard Tapia celebration of diversity in computing, UCLA/IPAM LatMath 2017 and 2018, and at the 2017 Math Alliance Field of Dreams

II. CAMPOS FACULTY

COLLEGE OF BIOLOGICAL SCIENCES

Jacqueline Barlow
Assistant Professor
Microbiology and Molecular Genetics

Anya Brown
Assistant Professor
Evolution and Ecology, Bodega Marine Lab

Rebecca M. Calisi-Rodríguez
Associate Professor
Neurobiology, Physiology and Behavior

Natalia Caporale
LPSOE
Neurobiology, Physiology and Behavior

Samuel Díaz-Muñoz
Assistant Professor
Microbiology and Molecular Genetics

Wilsaan M. Joiner
Associate Professor
Neurobiology, Physiology and Behavior; Neurology (*joint appointment*)

James A. Letts
Assistant Professor
Molecular and Cellular Biology

Mariel Vazquez *Professor*
Microbiology and Molecular Genetics and Mathematics (*joint appointment*)

COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES

Maciel Hernández
Assistant Professor
Human Ecology

Rebecca Hernández
Assistant Professor
Land, Air and Water Resources

Juliana Maria Nóbrega de Moura Bell
Assistant Professor
Food Science and Technology

Fernanda Valdovinos
Assistant Professor
Environmental Science and Policy

COLLEGE OF LETTERS AND SCIENCE

Marie Cuevas Heffern
Assistant Professor
Chemistry

Fernanda Ferreira
Professor
Psychology

Jairo Fúquene-Patiño
Assistant Professor
Statistics

Jeanette Ruiz
Assistant Teaching Professor
Communications

Joseph Teran
Professor
Mathematics

Jesús M. Velázquez
Assistant Professor
Chemistry

Mariel Vazquez
Professor
Mathematics and
Microbiology and
Molecular Genetics and
(*joint appointment*)

COLLEGE OF ENGINEERING

Verónica L. Morales
Assistant Professor
Civil and Environmental
Engineering

Maureen Njoki Kinyua
Assistant Professor
Civil and Environmental
Engineering

Jasquelin Peña
Associate Professor
Civil & Environmental
Engineering

Cindy Rubio González
Associate Professor
Computer Science

SCHOOL OF EDUCATION

Alexis Patterson *Assistant Professor*
Science Education

SCHOOLS OF MEDICINE AND PUBLIC HEALTH

Kristen George
Assistant Professor
Public Health Sciences

Marco I. González
Associate Professor
Neurology

Theanne N Griffith
Assistant Professor
Physiology and Membrane Biology

Tiffani Johnson
Assistant Professor
Emergency Medicine

Wilsaan Joiner
Associate Professor
Neurology; Neurobiology, Physiology & Behavior.
(joint appointment)

Rose Kagawa
Assistant Professor
Emergency Medicine, Violence Prevention Research Program

Anna La Torre
Associate Professor
Cell Biology and Human Anatomy

Verónica Martínez-Cerdeño
Professor
Pathology and Laboratory Medicine

Madeline Nieves-Cintrón
Assistant Professor
Pharmacology

Miriam A Nuño
Associate Professor
Biostatistics and Surgery Residence

BETTY IRENE MOORE SCHOOL OF NURSING

Fawn Cothran
Assistant Professor
Family Caregiving Institute

SCHOOL OF VETERINARY MEDICINE

Lillian Cruz-Orengo
Assistant Professor
Anatomy, Physiology and Cell Biology

Crystal D. Rogers
Assistant Professor
Anatomy, Physiology & Cell Biology

RECRUITMENT

Every Fall, CAMPOS publishes its call for nominations.

The CAMPOS Selection Committee (see next page for composition) met on March 25th 2021 to discuss the committee composition, its charge and the evaluation timeline. (See the next section.)

In separate communications, our office reached out to the department chairs, and chairs of hiring committees for all STEM related ladder-rank searches to remind them of CAMPOS and the nomination process. The nomination deadline was closed on May 30th, 2021.

We received 6 nominations for the 2021 cohort of CAMPOS Faculty Scholars. All materials were forwarded to the CAMPOS Selection Committee. After reviewing the nominations, the committee convened on June 21st. During this meeting, each candidate was discussed in detail and the committee made its recommendations.

CAMPOS Director and AVC Oropeza met with Vice Provost Phil Kass to convey the committee's recommendations. The new Faculty Scholars, the hiring deans and the department chairs were notified in July. The 2021 Cohort of CAMPOS Faculty Scholars was announced to the campus in the Vice Chancellor's Office for Diversity, Equity and Inclusion Newsletter: For Your Information Volume 3, Issue 1 on September 9, 2021.

The new CAMPOS Faculty participated in the CAMPOS/CAMPSSAH New Faculty Orientation in September 2021. See section Programming – New Faculty Orientation for details.

GOVERNANCE COMMITTEES

CORE SELECTION COMMITTEE

Every year, CAMPOS oversees two important review processes: the selection of the yearly cohort of CAMPOS Faculty Scholars and the selection of two ADVANCE Scholar Awardees. In 2019, the CAMPOS Director proposed a structure for these reviewing bodies. The CAMPOS and ADVANCE Selection Committees have independent charges as described in the next two sections. The Core Selection Committee consists of those members who serve in both the CAMPOS and the ADVANCE selection committees.

CAMPOS SELECTION COMMITTEE (CSC)

Members of the CAMPOS Selection Committee evaluate nominations for CAMPOS scholars once a year. The work of the committee typically occurs in the 2-4 weeks after the nomination period closes. The nomination period closes on May 30th, 2021. The CSC consists of all members of the "Core" selection committee and two CAMPOS Faculty Scholars (see roster in the next page). In addition, the Associate Vice Chancellor for Academic Diversity (AVC-AD) serves as a non-voting *ex-officio* member. After reviewing nominations, the CSC issues recommendations to the Vice Provost for Academic Affairs, who makes the final selection.

The committee will meet at least twice per year, once in the winter quarter and once in the spring quarter to plan, prepare and review applications. Committee members are also asked to recommend faculty to be invited as CAMPOS Affiliates and to serve on LAUNCH committees (overseen by Academic Affairs).

Committee members are encouraged to attend the CAMPOS Research Colloquia and other events organized by the Center, and to serve as informal mentors for CAMPOS Faculty. The presence of all committee members is requested at the CAMPOS Induction Ceremony. Due to the lockdown imposed by the COVID-19 pandemic, the induction ceremony for the 2020 and 2021 cohorts of CAMPOS Faculty will take place in Winter 2022.

CSC Composition: The CAMPOS Selection Committee will include at least one tenured CAMPOS Faculty Scholar, one member from the Academic Federation (at the Associate or Full level), and one member from a non-STEM department. In 2021, these roles are filled by Dr. Verónica Martínez-Cerdeño (CAMPOS Faculty), Dr. Denneal Jamison-McClung (Academic Federation), and Dr. Lorena Oropeza (History Department), respectively. All other members of the CSC are tenured professors in a STEM department. The chair of the CSC committee is the CAMPOS Faculty Director.

ADVANCE AWARD COMMITTEE (ASC)

UC Davis ADVANCE originated with an Institutional Transformation grant awarded by the National Science Foundation's ADVANCE Program in 2012. The NSF ADVANCE program aimed to increase the participation and advancement of women in academic science and engineering careers. At the completion of the NSF Grant, several components of the ADVANCE Program were adopted and are currently overseen by the Offices of Academic Affairs and DEI (Academic Diversity). The ADVANCE Scholar Award is overseen by the CAMPOS Director.

The ADVANCE Scholar Award program is available for mid-career and senior Academic Senate or Academic Federation faculty who advance diverse perspectives and gender equity in STEM through outstanding scholarship and mentorship. The intent of the ADVANCE Scholar Award is to encourage research, leadership, and to foster outreach to underserved communities and mentorship of students from under-represented groups. With this award, CAMPOS aims to highlight and celebrate the diverse contributions that UC Davis STEM faculty have made to their fields.

Members of the ADVANCE Award Selection Committee evaluate nominations for the ADVANCE Award. The work of the committee typically occurs in the month after the nomination period closes. The nomination period closes on June 1st, 2021. The committee consists of all members of the Core selection committee, with at least one member from the Academic Federation, and the previous year's Awardees.

The presence of all committee members is requested at the ADVANCE Symposium and Award ceremony. Due to the lockdown imposed by the COVID-19 pandemic, we anticipate that the event for the 2020 and 2021 ADVANCE Awardees will take place in Spring 2022.

The committee will meet at least twice per year, once in the winter quarter and once in spring. Committee members are asked to recommend excellent candidates for the ADVANCE Award and solicit nominations.

ASC Composition: The ADVANCE Award Selection Committee consists of the core selection committee and the ADVANCE awardees from the previous round (See roster in the next page). In 2021, these roles are filled by Professor Diane Beckles (2021 ADVANCE Awardee), Professor Luis Carvajal Carmona (2021 ADVANCE Awardee). The ASC will include at least one member from the Academic Federation (at the Associate or Full level), in 2021, this role is filled by Dr. Denneal Jamison-McClung (Academic Federation). All members of the ASC are tenured professors. The Chair of the committee is the CAMPOS Faculty Director.

SELECTION COMMITTEES

Member of the Core Selection Committee	Email	End of term
Titus Brown Professor Population Health and Reproduction, SVM	ctbrown@ucdavis.edu	Sept 2024
Aldrin Gomes Professor Neurobiology, Physiology and Behavior, CBS Physiology and Membrane Biology, School of Medicine	avgomes@ucdavis.edu	Sept 2024
Elva Díaz Professor Pharmacology School of Medicine	ediaz@ucdavis.edu	Sept 2024
Denneal Jamison-McClung Director, UC Davis Biotechnology Program (Academic Federation member)	dsjamison@ucdavis.edu	Sept 2022
Mariel Vazquez CAMPOS Faculty Director; Faculty Scholar Professor of Mathematics Professor of Microbiology & Molecular Genetics	mariel@math.ucdavis.edu	The CAMPOS Director is a permanent member of the selection committee

The CAMPOS Selection Committee (CSC) consist of the Core Selection Committee and these two additional members

Lorena Oropeza Associate Vice Chancellor for Academic Diversity Professor of History *ex-officio*; Non-STEM member (2020)	lboropeza@ucdavis.edu	July 2022
Verónica Martínez-Cerdeño Professor Pathology and Laboratory Medicine CAMPOS Faculty Scholar	vmartinezcerdeno@ucdavis.edu	Sept 2023

The ADVANCE Selection Committee (ASC) consist of the Core Selection Committee and these two additional members

Diane Beckles Professor Plant Sciences 2021 ADVANCE Scholar Awardee	dmbeckles@ucdavis.edu	Sept 2022
Luis Carvajal-Carmona Professor Biochemistry and Molecular Medicine 2021 ADVANCE Scholar Awardee	lgcarvajal@ucdavis.edu	Sept 2022

III. ACCOMPLISHMENTS – YEAR 2021

PROMOTIONS

Alexis Patterson
Promotion from Assistant Professor to Associate Professor with Tenure
Department of Science Education
School of Education

Veronica Morales
Promotion from Assistant to Associate Professor
Department of Civil and Environmental Engineering
College of Engineering

Juliana Maria Leite Nóbrega de Moura Bell
Promotion from Assistant Professor VI to Associate Professor 3.5
Department of Food Science and Technology
College of Agricultural and Environmental Sciences

MERITS

Maria Heffern
Merit to Assistant Professor Step 6
Department of Chemistry
College of Letters and Science

Maciel Hernandez
Merit received effective July 2021
Department of Human Ecology
College of Agricultural and Environmental Sciences

Jairo Fúquene-Patiño
Merit received
Department of Statistics
College of Letters and Science

GRANTS

NEW GRANTS AWARDED IN 2021

EXTERNAL GRANTS

- 07/2021-02/2023 (amendment to a 2019 Grant): NSF DGE1937778 - Impact of Ethnic Studies Courses on the sense of belonging, professional identity, self-efficacy and retention of underrepresented students in STEM. PI: **N. Caporale**, $349,923

- 08/01/2021-07/31/2026: DOE Basic Energy Sciences, Early Career Award, Award DE-SC0022293 - Understanding Plant-Specific Features of Mitochondrial Respiration. PI: **Letts, JA,** ($119,943.00 in 2021-2022, $750,000 over 5 years)

- 06/01/2021-05/31/2025: NIH National Institute of General Medical Sciences (NIGMS) 1R35GM137929-02 - Understanding the Mechanisms of Respiratory Supercomplexes and Mitochondrial Complex I. PI: **Letts, JA,** ($366,115.00 in 2021-2022, $1,789,304 over 5 years)

- 7/15/2021-6/30/2026: NSF IOS 2048265 - CAREER: Elucidating the Interaction Dynamics of Soil Metals with Flavonoids in the Plant Rhizosphere. PI: **Maria Heffern**; Co-Principal Investigator, Organization: University of California-Davis ($502,358.00)

- 09/01/2018-05/31/2023: NIH/NINDS R01 NS107131 Fragile X-associated tremor/ataxia syndrome (FXTAS) pathology and anatomy: imaging and clinical correlates. PI: **Martínez-Cerdeño**, $2,344,292 with indirect ($312,000 direct/year)
    - 09/01/2021-05/31/23: (NIH/NINDS) R01 Diversity supplement–1 **Martínez-Cerdeño (PI).** $308.000
    - 09/01/2021-05/31/23: (NIH/NINDS) R01 Diversity supplement–2 **Martínez-Cerdeño (PI)**. $250.000

- 2021-2025: NHLBI (2R01HL121059) – "Coupling of vascular $Ca_V1.2$ channels in health and disease." PI: Navedo, M.F. Co-investigator: **Madeline Nieves-Cintrón,** ($2,903,456 /4)

- 1/2021–12/2022: National Institute of Health Training Program in Basic and Translational Cardiovascular Science T32 HL086350 - "Nicotine impairs cAMP signaling in vascular smooth muscle". Mentor: **M. Nieves-Cintrón, $31,330**

- 7/2021-6/2022: NIH: Phase I RADx-UP Supplement: ORALE COVID-19 Study to improve vaccination among farmworkers in California. Co-investigator: **MA Nuño,** $300,000, 10% FTE

- 10/2021-3/2022: Health Equity Partnership, FEMA: Vaccine monitoring and determining areas of low vaccination acceptance in vulnerable populations. Co-investigator: **MA Nuño,** 10% FTE

- 9/01/2021–8/31/2024: DoE X-Stack "Com-Port: Rigorous Testing Methods to Safeguard Software Porting", PIs: **C. Rubio González**, Ganesh Gopalakrishnan and Pavel Panchekha

(University of Utah), Zachary Tatlock (University of Washington), Ignacio Laguna (LLNL), and Ang Li (PNNL). $389,642.00 (total award: $3,599,642.00)

- 10/2021–9/2026: NSF Principles and Practice of Scalable Systems (PPoSS), "PPoSS: Large: ScaleStuds: Foundations for Correctness Checkability and Performance Predictability of Systems at Scale", PIs: **C. Rubio González,** Haryadi Gunawi, Shan Lu and Henry Hoffmann (University of Chicago), Robert Ross and Venkatram Vishwanath (Argonne National Laboratories), Manos Kapritsos (University of Michigan), and YangWang (Ohio State University) $625,000.00 (total award: $5,000,000.00).

- 10/2021–9/2024: NSF Core "SHF: Medium: Studying and Exploiting the Bimodality of Software National Science Foundation", PI: Premkumar Devanbu and co-PIs: **C. Rubio González,** Gerardo Con Diaz, Emily Ida Popper Morgan, and Aditya Thakur (UC Davis) $1,200,000.00.

- 01/01/2022-12/31/2026 NSF CAREER: Functional Analysis of Crest EffectorS (FACES) **C Rogers** (Awarded)

- **2021** OAK RIDGE NATIONAL LABORATORY (OPERATED BY UT BATTELLE, LLC), Project Title: A High Performance Computing Model of Powder-Scale Melting and Solidification Simulations in Additive Manufacturing of Metals via the Material Point Method (MPM) **J. Teran**

- **2021** NATIONAL LABORATORIES [001742] Project Title: Fast and Conservative Contact Algorithms based on Particle-in-cell Grid Transfers**. J. Teran**

- 08/2021-07/2024: NSF DMS/NIGMS 2054347 - DMS/NIGMS 2: Collaborative Research: Modeling R-Loop Formation and Topology Using Braids and Graphs Coupled with Single-Molecule Footprinting. PI: **M. Vazquez**, co-PI: Frederic Chedin ($800,002)

- 08/2021-08/2022 (amendment to a 2018 grant): NSF1817156 – Collaborative Research: DNA Packing of Bacteriophages: Liquid Crystal Modeling through Analysis, Knot Theory and Numerical Simulation. PI: **M. Vazquez**, co-PI J. Arsuaga ($480,000 +$70,780 supplement 2021)

INTERNAL GRANTS

- 7/1/2021-6/30/2022: 5 grants from national/state agencies (NSF & CLL); 6 grants from UC Davis internal funding for Discipline-Based Education Research and professional development and funding to provide training on inclusion and quantitative skills to faculty in the US.
  PI: **N. Caporale**, $580,000.
  Co-PI: **N.Caporale**, $675,000. $1,255,000 total.

- 07/01/2021-06/30/2022: Jump-Start Grant, Center for the Advancement of Multicultural Perspectives on Science, UC Davis - "Broadening participation in the Geosciences". PI: **N. Caporale,** $5,000

- 07/01/2021-06/30/2022: Jump-Start Grant, Center for the Advancement of Multicultural Perspectives on Science, UC Davis – "Hypoxic preconditioning induces blood-brain barrier recovery after traumatic brain injury via ZO-1 suppression of ZONAB activity". PI: **Lillian Cruz-Orengo,** $5,680

- 07/01/2021-06/30/2022: Jump-Start Grant, Center for the Advancement of Multicultural Perspectives on Science, UC Davis. – This award is designed to help mitigate existing disparities have been exacerbated by the COVID-19 crisis, especially assistant professors, women and members from ethnic and racial minorities. PI: **T. Griffith,** $5,000

- 07/01/2021-06/30/2022: Jump-Start Grant, Center for the Advancement of Multicultural Perspectives on Science, UC Davis - "Transforming Energy and Diversity in Rapid Renewable Energy Transition". PI: **R. Hernandez**, $5,100

- 11/2020 – 9/2021: COVID-Impacted Research Funding – UC Davis Office of Research. Nicotine effects on the vasculature–Principal Investigator, **M. Nieves-Cintrón**, $43,000

- 2021 Research Travel Grant, UC Davis. **A. Patterson Williams**, **(**$800)

- 2021: Grant for Advancing Sustainable Development Goals, Global Affairs, UC Davis. PI: **J. Peña**, $7,500

- Davis Intellectual and Developmental Disabilities Research Center (IDDRC) Pilot Grant **C. Rogers** (Awarded)

- Davis Environmental Health Sciences Center Pilot Grant, "Identifying the effects of nitrate exposure on embryonic development" **C. Rogers** (Awarded).

- 07/01/2021-06/30/2022: Jump-Start Grant, Center for the Advancement of Multicultural Perspectives on Science, UC Davis - "Working group to develop theory on plant-herbivore interactions for terrestrial food webs". PI: F**. Valdovinos,** $4,220

- 07/01/2021-09/21/2022: Large Grant, Academic Senate, UC Davis - Modeling the Dynamics in California Upwelling Coasts**. PI: F. Valdovinos,** $25,000

- 2021: Grant for Advancing Sustainable Development Goals, Global Affairs, UC Davis. PI: **F. Valdovinos,** $7,500

OTHER ACTIVE GRANTS

- 2021-2022 (Year 3): USDA _Pulse Crop, ARS - Tailoring processing strategies to produce the new generation of chickpea proteins and prebiotic oligosaccharides. PI: **de Moura Bell, $90,000**

- 2021-2023: California Department of Food and Agriculture, CDFA - Effects of processing on the nutritional, functional, and sensory properties of almond milk and fouling of industrial equipment. PI: **de Moura Bell**, $425,986

- 2020-2021: USDA _ARS - Tailoring processing strategies to produce the new generation of chickpea proteins and prebiotic oligosaccharides. **PI: de Moura Bell,** $90,000

- 2020-2022: USDA _ARS - Effects of extraction methods on lentil and dry beans extract composition and structural modifications: from extraction efficiency, functional and biological properties to fouling of industrial UHT equipment. PI: **de Moura Bell**, $199,000

- 2020-2022: USDA _ARS - Effects of extraction methods on lentil and dry beans extract composition and structural modifications: from extraction efficiency, functional and biological properties to fouling of industrial UHT equipment. PI: **de Moura Bell**, $199,000

- 06/01/2019 - 05/31/2024: National Science Foundation, IOS Grant No.: IOS-1846381 - National Science Foundation CAREER award: Single Parenting in a Bi-Parental System: Discovering SexBiased Changes in Brain, Behavior, and Reproductive Success Agency. **PI: R. M. Calisi**, $1,800,000

- 01/01/2019 - 12/31/2021: Gordon and Betty Moore Foundation Grant No.: GBMF5387.01 - A Pipeline to the Public: Launching a new model of science communication training, practice, and public outreach. PI: William McGinnis, **PI: R. M. Calisi** $90,000.00

- 2020–2023: Betty Irene Moore Nurse Fellowship Program for Nurse Leaders and Innovators, "Stress and Resilience in African American Dementia Family Caregivers: A Longitudinal Study," **PI: Fawn A. Cothran**. $450,000.

- 07/01/2020 - 06/30/2024: USDA 2020-68014-30975 - Real-time Waterfowl Mapping Web Application: Validating a Critical Tool for a New Era of Avian Influenza Surveillance to Improve Food Security in Commercial Poultry. Co-Principal Investigator Maurice E. Pitesky, **Samuel Diaz-Munoz**, Brian Ladman, Jeff Buler, Christopher Williams, Michael Casazza, Elliott Matchett, Todd Kelman. Dr. Diaz-Munoz portion of the grant: Direct Costs: $163,428; Indirect Costs: $70,041; Total: $233,460. Award Amount: $1,000,000; On Campus: $519,575

- 2020-2022 NIH/NIA - NIH Loan Repayment Program L30AG069254, "Racial/Ethnic Disparities in Life Course Vascular Risk Factors for Cognitive Impairment, Dementia, and Healthy Cognitive Aging" **PI: K. George $35,921**

- 10/2020–9/2023: NSF CISE Community Research Infrastructure (CCRI) - "CCRI: ENS: BugSwarm: Enhancing an Infrastructure and Dataset to Support the Software Engineering

Research Community". With co-PI: Premkumar Devanbu (UC Davis), PI: **C. Rubio González,** $1,470,431.00

- 12/2019–8/2022: NSF Engineering Education and Centers (EEC) - "The PROMISE Engineering Institute". PI: Renetta Tull and co-PIs Ricardo Castro and **C. Rubio González,** $314,699.00

- 9/2019–8/2024: DOE Early Career Award - "Towards Scalable Precision Tuning of Numerical Software". PI: **C. Rubio González,** $806,000.00

- 7/2018–6/2023: NSF CAREER Award - "CAREER: Understanding and Combating Numerical Bugs for Reliable and Efficient Software Systems". PI: **C. Rubio González,** $552,363.00

- **2021-2023:** Spencer Foundation. "Re-imagining Latinx adolescents' academic success: How cultural assets and social relationships protect against the effects of discrimination." Ha, T. (PI), **Hernández, M. M.** (Co-PI), Kornienko, O. (Co-PI), & Rogers, A. A. (Co-PI), $74,965

- 9/01/20/19–8/31/2023: HRSA/MCHB/EMSC U03MC00001 - (Kuppermann/Nishijima) *Emergency Medical Service for Children Network Development* Overall goal: To demonstrate the effectiveness of a collaborative research network for studies of the prevention, treatment, and the recovery from acute illnesses and injuries in children. Disparities Co-Investigator: **T. Johnson**, $2,800,00

- 09/05/2020 - 08/31/2025: NIH/NHLBI R01HL152454-01 (Tapia) - *Investigating Socio-Ecological Factors in Pediatric Sleep Related Health Disparities* Overall goal: To identify novel socio-ecological factors contributing to disparities by race in sleep disordered breathing (SDB), particularly with regard to the SDB-related symptoms of sleepiness and neurobehavioral impairments, and to explore the role of provider's implicit racial bias in parent perceptions of SDB-related healthcare and disparities in referral patterns. Co-Investigator: **T. Johnson**, $3,000,000

- 09/01/2020 - 06/30/2025: NIH/NICHD: R01NS110826-01A1 (Tsze) - *Headache Assessment of Children for Emergent Intracranial Abnormalities.* Overall goal: To reduce unnecessary neuroimaging by creating a clinical decision-making algorithm to determine the precise risk of emergent brain abnormalities in children with acute headaches. Co-Investigator: **T. Johnson,** $8,200,00

- 10/1/2020 – 9/30/2024: NIH/NICHD: R01 HD102428-01 (Pierce) - *An Injury Plausibility Assessment Model for Differentiating Abusive from Accidental Fractures in Young Children* Overall goal: To externally validate the fracture injury plausibility assessment model (FxIPAM) for differentiating abusive from accidental fractures in young children. Co-Investigator: **T. Johnson,** $2,800,00

- 04/15/2020 – 3/31/2025: NIH/NHLBI: R01 HL1428247-01A1 (Kline, Ellison) - *Bedside Exclusion of Pulmonary Emboli in Children without Exposure to Radiation (BEEPER)* Overall goal: To provide valid clinical criteria to safely exclude pulmonary emboli (PE) in children without the use of ionizing radiation and reduce the rate of missed PE while decreasing unnecessary radiation exposure of children and adolescents with signs and symptoms suggestive of PE. Site-PI: **T. Johnson**, $8,600,00

- 7/1/2020-6/30/2025: UC Davis Internal Grant *Center for the Advancement of Multicultural Perspectives in Science (CAMPOS) Faculty Scholar* - Overall goal: The mission of CAMPOS is to support the discovery of knowledge by promoting women in science, starting with Latina STEM scholars and expanding to all underrepresented groups in STEM through building an inclusive environment that is diversity-driven, mentorship-grounded, and career-success focused. Faculty Scholar: **T. Johnson,** $530,000

- 04/01/2021-09/30/2022: University of California Institute for Mexico and the United States - Consejo Nacional de Ciencia y Tecnología (UC MEXUS-CONACYT) A21-1100 - Building a Mechanistic Understanding of Respiratory Supercomplexes using the Model Fungal Phytopathogen *Ustilago maydis,* (Brief Description: To develop the fungus *Ustilago maydis* as a model organism to examine the roles of respiratory complexes and supercomplexes, with a focus on SC I+III_2+IV and ATP synthase) Co-PI: **Letts, JA** (together with Co-PI Dr Oscar Flores-Herrera, Universidad Nacional Autonoma de Mexico), $12,500

- 07/01/2018-06/30/23: NIH/NIMH R01MH097236 - Typical and Pathological Cellular Development of the Human Amygdala. Co-Investigator: **Martínez-Cerdeño**
  Cynthia Schumann (PI), $1,962,500 with indirect ($250.000 direct/year)

- 07/15/16-07/14/21: NIH NINDS R01NS094559 - The Wnt-independent role of TCF7l2 in CNS myelin formation and repair. Fuzheng PI: Guo Co-Investigator **Martínez-Cerdeño,**
  $1,717,190 ($218,000 direct/year)

- 07/01/2016-06/30/21: NSF CAMPOS Award, Center for Advancing Multicultural Perspectives on Science. Role: PI: **Martínez-Cerdeño,** $430,000 ($85,000/year)

- 04/01/20-03/30/22: Disparity grant, Department of Developmental Services of CA. PI: **Martínez-Cerdeño**, $137,000

- 01/01/2020-12/31/21: Shriners Hospitals - Autism studies in the human cortex. PI: **Martínez-Cerdeño**, $30,000

- 07/21-06/23: EMSL PNNL Large-Scale Proposal "Advancing Micromodel and Imaging Capability to Detect Hotspots in the Hyporheic Zone," **V. Morales,** 450 resource hours at the lab.

- NSF-INTERN "Flow heterogeneity impact on dissolution behavior," **V. Morales**
  $21,616 USD, 4 months

- **:** Swiss National Science Foundation Post-Doc Mobility. "Nanoparticle Filtration in Structurally Heterogeneous Soils", **V. Morales** $110,150

- 7/2021-6/2024: American Heart Association- Career Development Award 852984 - "Spatially confined cAMP domains in vascular smooth muscle," **PI M. Nieves-Cintrón** $231,000

- 9/2020-12/2022: Healthy Davis Together (HDT), Modeling and Forecasting of COVID-19 Pandemic. Lead: **MA Nuño,** 20% FTE

- 05/01/2020-2/28/2021: CITRIS and Banatao Institute Award Project: Estimating the Local Spread of COVID-19 around Long-Term Care Facilities In California using Social Interaction Networks with Spatial Information. Co-PI: **MA Nuño**, $45,000 (total costs)

- 9/1/18-8/31/23: Agency for Healthcare Research and Quality (AHRQ) K08 (PI: Humphries), Statistician: **MA Nuño**. $715,770 (total costs)

AWARDS AND RECOGNITIONS

CAREER AWARDS

- 2021 NSF Career Award – **M. Cuevas Heffern.**
- 2021 Early Career Research Program Award from the Department of Energy's Office of Science – **J.A. Letts**
- AGU Hydrology Early Career Award – **V. Morales**
- 2021 Career Development Award from the American Heart Association – **M. Nieves-Cintrón**
- 2022 NSF CAREER Award – **C.D. Rogers**
- 2021 American Chemical Society – Chemistry of Materials – "Up and Coming" Early Career Scientist - **J. Velazquez**

OTHER AWARDS

- 2022 Paul Saltman Young Investigator Award from the Metals in Biology Gordon Research Conference (MIB GRC) – **M. Cuevas Heffern.**
- 2021 Paul Saltman Young Investigator Award in Bioinorganic Chemistry – **M. Heffern**
- Institute of Accelerated Ascension (IOAA) Awardee – **K. George**
- The Magnificent Makers, Nominated to the Sunshine State Young Reader Awards – **T. Griffith**
- 2021 Inaugural Minority Health, Equity and Inclusion Award from the American Academy of Pediatrics **– T. Johnson**
- 2021 Inaugural AAP Section on Minority Health Equity and Inclusion (SOMHEI) Award recipient in recognition of outstanding contributions to advance child health equity. Institute of Accelerated Ascension (IOAA), UC Davis – **T. Johnson**
- Interviewed by Amy Quinton for the Unfold podcast. https://www.ucdavis.edu/news/podcasts-and-shows/unfold - **W. Joiner**
- 2021 Hellman Fellow – **M. Kinyua**
- School of Medicine/Nursing Dean's Award of Excellence in Diversity – **V. Martínez-Cerdeño**
- Second Best Poster in the Protein Session: Effects of Enzymatic Extraction of Oil and Protein from Chickpea Flour on Protein Functionality. American Oil Chemists' Society Annual Meeting

& Expo, May 3-4, 2021 (virtual) - Kazunori Machida, Fernanda F. G. Dias, **Juliana M. L. N. de Moura Bell**.

- 2021 First Year Teaching Award from UC Davis Biochemical, Molecular, Cellular and Developmental Biology Graduate Group– **C.D. Rogers**
- UC Davis Chancellor's Fellowship for Diversity, Equity and Inclusion - Recognized for exceptional contributions to support, tutor, mentor, and advise underrepresented students from underserved communities. One of five awardees campus wide. – **C. Rubio-González**
- 2021 UC Davis Academic Senate Distinguished Teaching Award – **J.B. Ruiz**
- 2021 Management Communication Quarterly Paper of the Year Award – **J.B. Ruiz**
- Winner of the Management Communication Quarterly (MCQ) Article of the Year (announced 2021) – **J.B. Ruiz**
- Featured in the 2021 Chemical & Engineering News' Talented 12, "Catalyst connoisseur is studying materials that could mitigate climate change or clean up water"– **J. Velazquez**
- 2021 American Chemical Society – I&EC Class of Influential Researchers - **J. Velazquez**
- 2021 American Physical Society – Stanford R. Ovshinsky Sustainable Energy Fellowship - **J. Velazquez**
- 2021 C&EN's Talented Twelve - **J. Velazquez**

OUTREACH AND PUBLIC ENGAGEMENT

CAMPOS Faculty are involved in a variety of outreach activities. This section includes a short section includes a short selection of such activities in 2021.

Sam Diaz-Muñoz

- Interview (Television). *Teleoro Canal 13,* Interviewed by Ismal Torrez on the topic of vaccines. Aired on 01/19/2021
- Podcast. *¡Qué es la que hay!,* Interviewed by Luis Herrero on the topic of COVID variants. Aired on 02/04/2021
- Radio Segment. *Melissa Marzán's segment on Radio Isla*. On the topic of COVID variants. Aired on 02/10/2021
- Seminar Talk. *Representation Matters Seminar*, New York University, 02/11/2021
- Talk. *¿Qué es un virus?*, Ciencia Puerto Rico. 02/16/2021
- Interview (Television). *Univision*. On the topic of covid counter measures. Aired on 02/18/2021
- Interview (Television). *Codigo 58*. On the topic of the Johnson & Johnson vaccine. Aired on 02/24/2021
- Interview (Radio). *En Tu Comunidad* hosted by Alma Garcia. Aired on 02/16/2021

Wilsaan Joiner* **Joint appointment with School of Medicine*

- Article. *Improving Prosthetic Limbs for Children* by Noah Pflueger-Peters. 12/21/2021
- Article. *Learning to Control and Embody Robot Arms in Space* by Noah Pflueger-Peters. 05/11/2021

Tiffani Johnson

- Contributor. Ending Racism in Health Care – Episode 53. Pediatrics On Call Podcast Available at https://services.aap.org/en/pages/podcast/special-episode-on-ending-racism-in-health-care/. March 2021.
- Online Course. Fighting Racism to Advance Child. Health Equity Trent M, **Johnson T**, Marbin J, Boyd R. PediaLink. American Academy of Pediatrics. http://bit.ly/childhealth-racism. Published 4/15/2021.
- May 2021 **Johnson TJ**: What's the no.1 vaccine concern among people who are hesitant? KCRA 3 Television Interview. Available at https://www.kcra.com/article/get-the-facts-on-the-vax-jandj-vaccine-may-19-kcra-vaccine-phone-bank/36476997
- Jul 2021 **Johnson TJ**. Ethnic Media Services briefing COVID vaccine update. Panel Presenter- Are we demonization of the unvaxxed? Available at https://drive.google.com/file/d/1ykKmbdwKuPxHCkRf4fo1DFhqaxY6hvZl/view
- Aug 2021 Sohrabji S. (Online media coverage of panel presentation). Why demonizing the unvaccinated won't work. Ethnic Media Services. Available at https://ethnicmediaservices.org/covid-19/why-demonizing-the-unvaccinated-wont-work/

- Abstract Blackson E, Segan E, Anokam C, Lang A, Gerdes M. **Johnson TJ**. Implicit Racial Bias Towards Children in the Early Childhood Education Setting. Poster Presentation. Pediatric Academic Societies Virtual Meeting May 2021

Verónica Martínez-Cerdeño

- Newspaper: Crónica de hoy. Article: Buscamos tu cerebro. México (2021)
- Univisión. Buenos días Sacramento. About the MIND Insitiute (2021)
- Shrines Hospitals. Article about the brain bank I founded and direct: CENE (2021)
- Simons Foundation. Opinion piece about ASD organoid work (2021)

EDITORIAL BOARDS

Sam Diaz-Munoz

- Science and eLife journals - Reviewing Editor

Verónica Martínez-Cerdeño

- Scientific Reports. Nature Publishing Group - Associate Editor
- Taylor Francis Publishing Group – Editorial Board member for Neurogenesis
- Journal of Experimental Neuroscience. SAGE Publishing Group – Associate Editor

PEER REVIEWED PUBLICATIONS AND SOFTWARE

COLLEGE OF BIOLOGICAL SCIENCES

Jacqueline Barlow

- St Germain, C., Zhao, H., & **Barlow, J. H**. (2021). Transcription-Replication Collisions-A Series of Unfortunate Events. *Biomolecules*, *11*(8), 1249. https://doi.org/10.3390/biom11081249

Natalia Caporale

- Segura-Totten, M., Dewsbury, B., Lo, S. M., Bailey, E. G., Beaster-Jones, L., Bills, R. J., Brownell, S. E., **Caporale, N**., Dunk, R., Eddy, S. L., García-Ojeda, M. E., Gardner, S. M., Green, L. E., Hartley, L., Harrison, C., Imad, M., Janosik, A. M., Jeong, S., Josek, T., … Raut, S. A. (2021). Chronicling the Journey of the Society for the Advancement in Biology Education Research (SABER) in its Effort to Become Antiracist: From Acknowledgement to Action. *Frontiers in Education*, *6*. https://www.frontiersin.org/articles/10.3389/feduc.2021.780401

Rebecca M. Calisi

- Austin, S. H., Harris, R. M., Booth, A. M., Lang, A. S., Farrar, V. S., Krause, J. S., Hallman, T. A., MacManes, M., & **Calisi, R. M**. (2021). Isolating the Role of Corticosterone in the Hypothalamic-Pituitary-Gonadal Transcriptomic Stress Response. *Frontiers in Endocrinology*, *12*. https://www.frontiersin.org/articles/10.3389/fendo.2021.632060
- Austin, S. H., Krause, J. S., Viernes, R., Farrar, V. S., Booth, A. M., Harris, R. M., Angelier, F., Lee, C., Bond, A., Wingfield, J. C., MacManes, M. M., & **Calisi, R. M**. (2021). Uncovering the Sex-Specific Endocrine Responses to Reproduction and Parental Care. *Frontiers in Endocrinology*, *12*. https://www.frontiersin.org/articles/10.3389/fendo.2021.631384
- Farrar, V. S., Harris, R. M., Austin, S. H., Nava Ultreras, B. M., Booth, A. M., Angelier, F., Lang, A. S., Feustel, T., Lee, C., Bond, A., MacManes, M. D., & **Calisi, R. M**. (2022). Prolactin and prolactin receptor expression in the HPG axis and crop during parental care in both sexes of a biparental bird (Columba livia). *General and Comparative Endocrinology*, *315*, 113940. https://doi.org/10.1016/j.ygcen.2021.113940

Samuel Díaz-Muñoz

- Coil, D. A., Albertson, T., Banerjee, S., Brennan, G., Campbell, A. J., Cohen, S. H., Dandekar, S., **Díaz-Muñoz, S. L**., Eisen, J. A., Goldstein, T., Jose, I. R., Juarez, M., Robinson, B. A., Rothenburg, S., Sandrock, C., Stoian, A. M. M., Tompkins, D. G., Tremeau-Bravard, A., & Haczku, A. (2021). SARS-CoV-2 detection and genomic sequencing from hospital surface samples collected at UC Davis. *PLOS ONE*, *16*(6), e0253578. https://doi.org/10.1371/journal.pone.0253578
- Mäntynen, S., Laanto, E., Oksanen, H. M., Poranen, M. M., & **Díaz-Muñoz, S. L**. (n.d.). Black box of phage–bacterium interactions: Exploring alternative phage infection strategies. *Open Biology*, *11*(9), 210188. https://doi.org/10.1098/rsob.210188
- McCuen, M. M., Pitesky, M. E., Buler, J. J., Acosta, S., Wilcox, A. H., Bond, R. F., & Díaz-**Muñoz, S. L**. (2021). A comparison of amplification methods to detect Avian Influenza viruses in California wetlands targeted via remote sensing of waterfowl. *Transboundary and Emerging Diseases*, *68*(1), 98–109. https://doi.org/10.1111/tbed.13612

Wilsaan M. Joiner* **Joint appointment with School of Medicine*

- Bansal, S., & **Joiner, W. M**. (2021). Transsaccadic visual perception of foveal compared to peripheral environmental changes. *Journal of Vision*, *21*(6), 12. https://doi.org/10.1167/jov.21.6.12
- Bindra, G., Brower, R., North, R., Zhou, W., & **Joiner, W. M**. (2021). Normal Aging Affects the Short-Term Temporal Stability of Implicit, But Not Explicit, Motor Learning following Visuomotor Adaptation. *ENeuro*, *8*(5), ENEURO.0527-20.2021. https://doi.org/10.1523/ENEURO.0527-20.2021
- De Kock, R., Gladhill, K. A., Ali, M. N., **Joiner, W. M**., & Wiener, M. (2021). How movements shape the perception of time. *Trends in Cognitive Sciences*, *25*(11), 950–963. https://doi.org/10.1016/j.tics.2021.08.002

- De Kock, R., Zhou, W., **Joiner, W. M**., & Wiener, M. (2021). Slowing the body slows down time perception. *ELife*, *10*, e63607. https://doi.org/10.7554/eLife.63607
- Kruse, E., Board, S., Lesh, T., Wang, H., Brower, R., Carter, C., & **Joiner, W**. (2021). Transsaccadic-Associated Deficits in Individuals With Schizophrenia and Bipolar Disorder. *Biological Psychiatry*, *89*(9), S249. https://doi.org/10.1016/j.biopsych.2021.02.624
- North, R., Wurr, R., Macon, R., Mannion, C., Hyde, J., Torres-Espin, A., Rosenzweig, E. S., Ferguson, A. R., Tuszynski, M. H., Beattie, M. S., Bresnahan, J. C., & **Joiner, W. M**. (2021). Quantifying the kinematic features of dexterous finger movements in nonhuman primates with markerless tracking. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual International Conference*, *2021*, 6110–6115. https://doi.org/10.1109/EMBC46164.2021.9630018

James A. Letts

- Maldonado, M., Guo, F., & Letts, J. A. (2021). Atomic structures of respiratory complex III_2, complex IV, and supercomplex III_2+IV from vascular plants. *ELife*, *10*, e62047. https://doi.org/10.7554/eLife.62047

Mariel Vazquez * *Joint appointment, please refer to College of Letters and Science.*

COLLEGE OF LETTERS AND SCIENCE

Fernanda Ferreira

- Beier, E. J., Chantavarin, S., Rehrig, G., **Ferreira, F**., & Miller, L. M. (2021). Cortical Tracking of Speech: Toward Collaboration between the Fields of Signal and Sentence Processing. *Journal of Cognitive Neuroscience*, *33*(4), 574–593. https://doi.org/10.1162/jocn_a_01676
- **Ferreira, F**. (2021). What is lost when we all sound the same. *Science*, *374*(6571), 1060–1060. https://doi.org/10.1126/science.abm6530
- **Ferreira, F**., & Qiu, Z. (2021). Predicting syntactic structure. *Brain Research*, *1770*, 147632. https://doi.org/10.1016/j.brainres.2021.147632
- Huang, Y., & **Ferreira, F**. (2021). What causes lingering misinterpretations of garden-path sentences: Incorrect syntactic representations or fallible memory processes? *Journal of Memory and Language*, *121*, 104288. https://doi.org/10.1016/j.jml.2021.104288

Jairo Fúquene-Patiño

- **Fúquene-Patiño, J.**, Cristancho, C., Ospina, M., & Gonzalez, D. M. (2021). Fay-Herriot Model-Based Prediction Alternatives for Estimating Households with Emigrated Members. *Journal of Official Statistics*, *37*(3), 771–789. https://doi.org/10.2478/jos-2021-0034

Jeanette Ruiz

- Brunner, S. R., **Ruiz, J. B**., & Curran, M. A. (2022). Dear Solomon, dear Prudence: Using student written advice responses to demonstrate and teach theory application. *Communication Teacher*, *36*(2), 117–121. https://doi.org/10.1080/17404622.2021.1945641
- **Ruiz, J. B**., & Bell, R. A. (2021). Predictors of intention to vaccinate against COVID-19: Results of a nationwide survey. *Vaccine*, *39*(7), 1080–1086. https://doi.org/10.1016/j.vaccine.2021.01.010
- **Ruiz, J.**, Featherstone, J. D., & Barnett, G. A. (2021). *Identifying Vaccine Hesitant Communities on Twitter and their Geolocations: A Network Approach*. http://hdl.handle.net/10125/71096

Joseph Teran

- Chen, J., Kala, V., Marquez-Razon, A., Gueidon, E., Hyde, D. A. B., & **Teran, J**. (2021). A momentum-conserving implicit material point method for surface tension with contact angles and spatial gradients. *ACM Transactions on Graphics*, *40*(4), 111:1-111:16. https://doi.org/10.1145/3450626.3459874

Jesús M. Velázquez

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Kristen George

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Wilsaan Joiner **Joint appointment, please refer to College of Biological Sciences*

Rose Kagawa

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Verónica Martínez-Cerdeño

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Madeline Nieves-Cintrón

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SCHOOL OF NURSING

Fawn Cothran

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SCHOOL OF VETERINARY MEDICINE

Lillian Cruz-Orengo

- Dayton, J. R., Yuan, Y., Pacumio, L. P., Dorflinger, B. G., Yoo, S. C., Olson, M. J., Hernández-Suárez, S. I., McMahon, M. M., & **Cruz-Orengo, L.** (2021). Expression of IL-20 Receptor Subunit β Is Linked to EAE Neuropathology and CNS Neuroinflammation. *Frontiers in Cellular Neuroscience*, *15*. https://www.frontiersin.org/articles/10.3389/fncel.2021.683687
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Crystal D. Rogers

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RESEARCH MENTORING IN 2021

COLLEGE OF BIOLOGICAL SCIENCES

Rebecca M. Calisi

- 2 Jr Specialists
- 2 PhD Candidates
- 4 Post-doctoral

Natalia Caporale

- 2 Undergraduates
- 1 Graduate Student

Samuel Diaz-Muñoz

- 2 Graduate Students

Wilsaan M. Joiner* **Joint appointment with School of Medicine*

- 4 Undergraduates
- 1 Masters
- 5 PhD

James A. Letts

- 1 Undergraduate
- 2 Graduate Students
- 1 Post-doctoral

Mariel Vazquez * *Joint appointment, please refer to College of Letters and Science.*

COLLEGE OF LETTERS AND SCIENCE

Marie Cuevas Heffern

- 3 Undergraduates
- 3 Graduate Students

Fernanda Ferreira

- 6 Undergraduates
- 6 Graduate Students

Jairo Fúquene-Patiño

- 2 Undergraduates
- 1 Master Student

Jeanette Ruiz

- 3 Graduate Students

Joseph Teran

- 11 Undergraduate & Graduate students
- 2 Graduating PhD Students

Mariel Vazquez **Joint appointment with CBS*

- 1 Post-doctoral
- 2 PhD students
- 1 Undergraduate
- 3 High School Students

COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES

Maciel Hernández

- 5 Graduate Students

Rebecca Hernández

- 4 Undergraduates
- 1 Graduate Student
- 4 PhD Students

Juliana Maria Nóbrega de Moura Bell

- 2 Undergraduates
- 6 Graduate Students
- 1 Post-doctoral

Fernanda Valdovinos

- 2 Undergraduate
- 4 Graduate Students
- 1 Post-doctoral

COLLEGE OF ENGINEERING

Verónica L. Morales

- 2 High-School Students
- 3 Masters Students
- 3 Undergraduates
- 3 PhD students

Jasquelin Peña

- 2 Masters Students
- 3 PhD Students
- 3 Post-doctoral scholars and researchers

Cindy Rubio González

- 5 Undergraduates
- 8 Graduate Students
- 5 PhD Students

SCHOOL OF EDUCATION

Alexis Patterson

- 1 Graduate Student
- 3 PhD Students

SCHOOL OF MEDICINE AND PUBLIC HEALTH

Kristen George

- 3 Undergraduates
- 1 Graduate Student

Theanne N. Griffith

- 2 Undergraduates
- 1 Jr Specialist
- 2 PhD Students

Anna La Torre

- 3 Graduate Students

Wilsaan Joiner **Joint appointment, please refer to College of Biological Sciences*

Rose Kagawa

- 4 Students

Verónica Martínez-Cerdeño

- 5 Undergraduate
- 1 Post-bachelor
- 4 Graduate Students

Madeline Nieves-Cintrón

- 2 Undergraduate
- 2 Graduate

Miriam A Nuño

- 1 Graduate Student

SCHOOL OF VETERINARY MEDICINE

Lillian Cruz-Orengo

- 7 Undergraduates
- 1 Graduate Students

Crystal D. Rogers

- 3 Undergraduates
- 2 Graduate Students

IV. PROGRAMMING

CAMPOS RESEARCH COLLOQUIA

The goal of the CAMPOS Research Colloquia is to showcase the fantastic STEM research done by CAMPOS scholars. Through them, we continue to build a diverse UC Davis scientific community grounded on research excellence. Due to the COVID-19 pandemic, we changed our format from in person to fully online through zoom in Winter and Spring 2021. This allowed for CAMPOS Colloquia to be expand and be available for members in our community as well as those outside of UC Davis.

In Fall 2021, we introduced a Hybrid format which allowed members to join online via zoom or in-person by RSVP and following the University Safety Protocol.

The talks were held on Wednesday or Thursday, from 3:10-4:00pm, via Zoom or Hybrid mode at Mrak 213 or Surge III 1100.

In Fall 2021, we introduced a CAMPOS Colloqium on a topic related to Diversity Equity and Inclusion in teaching, mentoring or service.

The first talk was on November 10, 2021. This series will continue once per quarter in 2022.

Date	Presenter	Topic	Location
February 1	Fernanda Valdovinos	Understanding the Dynamics of Complex Food Webs to Inform Fisheries Sustainability	Zoom
February 25	Jesús Velázquez	Towards Remediating Water and Decarbonizing Energy Infrastructure Through Design of Multidimensional Materials	Zoom
April 1	Marie Heffern	Unraveling the Role of Metals in Extracellular Dynamics	Zoom
April 29	Crystal D. Rogers	Regulating neural crest cell fate and survival during embryonic development	Zoom
May 27	Lillian Cruz-Orengo	“The Great Wall Under Siege! Role of IL-20 sub-family cytokines at the blood-brain barrier during neuroinflammation”	Zoom
October 13	Marco I. González	Calpain-Dependent Proteolysis and Epileptogenesis	Hybrid – Mrak 213
October 20	Joseph Michael Teran	Snow Business: Scientific Computing in the Movies and Beyond	Hybrid – Mrak 213
November 2	Madeline Nieves-Cintron	Secondhand smoke exposure impairs ion channel function and contractility of mesenteric arteries	Hybrid – Mrak 213
November 10	Cruz-Orengo, Martínez-Cerdeño, Nieves-Cintron	Advancing Multicultural Perspectives in Research, Teaching, and Science	Hybrid – Mrak 213
December 1	Kristen M George	Lifecourse Risk Factors for Cognitive Aging and Impairment	Hybrid – Surge III

NEW FACULTY ORIENTATION

The 2021 CAMPOS and CAMPSSAH New Faculty Orientation took place on Friday, September 24, 2021. It was offered to the 2021 cohorts of CAMPOS and CAMPSSAH Faculty

The invited CAMPOS scholars include 2 Assistant Professors, 1 Associate Professor, and 1 Full Professor. Normally, the orientation is a multi-day event with in-person sessions and training that connect our faculty to various on-campus resources. Due to continuing challenges posed by the COVID-19 Pandemic, the event was held virtually via Zoom.

New Faculty Scholars were able to attend the different online sessions offered by guest speakers. Following the 2020 New Faculty Orientation, the Office of Academic Diversity compiled the 2020 New Faculty Orientation Resource Book containing available presentations slides, transcripts, and other resources. This document was made available to new CAMPOS and CAMPSSAH Faculty.

CAMPOS and CAMPSSAH
New Faculty Orientation

Date: Friday, September 24
Time: Session 1: 10:30 am to 11:45 am
Session 2: 1:00 pm to 3:00 pm

Zoom Connection Details:
https://ucdavis.zoom.us/j/92266148752
Meeting ID: 922 6614 8752
Dial by your location
+1 669 900 6833 US (San Jose)
Find your local number: https://ucdavis.zoom.us/u/ab4aAz65al

Agenda

- Welcome and Introductions 10:30 am to 10:45 am
- Academic Affairs 10:45 am to 11:45 am
- Reconvene and More Introductions 1:00 pm to 1:15 pm
- VC Office of Research 1:15 pm to 1:30 (or 1:45 pm)
- Interdisciplinary Research Support 1:30 (or 1:45) to 2:30 pm
- Closing 2:30 pm to 3 pm

CAMPOS MEET AND GREET

The COVID-19 crisis forced us to cancel or postpone several of our programs, including the End of Year Event (June), the Welcome Event (September), the induction ceremony for 2021 CAMPOS Faculty (October) and the 2021 ADVANCE Award Symposium (October). The CAMPOS Research Colloquia were held virtually via zoom during Winter and Spring, and followed a hybrid format during Fall.

On November 17th, Faculty Director Mariel Vazquez organized an online Welcome Meeting. Many of the CAMPOS Faculty Scholars joined the zoom call. Professor Vazquez gave a presentation with an overview of CAMPOS, a summary of 2020 accomplishments, and welcomed the four new faculty (2021 cohort). The formal part of the program was followed by informal conversation.

In Fall 2020, the CAMPOS faculty expressed a desire to have regular meetings without a formal agenda. Following this request we scheduled a zoom call every other week on Fridays, from 4:30pm to 6:00pm during Winter and Spring 2021 and re-structured the CAMPOS Research Colloquia to include an extended period of informal conversation at the end of the formal presentation and Q&A.

In 2021, monthly **CAMPOS Get-togethers** took place on January 15, February 12, March 12 and April 16. These calls were characterized by informal and general topic conversations. We sent calendar invites to all CAMPOS faculty and created a google document to share topics of common interest to discuss during the events.

2021 Dates:

January 15

February 12

March 12

April 16[2]

[2] April 16, 2021 – ENHANCE Application to the Alfred P. Sloan Foundation was due this day. The Zoom room was open for CAMPOS Faculty to join, but AVC Oropeza or Faculty Director Mariel Vazquez were unable to join.

V. OTHER ACTIVITIES

CAMPOS AFFILIATE EXPANSION

History: The CAMPOS Faculty Affiliates Program engages a broad segment of the campus faculty population in support of the CAMPOS mission of increasing diversity in STEM faculty. CAMPOS developed an application process and framework to engage faculty interested in promoting STEM diversity, either through teaching, research, mentoring or outreach. The program welcomes participation from all faculty, tenure track and non-tenure track, across all campus disciplines. This effort was launched in December 2014 via an outreach campaign to faculty that have participated in CAMPOS and ADVANCE networking activities (CAMPOS Faculty Welcome, "Cafecitos," the Faculty Women Reception), the Internal Advisory Board STEM Deans, and through campus partners, such as the UC Davis Hispanic/Latino Faculty group.

The development of the CAMPOS Faculty Affiliates Program serves as a cross-initiative platform for developing joint research, teaching and mentoring programs aimed at increasing diversity.

LAUNCH COMMITTEES

Each CAMPOS Scholar is assigned a LAUNCH Mentoring Committee. The LAUNCH program started as part of UC Davis ADVANCE, and was institutionalized in 2017 and absorbed by the Office of Academic Affairs. The LAUNCH program is modeled on similar successful mentoring programs developed at Case Western Reserve and the University of Michigan, convening a committee of senior faculty to advise the new faculty member on a range of issues related to setting up a research program, managing teaching loads, securing campus resources and generally making a successful career transition to their departmental work environment.

FRIENDS

Faculty Retention and Inclusive Excellence Networks – Designing Solutions.

FRIENDS is a Project Funded from 2019 to 2021 through the University of California's Advancing Faculty Diversity Improved Climate and Retention Program and led by the UC Davis Office of Diversity, Equity and Inclusion, in collaboration with UC Davis Academic Affairs. A group of committed UC Davis faculty, including CAMPOS Affiliates, joined together in a Community of Practice in February 2020 to address the pressing problems presented to Associate Professors revealed in the COACHE Faculty Satisfaction Survey. The findings of their year-long inquiry were presented to the public on Monday, April 5, 2021. Below you will find a link to a recording of the event, to the presentation slides, and research referenced over the course of the presentations.

Findings and Solutions Spring Convening
April 5, 2021 2-4 pm.

- **Welcome** (2:00-2:10)
  Raquel Aldana - *Professor of Law and PI*

- **COACHE as Inspiration for FRIENDS** (2:10-2:20)
  Kimberlee A. Shauman - *Professor of Sociology*

- **Lime Team Presentation** (2:20-2:40)
  "Reimagining Faculty Service"
  Theme: "Invisible labor" service work performed by racially minoritized faculty, particularly Women of Color (WOC).
  Service labor isn't invisible; it's simply undervalued. Service course release fellowships are designed to elevate service work to the same level as research and teaching by granting faculty space to pro-actively advance a service project of key importance to their unit or to the institution. An additional component of the project is a Service Tracking Dashboard to make service not just visible, but quantifiable.
  Presented by: Diane Beckles Associate Professor of Plant Sciences Cecilia Tsu Associate Professor of History

- **Grape Team Presentation** (2:40-3:00)
  "Climate Change"
  Theme: Developing a critical consciousness among majority faculty to create and support healthy, productive academic climates.
  Lack of community and lack of accountability for faculty behavior can contribute to issues with workplace climate—especially for scholars from marginalized backgrounds. A community of DEI all-stars, creation of tools and resources, and a workplace climate committee together would support early, proactive interventions that support community and meaningful workplace climate improvement.
  Presented by: Jacob Hibel Associate Professor of Sociology Lisa Materson Associate Professor of History

- **Lemon Team Presentation** (3:00-3:20)
  "Faculty Success Centers"
  Theme: Challenges faced by women and minority faculty in advancing from Associate to Full Professor, including epistemological inclusion of efforts in diversity, equity, and inclusion in the

University's intellectual work.
All scholars need a space where they can connect with others to problem-solve, reinforce their sense of belonging to the professoriate, and expand their capacity for success—regardless of their department or location within the institution. Sometimes this is a physical space to network; sometimes it is space in their life to regroup. Having access to powerful faculty advocates will enable scholars to identify barriers to promotion and hurdle them.
Presented by: Corrie Decker Associate Professor of History Kevin Gee Associate Professor, School of Education Milmon Harrison Associate Professor of African American and African Studies

- **Berry Team Presentation** (3:20-3:40)
  "**Dialogues Across Difference"**
  Theme: Addressing issues related to the learning environment, including hate speech and harassment.
  Addressing this complex issue requires that we (1) document the experience by collecting data via survey and interview on experiences in the learning environment that involve disruptive speech, (2) perform the experience by creating composite stories that can be acted out and discussed, and (3) practice the experience by establishing an evolving scaffolding of support, including access to guidelines, models, and other resources.
  Presented by: Annaliese Franz Professor of Chemistry Natalia Deeb-Sossa Professor of Chicana/o Studies

- **Advancing Faculty Diversity Next Steps** (3:40-3:50)
  Susan Carlson - *Vice Provost for Academic Personnel and Programs, UC Office of the President*

- **Closing Remarks** (3:50-4:00)
  Lorena Oropeza - *Interim Associate Vice Chancellor for Academic Diversity and Co-PI*

FRIENDS Planning Team:

Lorena Oropeza* – Associate Vice Chancellor for Academic Diversity

Laura Cerruti – Analyst, Office of Diversity, Equity and Inclusion

Claudia Escobar – Ph.D. Candidate

Philip Kass – Vice Provost, Academic Affairs

Adrienne Lawson – Director for Institutional Culture/Climate and Community Engagement at UC Davis Health

Mark A. Lopez – Chief of Staff, Office of Diversity, Equity and Inclusion

Kimberly Nettles Barcelón -- CAMPSSAH Faculty Director, Office of Academic Diversity - Diversity, Equity and Inclusion

Thomas O'Donnell -- Analyst, Office of Academic Diversity - Diversity, Equity and Inclusion

Cynthia Pickett -- Associate Vice Provost for Faculty Equity and Inclusion, Academic Affairs

Binnie Singh -- Associate Vice Provost, Academic Affairs

Hendry Ton -- Interim Associate Vice Chancellor for Diversity and Inclusion at UC Davis Health - Diversity, Equity and Inclusion

Renetta Garrison Tull -- Vice Chancellor of Diversity, Equity and Inclusion

Mariel Vazquez* -- CAMPOS Faculty Director, Office of Academic Diversity - Diversity, Equity and Inclusion

From Storywalkers Consulting Group: Mark Simon, Principal Consultant

* CAMPOS Leadership

Teams

Team Berry:

Theme: Addressing issues related to classroom climate, including hate speech and racial harassment.

Lead: Raquel Aldana

Members: Marcela Cuellar, Natalia Deeb-Sossa, Annaliese Franz. Stephen Garcia, Jasmine Harris, Adam Jacob, Danny C. Martinez, Noha Radwan.

Team Grape:

Theme: Developing a critical consciousness among majority faculty to create and support healthy, productive academic climates.

Lead: Mariel Vazquez* and Rachel Jean-Baptiste

Members: Sharon Aviran, Julie Bossuyt, Titus C. Brown, Stacey Combes*, Jochen Ditterich, Mark Fedyk, Jacob Hibel, Lisa Materson, Amy Motlagh, Leticia Saucedo, and Aijun Wang.

Team Lemon:

Theme: Challenges faced by women and minority faculty in advancing from Associate to Full Professor, including epistemological inclusion of efforts in diversity, equity, and inclusion in the University's intellectual work.

Lead: Kimberly Nettles Barcelón.

Members: Ester Carolina Apesoa-Varano, Margaret Kemp, Tae Youn Kim, Corrie Decker, Kevin Gee, Eleonora Grandi, Milmon Harrison, Becca Thomases*, Li Tian.

Team Lime:

Theme: "Invisible labor" service work performed by racially minoritized faculty, particularly Women of Color (WOC).

Lead: Lorena Oropeza

Members: Diane Beckles*, Luis Carvajal, Lijuan (Dawn) Cheng, Desiree Martin, Susette Min, Elizabeth Montaño, Claire Napawan, Jon Rossini, Cecilia Tsu, Archana Venkatesan.

* CAMPOS Leaders or CAMPOS Affiliates

VI. PLANNED ACTIVITIES – YEAR 2022

PROGRAMMING

CAMPOS Research Colloquia – Winter Quarter

Date	Presenter
January 19st, 2022	Miriam Nuno
January 26th, 2022	Jacqueline Barlow
February 2nd, 2022	Jasquelin Peña
February 9th, 2022	Advancing Multicultural Perspectives in Research, Teaching, and Service
February 16th, 2022	Maciel Hernandez
February 23rd, 2022	Jeanette Ruiz
March 2nd, 2022	Jairo Fúquene Patiño
March 9th, 2022	Theanne N. Griffith
April 3rd, 2022	Lillian Cruz-Orengo
May 4th, 2022	Marco S. Messina
May 11th, 2022	Natalia Caporale
May 11th, 2022	Fernanda S. Valdovinos
May 18th, 2022	Verónica L. Morales
May 26th, 2022	Alexis Patterson Williams
June 1st, 2022	Tiffani Johnson

Induction Ceremony – March 6th, 2022

ADVANCE Award Symposium – May 21, 2022

2020 Awardees
- Jesús A. De Loera
  Mathematics
- Chen-Nee Chuah
  Electrical and Computer Engineering

2021 Awardees
- Diane Beckles
  Plant Sciences
- Luis G. Carvajal-Carmona
  Biochemistry and Molecular Medicine

ADVANCE Award
The ADVANCE Scholars Award Program call for nominees with a deadline for May 31st of 2022.

Grant Writing Workshops – January and June 2022

New Faculty Orientation – Fall 2022

VII. CAMPOS GRANTS

SLOAN FOUNDATION — AWARDED

Alfred P. Sloan Foundation Letter of Inquiry
Non-Research Project

ENHANCE: Promoting advancement and retention of underrepresented STEMM Faculty by enhancing research productivity and centering family support.

Grant Seeker Title and Contact information:
Mariel Vazquez
Professor of Mathematics and of Microbiology & Molecular Genetics
CAMPOS Faculty Director
University of California Davis
Email: mrlvazquez@ucdavis.edu | Phone Number: (415) 205-7096

Other Key Members of the Project:
Lorena Oropeza
Interim Associate Vice Chancellor for Academic Diversity
Email: lboropeza@ucdavis.edu | Phone Number: (530) 752-1290

Thomas O'Donnell
Analyst, UC Davis Diversity, Equity and Inclusion
Email: twodonnell@ucdavis.edu | Phone Number: (510) 682-7189

Nature and purpose of the proposed project:
The goal of this project is to advance faculty diversity by offering two interventions designed to enhance research development support and center the family support needs of minoritized faculty who often experience isolation in their academic units and fields. Specifically, we would like to hire a research development specialist/analyst to support the grant application process and offer mini-grants to help faculty members balance their familial and research responsibilities at critical junctures.

Estimate of the total cost of the project: $335,000

Amount of this total the proposer seeks from the Sloan Foundation: $250,000

Duration of the Project: Two years (24 months)

Description of the proposed work to be supported:
Faculty from underrepresented groups often experience isolation, lack of adequate support, and feel enormous pressure to prove their research excellence. The goal of this project is to advance faculty diversity in STEMM (Science, Technology, Engineering, Mathematics, and Medicine) by facilitating and promoting excellence in research through two targeted interventions: 1) the hiring of a research specialist/analyst and 2) a mini-grant program. Both will help alleviate the experience of isolation and pressure and, in doing so, will contribute to building a stronger and more inclusive community of STEMM researchers.

This project targets a cohort of faculty in STEMM, with an emphasis on women and People of Color (POC) at the tenure track level. These faculty members are affiliated with the Center for the Advancement

of Multicultural Perspectives in Science (CAMPOS) at the University of California (UC) Davis. The CAMPOS initiative was created as part of the National Science Foundation UC Davis ADVANCE program (2012-19) and was institutionalized in 2017. The mission of CAMPOS is to support the discovery of knowledge by promoting women scholars and members of underrepresented groups in STEMM through building an inclusive environment. CAMPOS faculty are ladder rank faculty affiliated with departments across eight UC Davis colleges and schools. The majority self-identify as women and belong to groups currently underrepresented in their discipline. In order to achieve our goal, we propose two interventions as follows.

Intervention 1: Research Development
This intervention will be centered on providing enhanced and individualized professional research development support for the faculty to help streamline the grant writing process in order to increase output and success rates. The RD specialist will work closely with the PI and College Deans to identify and lower barriers that prevent faculty POC from developing and funding their research and scholarship. We will recruit a Research Development (RD) Specialist and a Project Analyst for this intervention.

Intervention 2: Family Support – Caring Responsibilities Support
The second intervention addresses the difficulty of maintaining a full professional life as a researcher while also balancing multiple familial responsibilities. To address this tremendous obstacle, we propose offering mini-grants to the faculty participants, with the objective of freeing time for research and relieving stress related to caring for others. This is especially important for faculty who are working from home during the COVID-19 pandemic. The funds will provide family support when participating in research collaborations, during periods of intense grant preparation or traveling to present their research at conferences.

Evaluation
In Spring 2020 we developed and administered a survey to measure job satisfaction among CAMPOS Faculty Scholars and to identify interventions needed for their career success. The survey instrument will be improved and administered to the faculty participants at three distinct time periods: a baseline prior to the interventions, midline at the end of Year 1, and final at the end of Year 2. Jointly with a Project Evaluator, we will analyze the data to measure the impact of the interventions and produce assessment reports.

We base our proposed interventions on a body of literature that documents and quantifies the problems faced by underrepresented groups in academia. We also use information collected from the 2012-13 and 2016-17 Collaborative on Academic Careers in Higher Education (COACHE) Faculty Job Satisfaction Surveys, and preliminary data from a survey designed for this proposed project and administered to CAMPOS Faculty Scholars in spring 2020.

There is a strong institutional desire to support faculty from groups underrepresented in STEMM, and recognition that the support needs to be specialized. If the proposed interventions are successful, they will be extended to other groups of underrepresented faculty across campus, going beyond STEMM disciplines.

In Year 1, participating faculty members prepared 11 grant applications (see Appendix B, “Appendix C Grants Applied for by Participating Faculty”).

VIII. APPENDICES

APPENDIX A. CAMPOS AFFILIATE LIST

CAMPOS Faculty Affiliates Roster

Agricultural and Environmental Sciences

Tim Beatty, Professor, Agricultural and Resource Economics [faculty]

Diane M. Beckles, Associate Professor, Plant Science [faculty][bio]

Kyaw Tha Paw U, Professor, Land Air and Water Resources [faculty]

Samuel Sandoval Solis, Associate Professor, Land, Air and Water Resources [faculty][bio_a][bio_b]

Anne E. Todgham, Associate Professor, Animal Science [faculty]

College of Biological Sciences

F. Javier Arsuaga, Professor, Molecular and Cellular Biology; Mathematics [faculty]

Stacey Combes, Professor, Neurobiology, Physiology and Behavior [faculty]

J. David Furlow, Professor, Neurobiology, Physiology and Behavior [faculty]

Aldrin V. Gomes, Professor, Neurobiology, Physiology and Behavior and Physiology; Membrane Biology [faculty]

Gail L. Patricelli, Professor, Evolution and Ecology [faculty]

Karen Zito, Professor, Neurobiology, Physiology and Behavior [faculty]

Letters and Science

F. Javier Arsuaga, Professor, Mathematics; Molecular and Cellular Biology [faculty]

Jesús A. De Loera, Professor, Mathematics [faculty][bio]

Yvette Flores, Professor, Chicana and Chicano Studies [faculty]

Cristina González, Professor Emerita, Spanish [faculty]

Susan Kauzlarich, Distinguished Professor, Chemistry [faculty]

Lorena Oropeza, Professor, History [faculty]

Jeffrey Sherman, Professor, Psychology [faculty]

Dawn Y. Sumner, Professor, Earth and Planetary Sciences [faculty][bio]

Becca Thomases, Professor, Mathematics [faculty]

College of Engineering

Nina Amenta, Professor, Computer Science

Karen McDonald, Professor, Chemical Engineering [faculty]

Miguel A. Jaller Martelo, Associate Professor, Civil and Environmental Engineering [faculty]

School of Medicine

Luis G. Carvajal-Carmona, Professor, Biochemistry and Molecular Medicine [faculty]

Elva Díaz, Professor, Pharmacology [bio]

Aldrin V. Gomes, Professor, Neurobiology, Physiology and Behavior and Physiology and Membrane Biology

Jeffrey S. Hoch, Professor, Public Health Sciences [faculty]

Kent E. Pinkerton, Professor, Pediatrics and Anatomy, Physiology and Cell Biology [faculty]

John Daniel Ragland, Professor, Psychiatry and Behavioral Sciences

Luis Fernando Santana, Physiology and Membrane Biology [faculty][bio]

Colleen Sweeney, Professor, Molecular Medicine

School of Veterinary Medicine

Kent E. Pinkerton, Professor, Pediatrics and Anatomy, Physiology and Cell Biology [faculty]

Esteban Soto, Professor, Medicine & Epidemiology [bio]

School of Nursing

Mary Lou de Leon Siantz, Professor Emeritus [faculty]

Centers

Denneal Jamison-McClung, Director, Biotechnology Program [faculty]

APPENDIX B. ENHANCE YEAR 1 INTERIM REPORT

ENHANCE: Promoting Advancement and Retention of Underrepresented STEM Faculty by Enhancing Research Productivity and Centering Family Support

Year 1 Substantive Interim Report (July 1, 2021- June 30, 2022)

PROJECT INFORMATION

Award Number: G-2021-16830

Principal Investigator Grantee Organization: University of California, Davis
PI Mariel Vazquez, Professor of Mathematics and of Microbiology & Molecular Genetics
Faculty Director, Center for the Advancement of Multicultural Perspectives on Science (CAMPOS)
mrlvazquez@ucdavis.edu

Co-PI Lorena Oropeza, Professor of History
Associate Vice Chancellor of Academic Diversity
lboropeza@ucdavis.edu

Project URL: https://diversity.ucdavis.edu/enhance

Duration of the Project: Two years (24 months) from July 1, 2021-June 30, 2023

Award Amount: $250,000
In-kind Support: $140,000 of in-kind support from the UC Davis Office of the Provost, Office of Academic Diversity and Office of Research, as well as the four undergraduate colleges, the Betty Irene Moore School of Nursing and three other UC Davis schools, Education, Medicine and Veterinary Medicine.

SUMMARY

The ENHANCE program at UC Davis aims to advance diversity and increase the representation of faculty from communities underrepresented in Science, Technology, Engineering, Mathematics, and Medicine (STEMM). Toward this end, we are implementing and testing two primary interventions to support and enhance the career development of STEMM faculty from underrepresented groups: (i) strategic grant-writing support from a dedicated Research Development Specialist; and (ii) a program of Family Support Grants to enable faculty with dependent care obligations to focus undivided attention on necessary professional development activities such as conferences, research, and publications.

In Year 1, we organized and presented two grant-writing workshops, one in Davis (Sept 2021) and one in Monterey County (June 2022). Plans for a winter workshop were disrupted by the pandemic and by delays in the RDS recruitment process. Instead, interested faculty received one-on-one proposal preparation support. A total of 16 faculty benefited from these interventions. Our dependent care support program attracted 9 applications in the first eleven months of operations; all applicants were women, and the majority were assistant professor. Information about ENHANCE was disseminated broadly. A full evaluation report by external evaluator Sondra LoRe (SPEAR Consultants) covering all twelve months of Year 1 is now in process and will be submitted in July 2022 as a supplement to this progress report.

BACKGROUND AND OVERVIEW

In 2021, the Alfred P. Sloan Foundation awarded the University of California, Davis, two years of funding to establish the ENHANCE program to further advance diversity and increase the representation of faculty from groups underrepresented in Science, Technology, Engineering, Mathematics, and Medicine (STEMM). Faculty from underrepresented groups often experience isolation, lack of adequate support, and feel enormous pressure to prove their research excellence. In addition to recognizing these obstacles that are well-documented in the research literature, ENHANCE was inspired by the specific experiences of underrepresented STEMM faculty at UC Davis and informed by their perceptions of the greatest challenges in their efforts to advance their research careers in a timely manner. The program was further motivated by the devastating impact of the COVID pandemic on research productivity and morale, particularly among early career faculty, as well as by the disproportionate effects of the pandemic on underrepresented faculty from communities and groups already hard-hit by pandemic-related inequities. ENHANCE focuses on two specific interventions that offer necessary and innovative pathways to support and enhance the careers of STEMM faculty, especially those from groups underrepresented in their disciplines, while also alleviating experiences of isolation and pressure. In so doing, the grant contributes to building a stronger and more inclusive community of STEMM researchers.

GOALS AND INTERVENTIONS

The goal of the ENHANCE program is to advance faculty diversity in STEMM by facilitating and promoting excellence in research through two targeted interventions at UC Davis:

> *Dedicated Research Development Specialist*: To provide our faculty with individualized professional research development support and to help them streamline the grant-writing process in order to increase their proposal output and success rates, we have recruited and hired a professional Research Development Specialist (RDS) who has worked extensively over the course of more than two decades with early career and underrepresented faculty on grant development and writing. In addition to facilitating grant-writing workshops and providing individualized strategic guidance, coaching, and feedback on ENHANCE faculty grant proposals, the RDS will be a liaison to the Office of Research. The RDS will work closely with the PIs and other campus leaders to help identify and lower institutional barriers that prevent underrepresented faculty from developing and funding their research and scholarship.
>
> *Family and Dependent Care Support Mini-Grants:* To alleviate the profound stresses of maintaining a full professional life as a researcher while balancing multiple familial responsibilities and providing care for others, we have created and implemented a mini-grants program with the objective of freeing up faculty time to participate in research collaborations, engage in periods of intense grant preparation, and travel to present research results at professional conferences. These grants have been especially important in helping to sustain the productivity of faculty who have to work from home during the COVID-19 pandemic.

These interventions are necessary and innovative pathways to support and enhance the careers of STEMM faculty from groups underrepresented in their disciplines. In addition, these innovations help alleviate faculty experiences of isolation and pressure, thereby contributing to the development of a stronger and more inclusive community of STEMM researchers.

ACTIVITIES DURING YEAR 1

Recruitment and Hiring of Program Leadership

The PIs (M. Vazquez and L. Oropeza) launched the ENHANCE Program in July 2021. They hired a Program Coordinator (S. Barbu), established regular meetings with the external program evaluator (S. LoRe), and initiated the recruitment of a Research Development Specialist (B. Ustanko). These five individuals constitute the program leadership team.

Program Coordinator: Sophie Barbu joined ENHANCE on July 1, 2021. She previously worked as the Assistant Director for the NSF-funded UC Davis ADVANCE Institutional Transformation program, which facilitated institutional change by supporting the recruitment, retention, and promotion of women and underrepresented faculty in science technology, engineering, and math. Ms. Barbu is concurrently enrolled in a Masters of Business Administration program and has a strong interest in the creation and management of programs that advance diversity, equity, and inclusion in higher education and the public sector.

Research Development Specialist: Recruiting the RDS turned out to be a long, drawn-out process, due to both pandemic-related pressures and the paucity of qualified applicants interested in a 40% time position that required both research development and grant-writing expertise and a track record of working successfully to support faculty underrepresented in their disciplines in launching their research careers. Barbara Ustanko accepted the position and formally joined our team on May 1, 2022. She is a board-certified editor in the life sciences and a certified grant professional with more than two decades of experience in faculty research development at the University of California (UC Berkeley and UCSF) and the California State University (SFSU). See Appendix A.

As an interim measure prior to filling the RDS position, ENHANCE drew upon a variety of professionals in research development/grant facilitation-adjacent positions from the UC Davis School of Medicine and the Interdisciplinary Research Services unit to fulfill portions of the RDS function. While their bandwidth was limited by other responsibilities, the participation of these individuals on an ad-hoc basis enabled us to offer a grant-writing workshop and to make available individual grant-writing consultations. During this interim period, grant-writing support was provided to twelve faculty members: six through the September grant-writing workshop, and six through individual consultations. Ustanko will facilitate the grant-writing workshop in June 2022.

Grant-Writing Workshops

September 2021: Six faculty members participated in a two-day grant-writing workshop held at Putah Creek Lodge on the UC Davis campus at the beginning of the fall semester. All six participants were women, and they identified as Hispanic/Latinx (5), Black or African American (1), and American Indian or Alaska Native/Black or African American (1). Two of the six participants used Family Support Grants to enabled their attendance and participation. Dr. Betty Guo, Associate Director of Grants Facilitation in the UC Davis School of Medicine, served as the workshop facilitator.

January 2022: A second grant-writing workshop, originally scheduled for January 2022, had to be canceled due to the surge in COVID-19 cases and the prohibition on hosting in-person gatherings through the University. We attempted to reschedule the event as a virtual online workshop; however, this turned out to be infeasible when one of the facilitators became ill and several of the faculty who had originally registered were no longer available to participate.

In the wake of the January workshop cancellation, we acted swiftly to ensure that adequate support was available to faculty with imminent proposal deadlines. This was accomplished by partnering with grant professionals from the School of Medicine and the Interdisciplinary Research Services unit, who provided individual grant-writing feedback to six of our faculty members (5 female, 1 male).

June 2022: A grant-writing workshop will be held from June 3 to June 5 at the Asilomar Conference Center in Monterrey, California. This will be our first workshop facilitated by the ENHANCE RDS and will include overviews of proposal development best practices, 1:1 consultations, peer review, and extensive time for writing. We are hosting the workshop in a location away from campus and making Family Support Grants available to release participants from their ordinary caregiving responsibilities. These arrangements will enable faculty to devote a substantial block of uninterrupted time to their writing, with instantaneous access to expert guidance and consultation, in an environment that will foster a strong sense of community among the participants.

Outcomes: As we go to press with this progress report, formal workshop evaluation data is available only for the September workshop (as the January workshop was cancelled and the June workshop will be taking place on June 3-5, 2022). We comment briefly on outcomes to date in this section and have attached the external evaluator's report from the September grant-writing workshop as Appendix B.

All six participants who attended the September 2021 workshop submitted the proposals they worked on during that event to the intended funding agencies (see Appendix C). To date, one attendee (Griffith) has been notified that her NIH proposal, which received an impact score of 20, has been recommended for funding. The others are preparing their materials for resubmission in June 2022 (Nuño, Vázquez) or October, 2022 (Cruz-Orengo, Nieves-Cintrón). Of the 6 faculty who requested assistance in January and February, three submitted proposals (Cruz-Orengo, Valdovinos, and Hernandez), two are preparing to submit to June 2022 deadlines (George, Gonzalez) and one delayed submission due to a high teaching load and grant facilitator illness. All faculty will have access to intensive coaching from the RDS on the resubmission process. This includes not only advice on proposal development but also assistance interpreting and responding to the reviewer comments, planning for a call with the program officer, and the availability of mentoring and practical advice. This aspect of the work is crucial, as rejection from funders upon initial submission is very common for all applicants of all career stages across the nation, but can be particularly difficult for early career faculty and those from underrepresented communities to navigate and can have a devastating effect on their morale. The RDS is highly skilled at these processes and her assistance in this area will be invaluable.

On a pre- and post-workshop evaluation survey (see Appendix B), all participants indicated that they found the workshop "very helpful," specifically endorsing this statement with respect to the feedback they received about their writing; the process of reading and discussing each other's work; and working with an individual consultant. All participants also indicated that they "used most or all of the suggestions made." Responses to an open-ended question about what participants found most valuable about the workshop included:

> *"Having feedback from an expert, and colleagues, as well as having a community committed to the same process."*
>
> *"The feedback from the facilitator and peers."*
>
> *"Feeling supported while writing."*

A full evaluation report by the external evaluator covering the entirety of Year 1 will be submitted as a supplement to this progress report at the end of Year 1, as explained in the Evaluation section below.

FUTURE PLANS

Despite the difficulties encountered throughout Year 1 from pandemic-related constraints and the uncertainties introduced by their fluctuations over time, as well as from considerable delays in the recruitment and hiring of the RDS, we approach the end of our first year proud of our progress in piloting innovative mechanisms to support the career development of underrepresented STEMM faculty. Upon its completion in July, we will use the formal external evaluation report for Year 1 to refine and expand our plans for the year ahead as appropriate, and we will provide a copy of that report along with any further updates to the Sloan Foundation at that time.

We will enter Year 2 with a solid foundation having been set in place, ready for refinement and expansion. Our plans for the year include developing a long-term research funding strategy; new mechanisms to expand faculty awareness of the range of funding opportunities that are a good "fit" for their research; individualized guidance on grant proposal preparation tailored to the specific needs of the participating faculty; group sessions on navigating the grant revision and resubmission process, an essential skillset for anyone seeking federal funding; three major hands-on grant-writing workshops; supporting the development of ongoing peer writing groups throughout the year; and experimenting with other innovations inspired by the ongoing needs and interests of the faculty. We will continue to offer Family Support and Dependent Care mini-grants and to encourage faculty to take advantage of this important support mechanism.

We take every opportunity at all our events and in all our communications to foster the development of a supportive, highly engaged community of researchers underrepresented in STEMM, and we will continue to disseminate the model and mechanisms we are piloting locally, regionally, and nationally. We thank the Alfred P. Sloan Foundation for your enthusiasm about our vision and for your support in enabling us to conduct the work to make it a reality.

APPENDICES

Appendix A: Barbara Ustanko CV

Appendix B: Evaluation Materials. ENHANCE Grant Writing Workshop Report (September 2021) & ENHANCE Baseline Needs/Climate Report

Appendix C: Grants Applied for by Participating Faculty

Appendix D: Grants Preparation by the Leadership Team

Appendix E: UC Davis ENHANCE Financial Statement

Appendix A

BARBARA E. USTANKO, M.A., ELS, GPC
899 Capp Street #5
San Francisco, CA 94110
415.867.6589
amanthha@gmail.com

EDUCATION

M.A., English Composition, San Francisco State University. 2007
Extensive graduate coursework in Teaching English as a Second Language.
M.A., English/Linguistics, San Francisco State University. 2004
Specialization in Discourse Analysis.
B.A., Philosophy, Pomona College, Claremont, CA. 1978

PROFESSIONAL DEVELOPMENT

Managing Implicit Bias (series), University of California Learning Center, in progress. 2021
Certificate in Science and Medicine, American Medical Writers Association. 2015
Coursework in cell and molecular biology, cancer pharmacology, bacteriology, laboratory methods, epidemiology, biostatistics, responsible conduct of research.
Certificate in Essential Skills, American Medical Writers Association. 2013
Coursework in biomedical editing, statistics, graphic presentation of data, medical terminology, ethics of scientific publication.

PROFESSIONAL CERTIFICATION

Editor in the Life Sciences (ELS), Board of Editors in the Life Sciences. 2013-Present
Lifetime certification, conferred May 16, 2013.
Certified Grants Professional (GPC), Grant Professionals Certification Institute. 2013-Present
GPC455717, valid through April 30, 2022, renewal in progress.

EMPLOYMENT

PROPOSAL AND MANUSCRIPT DEVELOPMENT and SCIENTIFIC EDITING

University of California, Berkeley April 2014-Present
Research Development Analyst/Specialist

Provide proposal development analysis and consultation for individual investigators, transdisciplinary teams, and cross-institutional collaborations. Analyze solicitations and evaluate potential funding sources. Edit grant proposals and concept papers to federal agencies (NIH, NSF, USDA, NASA, DOE, DOD, FAA, HRSA, AHRQ, NEA, NEH), private foundations (Keck, MacArthur, Moore, Simons) and others (American Heart Association, Google, UCOP). Coordinate and develop original content for center and institute proposals. Lead site visit preparations; participate in red team reviews. Present at workshops, roundtables, info sessions, and departmental meetings. Support research and infrastructure initiatives of the Office of the Vice Chancellor for Research. Create resources materials in areas of federal and institutional priority. Represent the University at national and regional meetings and conferences.

San Francisco State University July 2008-March 2014
Senior Grant Proposal Editor

Edited proposals and manuscripts for research, faculty development, infrastructure, and training programs across the College of Science & Engineering, the Health Equity Institute, the César Chávez Institute, the Center for Research & Education on Gender and Sexuality, and the Paul K. Longmore Institute on Disability. Developed original content and provided substantive editing for STEM investigators on proposals to various funders (NCI, NIGMS, NIMHD, NIAID, NIMH, NSF, AHRQ, NASA, USED; CSUPERB; Beckman, Ford, Genentech, Peter & Miriam Haas, Keck, Spencer, Walter & Elise Haas Foundations; Howard Hughes Medical Institute). Designed and led faculty writing retreats; presented workshops and supported the creation of internal and external peer review networks to facilitate the career development of early-stage investigators.

San Francisco State University December 1999-June 2008
Grant Proposal Editor

Edited and coordinated the development and submission of complex institutional proposals for large research infrastructure-building projects for minority-serving institutions (MBRS SCORE, MRISP, COR, RIMI, CC-MSI, TRIO, Bridges to the Baccalaureate and the Doctorate) and for multi-investigator collaborations with research-extensive universities (UC campuses in San Francisco, Davis, Berkeley, Santa Cruz, San Diego; Stanford; Harvard; Scripps Institute), in accordance with SFSU's long-term strategic plan. Edited investigator-initiated research and training proposals to federal agencies (NIH, NSF, NIJ, NEH, NEA, HRSA, ACYF, IMLS, RSA, USED), state agencies (California Institute for Regenerative Medicine, CalHumanities), and private foundations (Annie E. Casey, Dreyfus, Ford, Haas, Keck, Rockefeller, Spencer, Tides, Robert Woods Johnson).

San Francisco State University May 1999-December 1999
Proposal Preparation Specialist

Developed budgets for research, training, and education grant applications to federal, state, and municipal agencies and private foundations. Prepared and assembled forms in compliance with federal regulations and institutional policies including those governing research with human subjects and vertebrate animals. Drafted budget justifications, letters of support, and ancillary materials; proofread proposal narratives.

Northern California Institute for Research and Education November 1995-April 1998
Clinical Research Program Manager

Administered the research activities of an interdisciplinary group of senior investigators from the University of California, San Francisco (UCSF) and the San Francisco Veterans Affairs Medical Center (SFVAMC) studying protective factors, sequelae, and treatment of post-traumatic stress disorder in emergency services personnel, sexual assault survivors, and combat veterans. Prepared and edited grant proposals for federal agencies (NIMH, NIA, NIJ, NASA) and industry sponsors (Solvay Pharmaceuticals). Edited manuscripts for publication in peer-reviewed journals, medical textbooks, and scholarly anthologies.

San Francisco Education Fund May 1985-September 1990
Program and Evaluation Administrator

Coordinated the grant-making activities of a pioneering local public education foundation. Developed and presented proposal writing workshops for applicants. Provided technical assistance to grantees. Conducted background research; led site visits; interviewed grantees and other stakeholders. Developed and issued calls for proposals, funding guidelines, project catalogs, and publications for national distribution. Created resource guides disseminating best practices and organized project fairs highlighting exceptional projects by grantees. Researched and wrote progress reports to funders (Crescent, Porter, Hale; Exxon Education; Ford; Haas; Hewlett; Kellogg; McKesson; Rockefeller; Rosenberg; San Francisco; Skaggs; Spencer; Stuart; Swig; and Tides Foundations).

TECHNICAL WRITING AND ANALYSIS

Neil & Associates and FastTrack Litigation Support Services September 1990-October 1995
Deposition Summary Writer/Analyst

Analyzed and summarized deposition and trial transcripts in intellectual property disputes. Specialized in working with complex technical testimony by expert witnesses in computer, bioengineering, and biotechnology cases, including a landmark case in Federal District Court that adjudicated the intellectual property rights for the invention of polymerase chain reaction (PCR) in *Cetus v. Amgen.*

REFERENCES

Dr. Carmen Domingo cdomingo@sfsu.edu
Dean, College of Science and Engineering 415.338.7789
Professor of Biology
San Francisco State University

I worked closely with Dr. Domingo, a developmental biologist at San Francisco State University (SFSU), for more than a decade, beginning three years into her appointment as Assistant Professor and continuing throughout her years as Associate and then full Professor. Initially, I assisted with sub-proposals within a large institutional portfolio on several consecutive NIGMS Minority Biomedical Research Support/Support of Continuous Research Excellence (MBRS SCORE) submissions; when the program was restructured to support individual investigators rather than institutional portfolios, I assisted her with several SC-1s for her research on cellular and molecular pathways that underlie pattern formation in the vertebrate embryo. In addition, we worked together on NSF instrumentation (MRI) and student training (REU, PSM) proposals, as well as on multiple major research training proposals to the California Institute for Regenerative Medicine. Nearly all the proposals we worked on together (~90%) were ultimately funded, many on initial submission. Dr. Domingo is currently Dean of the College of Science and Engineering at SFSU, the first woman as well as the first Latinx researcher to hold that position.

Dr. Rafael M. Díaz rafaelmdiaz929@gmail.com
Professor (Emeritus) of Ethnic Studies 415.420.1576
Founding Director, César Chávez Institute
San Francisco State University

Dr. Díaz, the PI on groundbreaking studies of HIV, decision-making and risk among Latino men who have sex with men (MSM), was recruited to SFSU as part of a strategic initiative to build institutional capacity in biobehavioral research. I worked closely with him on two Minority Research Infrastructure in the Sciences (MRISP) proposals, which provided ten years of NIMH funding to support the career development of a select group of underrepresented early career faculty. These institutional submissions involved multiple full and pilot research projects, a fellowship program, and, beginning in year six, an intramural seed grant program. I assisted participants with narrative and ancillary documents for sub-project proposals, contributed to monthly seminars hosted by Dr. Díaz, and edited publications and investigator-initiated proposals. The MRISP launched the research careers of ~36 underrepresented faculty. I also assisted Dr. Díaz and his colleague Dr. Caitlin Ryan with proposals to the Ford and Robert Wood Johnson Foundations that provided initial support for the Family Acceptance Project, the first comprehensive study of LGBTQ youth and their families and the first evidence-based family support model to help diverse families learn to support their LGBTQ children. Dr. Díaz has retired from academia and is currently in practice as a licensed clinical psychologist.

Dr. Candice Price candice.r.price@gmail.com
Associate Professor of Mathematics 916.601.4619
Smith College

Dr. Price, a mathematical biologist and co-founder of the Mathematically Gifted and Black project, sought me out for strategic consultation and editing of an NSF CAREER proposal in 2020. With her, as with all early career investigators, I focused a portion of our work on explaining the importance of and guiding her in the exercise of foundational skills crucial for the success of any proposal (e.g., demonstrating alignment of the proposed work with the funder's mission and review criteria; establishing and clearly articulating significance, innovation, and impact; seamlessly integrating the budget request and justification with the project description; writing to a mixed audience of reviewers, not all of whom are experts in the PI's area of specialization). When this proposal was not funded, I taught her a systematic approach to analyzing reviewer comments and coached her on framing and conducting a follow-up call with the cognizant program officer. Without requiring further involvement on my part, Dr. Price revised the proposal and submitted it to NSF's Launching Early-Career Academic Pathways in the Mathematics and Physical Sciences (LEAPS-MPS) program, where it was reviewed enthusiastically and has since been funded. Dr. Price was recently promoted to Associate Professor and granted tenure at Smith College.

PROFESSIONAL SERVICE AND TEACHING / COACHING / TUTORING

GRANT PROPOSAL AND MANUSCRIPT REVIEW (SELECTED)

Manuscript Reviewer, Grant Professionals Association, 2021.
Grant Proposal Reviewer, US Department of Health and Human Services, Administration for Children, Youth & Families, Office of Community Services, Community Economic Development, 2013.
Grant Proposal Reviewer, Horatio Alger, Jr., Association, 2013.
Grant Proposal Reviewer, California State University Doctoral Dissertation Fellowships, 2009-2012.
Grant Proposal Reviewer, Research and Creative Innovation Awards, San Francisco State University, 2010.
Grant Proposal Reviewer, AVP's Collaborative Research Awards Program, San Francisco State Univ., 2009.
Reviewer, NIMH Minority Research Infrastructure Support Program (MRISP) Faculty Fellowships, 2005-2008.
Grant Proposal Reviewer, NEH Summer Stipend Ltd. Submissions, San Francisco State Univ., 2001-2004.
Grant Proposal Reviewer, San Francisco Education Fund Allocations Committee, 1991-1992.
Manuscript Reviewer, Women's Studies Review, and Journal of Lesbian and Gay Studies, 1984.

WORKSHOPS AND PRESENTATIONS (SELECTED)

Presenter/Panelist, NSF Early Faculty Career Proposals, University of California, Berkeley, 2015-2021.
Discussant, Grants Roundtable, American Medical Writers Association Annual Meeting, 2014.
Contributor, Informational Session on Funding for Science &Technology Centers, UC Berkeley, 2014.
Presenter, Federal and Foundation Grantwriting, Extended Education, San Francisco State Univ., 2013.
Presenter, Proposal Writing, New Faculty Orientation, San Francisco State University, 2009-2013.
Presenter, Writing NIH Proposals, Faculty Development Day, College of Science & Engineering, San Francisco State University, 2012.
Presenter, Writing to your Audience: Grant Proposals, Publications, & Reports, Faculty Development Day, College of Business, San Francisco State University, 2009.
Presenter, Fellowship and Grant Opportunities and Resources, New Faculty Orientation, SFSU, 2001-2005.
Presenter, US Department of Education Fund for Innovation in Post-Secondary Education (FIPSE) Comprehensive Grant Proposals (with Bette Dow, FIPSE Program Officer), SFSU, 2003.

OTHER RELEVANT ACTIVITIES

Publications Committee Member, Grant Professionals Association, 2021.
GPC Examination Task Force, Grant Professionals Certification Institute, 2019-2021.
Writing Coach, Proposal Clinic for Early Career Faculty, University of California Team Science Retreat, University of California, Santa Barbara, 2016.
Chancellor's Outstanding Staff Award, University of California, Berkeley, 2015.
Writing Consultant, University of California Team Science Retreat, UC Santa Barbara, 2015.
Red Team Reviewer, NSF Sustainability Resource Network Site Visit, UC Berkeley, 2014.
Facilitator/Coach, Proposal and Manuscript Writing Retreats, San Francisco State University, 2010-2014.
Scholarship Reviewer, Hispanic Scholarship Fund, 2006-2013; ACT/Horatio Alger, Jr., Association, 2013.
Lecturer, English Composition, San Francisco State University, 2002-2006 (first two years as GSI).
Contributing Editor, Institute on Disability, San Francisco State University, 2000-2007.
Member, WASC Self-Study Group, Language Arts Division, Skyline College, 2006-2007.
Lecturer, Graduate Science Writing, College of Science and Engineering, SFSU, 2006.
Organizing Committee Member, Women on Writing Conference, Skyline College, 2006 and 2007.
Lecturer, Sociolinguistics, and History of English, San Francisco State University, Spring 2005.
Coordinator, NEH Summer Institute on Disability Studies, San Francisco State University, 2000.
Allocations Committee Member, San Francisco Education Fund, 1991-1992.
Program Coordinator, San Francisco Teacher Summer Institute, Ford Foundation HERALD Project, 1990.
Editor, Annual Grants Program Catalogs, SF Education Fund/Exxon Education Foundation, 1986-1989.
Tutor, English as a Second Language, Partners in English, 1984-1985.
Contributing Writer, Journal of Lesbian and Gay Studies (formerly Journal of Homosexuality), Women's Studies Review, Women Library Workers' Journal, 1983-1986.
Advisor, Bay Area Chapter, People First (in affiliation with the Center for Independent Living), 1982-1984.
Instructor, ESL and Expressive/Receptive Language Development, Touchstone Program, 1980-1985.

Family and Dependent Care Support Grants

From July 2021-May 2022, nine Family and Dependent Care Support mini-grants, collectively totaling $7,545 were applied for and awarded. These grants cover dependent care expenses to enable faculty to dedicate their time and attention to professional development activities (conferences, research, proposals, and/or publications) necessary for career advancement. Since these funds are considered taxable income, ENHANCE adjusts the amounts accordingly, adding a percentage to the award amount requested by each individual to ensure that the estimated tax liability is fully covered.

Outcomes: With support from these mini-grants, three scholars attended ENHANCE grant-writing workshops; two attended research conferences; two worked on research projects; and three worked on grant-writing and manuscript preparation. One of the participants who used the mini-grant to be able to attend a workshop stated, *"I would not have been able to participate without it."*

A evaluation report of this intervention will be included in the full report from the external evaluator.

Formal Evaluation

In Appendix B, we have attached copies of the summary of evaluation findings of our September grant-writing workshop and a baseline needs/climate report by our external evaluator.

Our external evaluator, Sondra LoRe of STEM Program Evaluation, Assessment and Research, is currently collecting data from an active survey and is in the process of transcribing and analyzing recently completed semi-structured interviews with ENHANCE participants. Parts of the survey are based on a job satisfaction survey that was developed and administered in Spring 2020 to CAMPOS Scholars in the process of developing the ENHANCE proposal. The instrument has been further modified and will be administered to ENHANCE participants at three data points: a baseline in December 2021 (Appendix B) prior to the interventions, a midline in December 2022, and a final upon the conclusion of the Sloan award.

To avoid impacting data collection activities or compromising the quality of the results of the external evaluation, and to enable the collection and analysis of data from the June grant-writing workshop, we will submit a supplemental update to the Foundation with the results of the formal Year 1 evaluation in July 2022.

Grants Preparation by the Leadership Team

The ENHANCE leadership team is at the forefront of the strong institutional desire to support diverse groups of faculty effectively and has already increased campus awareness that to be effective, support must be specialized and tailored to the specific needs of the groups being supported. The success of this approach, as exemplified in ENHANCE's primary interventions, will be extended to other groups of underrepresented faculty across campus, thus having an impact beyond STEMM disciplines and will serve as a national model. In Appendix D, we list relevant grant proposals on which the PI and co-PI have served as co-authors and are named as investigators or in other participating roles. Alfred P. Sloan Foundation funds were not used toward the development of these proposals.

Dissemination

August 2021-June 2022	CAMPOS and Office of Diversity, Equity and Inclusion Social Media Channels: Twitter (@CAMPOSUCDavis1, @UCD_Diversity), Instagram (@ucd_diversity) Announcements of ENHANCE and its Year 1 activities.
August 16, 2021	Press Release, UC Davis Dateline *Sloan Grant Enhances STEM Faculty Diversity Efforts Amid Pandemic*, https://www.ucdavis.edu/news/sloan-grant-enhances-stem-faculty-diversity-efforts-amid-pandemic
September 24, 2021	Joint Orientation for New CAMPOS* and CAMPSSAH** Faculty Presentation with overview of ENHANCE by PI Vazquez and co-PI Oropeza. *(*Center for the Advancement of Multicultural Perspectives on Science; ** Center for Advancement of Multicultural Perspectives on Social Science, Arts & Humanities)*
October, 2021	Call for Nominations of CAMPOS Faculty. Campus email announcement included highlights of ENHANCE interventions. Recipients of the call included the chancellor, provost, deans of 8 colleges, department chairs and chairs of hiring committees.
February 22, 2022	Provost Leadership Council Meeting. Presentation by co-PI Oropeza, as Associate Vice Chancellor of Academic Diversity, highlighting ENHANCE, the Sloan Foundation award, and the 11 academic units that contributed matching funds (8 colleges and schools, and the Offices of Academic Diversity-Diversity, Equity and Inclusion, Research, and the Provost).
March 10, 2022	CAMPOS Induction Ceremony. Overview of the ENHANCE Program by PI Vazquez and co-PI Oropeza for CAMPOS faculty who joined UC Davis from 2019-2021.
April 20, 2022	CAMPOS Colloquium. Discussion of ENHANCE program activities, opportunities, and funding.
April 27, 2022	Meeting with Dean Atekwana, College of Letters and Sciences. Overview of CAMPOS, ENHANCE, and their opportunities for faculty.
April 28-May 2, 2022	Dreamcatcher Workshop: Challenges facing STEM Latinas in Academia, Santa Fe, New Mexico (by invitation only). Dissemination among national academic networks by PI Vazquez, attending in her capacity as CAMPOS Director.
May 2022	Call for Nominations of CAMPOS Faculty. Campus email announcement included highlights of ENHANCE interventions. Recipients of the call included the chancellor, provost, deans of 8 colleges, department chairs and chairs of hiring committees.

"The family support helped me to come in here and do some writing. It was the difference between doing something or nothing with writing. With COVID there are no extracurricular activities for my children. We have no family help. So [with support] I could have a sitter at the house and come into work to write articles or grants."

"Because of COVID, they actually suspended childcare. So there, there really wouldn't have been a way for me to have childcare. I would have definitely had to carry my daughter during my talk or not participate… I am pre tenure so these talks are very important."

Importance of Writing Support

In the theme of writing support are statements from faculty describing how the writing workshops and coaching sessions increased their productivity. They also appreciated the atmosphere of the writing group and opportunities for constructive feedback.

"I think that the writing workshop was really awesome. …writing grants, it's difficult to find uninterrupted time to just focus, where you don't have to write emails, you don't have to respond to email then. So I think having those writing sessions, and being in the company of other people…who are writing too and can give you critical feedback [is important]."

"Because of the support that I received, I was able to pay a babysitter to watch my children. And importantly, the grant that I was writing while I was at the workshop, just got a fundable score! I'm very, very confident that I will be getting that funding."

Pride in being a CAMPOS Scholar

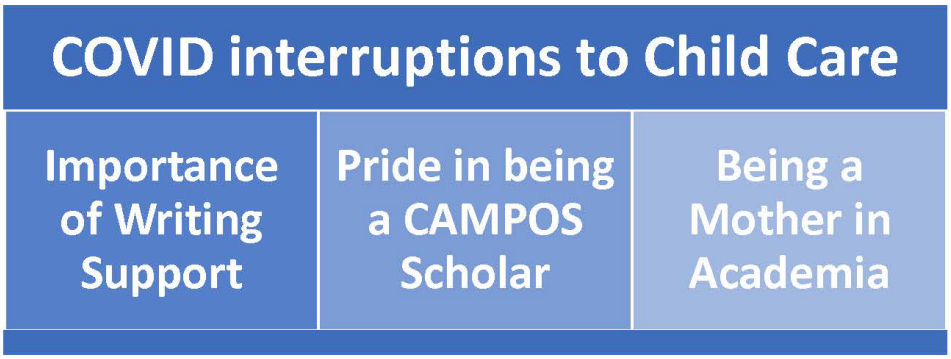
While all the faculty interviewed expressed appreciation for the additional financial supports - their greatest appreciation is for the steadfast support of Dr. Mariel Vazquez specifically and the CAMPOS Scholars program as a whole.

"At first I thought people might be like 'Oh, no, she got handed something because she's Latina', or, because of, you know, your race, ethnicity, right? But what Mariel has done [with CAMPOS Scholars], that is very amazing and empowers us to not feel like that. She's made a huge effort of

Faculty Interviews

In April 2022, Dr. LoRe interviewed six faculty members who received faculty support funding and two research staff members who assisted in coaching faculty member writings. Faculty and staff selected a time to meet from an online poll, and each interview lasted between 22 and 30 minutes. Discussions were audio-recorded and transcribed by Dr. LoRe. Consultants analyzed the audio transcripts in two cycles. Cycle one included line-by-line or *in-vivo* coding (Saldana, 2016), in which the evaluator categorized each statement into preliminary codes. Similar codes were merged into themes and categories in the second coding cycle. Categories from faculty interviews are displayed in the figure below.

Figure 35: Themes for interviews with Faculty



COVID interruptions to Child Care

In this category faculty described ways in which the COVID-19 pandemic had interrupted childcare options either through closures, quarantines for their family, or cancellation of services. They described how the family supports offered throughout the program enabled them to participate in writing workshops, conferences, and uninterrupted blocks to conduct research.

Table 10: Faculty found most valuable to them during the writing workshop

One on one meeting with research development specialist
Per review session and the one-on-one with Barbara.
Help with understanding the reviewer comments and preparing for the resubmission. Writing in community. Knowing that I was receiving specialized help. Getting away from family and work responsibilities to focus on writing.

Table 11: Changes faculty would make to the writing workshop

It would be better is not held on the weekend before finals week.
Probably this is not feasible for other scholars, but a longer workshop might work for me. Additionally, to ensure continuity and engagement to follow up with 1-hour meetings by Zoom, once or twice a month similar to how is done by other research communities on campus.
I would adjust the timing to minimize commute.

Table 12: Faculty final thoughts, comments, or questions about their experience.

Following on my previous comment, the Environmental Health Science Center (EHSC) offers an "AIMS Review Monday" to its members every other Monday from 12-1:30pm via ZOOM. The faculty send their specific aims for discussion the week prior. One of the center's advisors serve as moderator each time and some members just join to give feedback or to learn from the process (EHSC has also grad students and postdocs). They usually discuss specific aims from 3-4 EHSC members. Obviously, this model is quite intense because EHSC has many members, and its focus is specific to environmental health. Still, we could apply some of aspects of this approach. Likewise, CIID has a monthly discussion among faculty with interest in immunology and infectious diseases. However, this group meets once a month and there is a designated presenter that is looking for feedback on a grant or manuscript. The presentation includes data (preliminary for a grant or figures for a manuscript), approach, etc. Although it might seem specific in focus, the people that present have very different expertise, and made use of very different animal or in vitro systems and technical approaches so, overall, the feedback is quite broad.

Figure 34: Faculty rate their level of agreement regarding the writing workshop

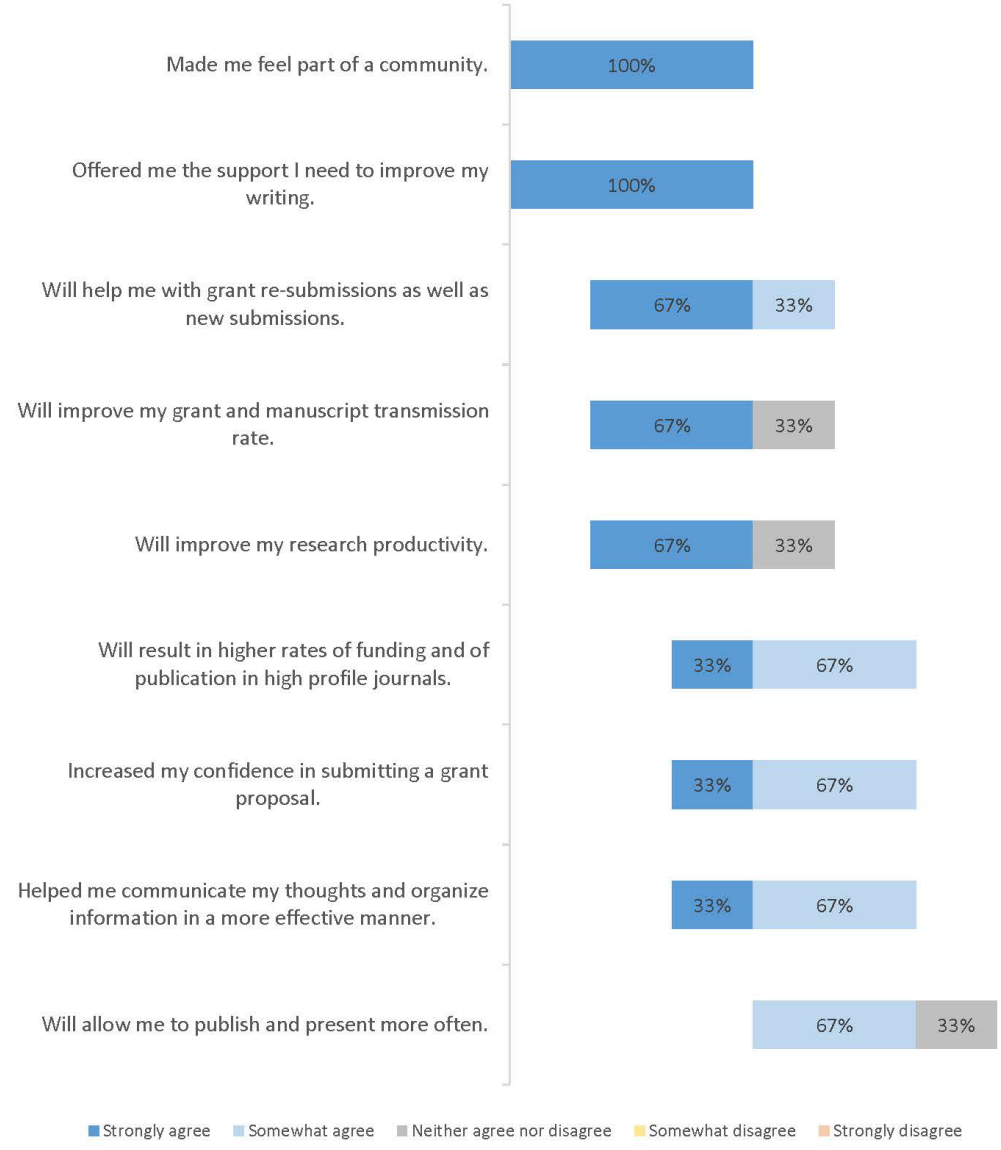
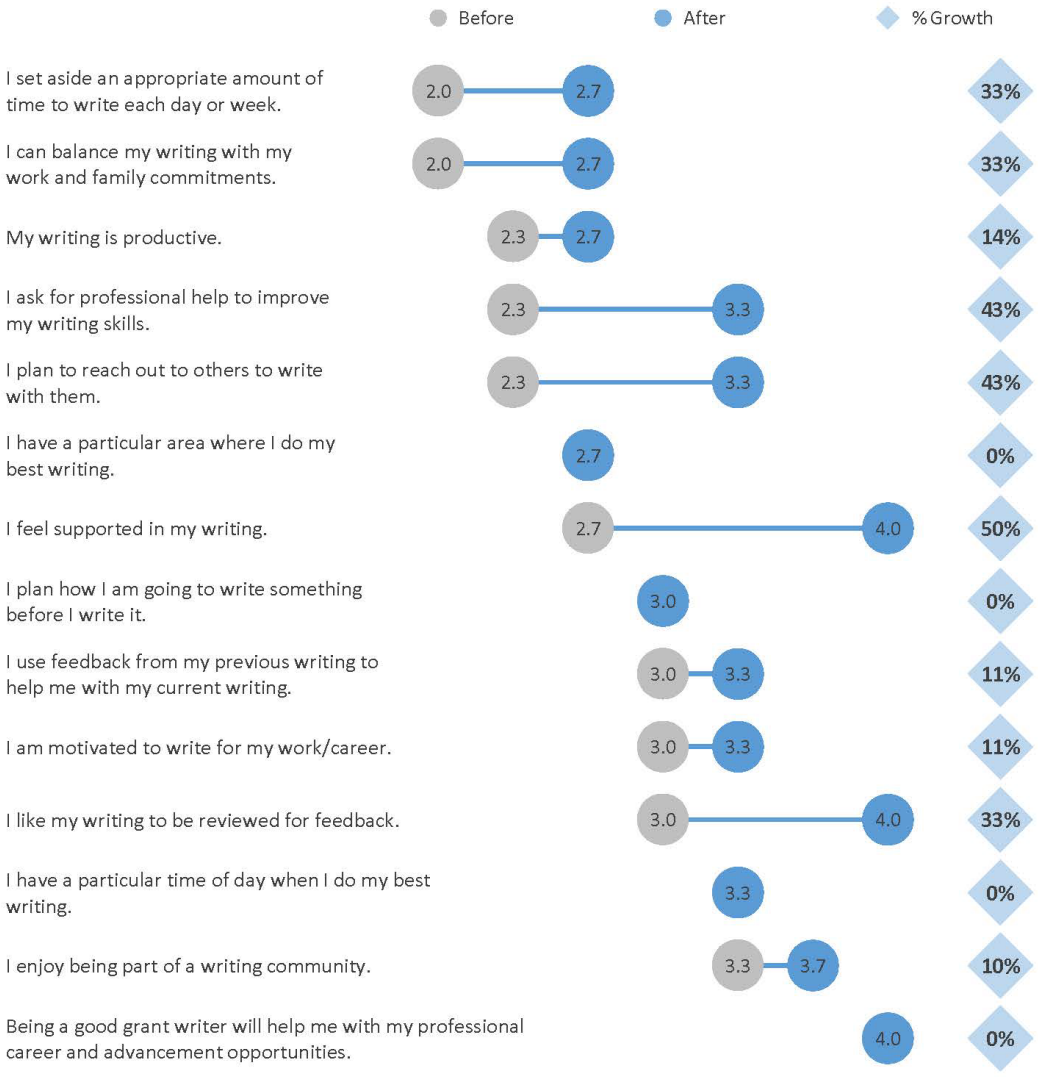


Figure 33: Faculty rate their level of agreement to the following statements before and after attending the writing retreat



Spring 2022 Grant Writing Workshop Survey

The basis of the survey was to gather data on the grant writing retreat experiences of CAMPOS faculty members to describe the workshop's impact. . Three (3) faculty responded to the survey. Each Figure and table descriptions below delineate the basis of the questions asked. Survey items consisted of a mix of asking faculty to select responses from a variety of options provided or to indicate their level of agreement to statements presented, as well as soliciting written responses where appropriate. Some respondents did not answer all the questions.

The data visualization below displays the aggregate response of the group. Some responses allowed faculty to select more than one choice. Most questions with a selection of choices also allowed the respondent to provide an additional "other" written response if the options provided did not address their particular situation.

All data in this document has been self-reported by the respondents and visualized by the evaluator, where appropriate, to best display the instructor's responses.

Overall, attendees valued the grant writing workshop with faculty reporting that:

The **feedback received about their writing** was

- **very helpful**, and they used most or all of the suggestions made (67%).
- **Somewhat helpful** and I used some or most of the suggestions made to me (33%).

- **Reading each other's work and discussing** it was **very helpful** (100%).

- **Working with an individual consultant** was **very helpful** (100%).

Figure 31: Proposals awarded

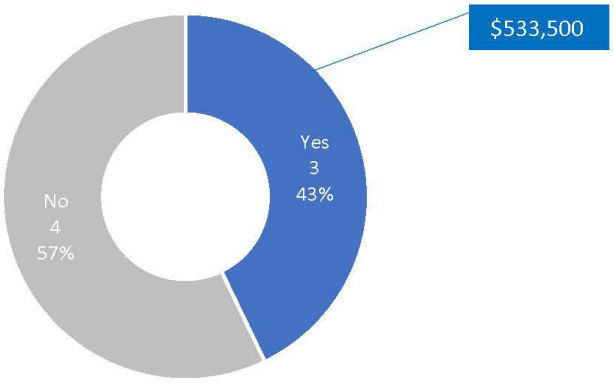


Figure 32: Faculty who plan to resubmit their proposal

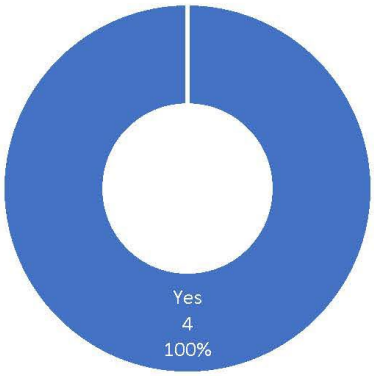


Figure 29: Funding associated with the proposals

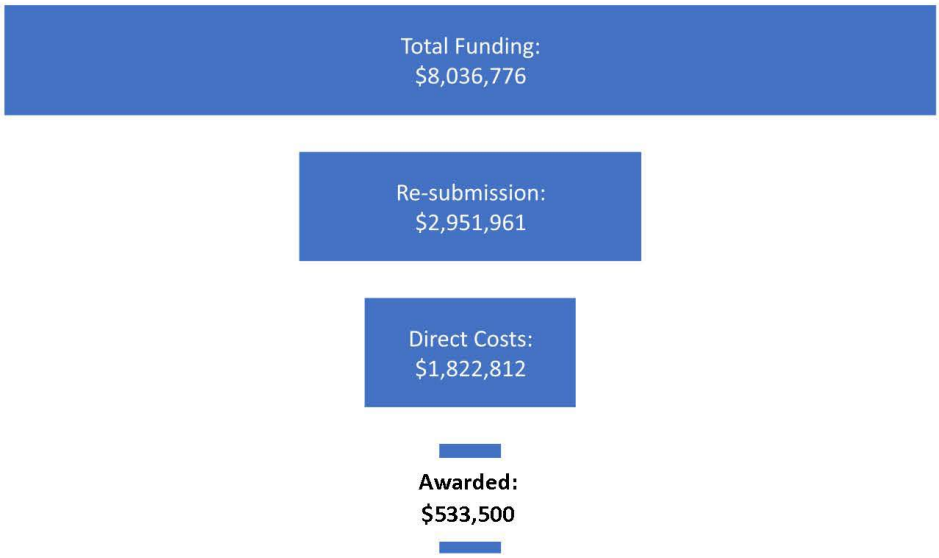


Figure 30: Faculty who have received responses about their proposals

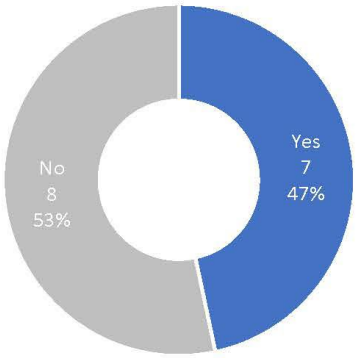
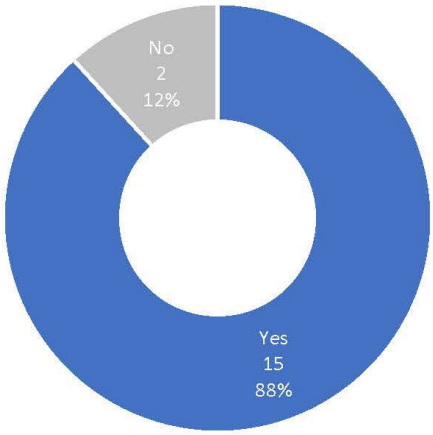


Figure 27: Proposals submitted



Note: *Some faculty wrote and submitted more than one grant*

Figure 28: Submission timeline

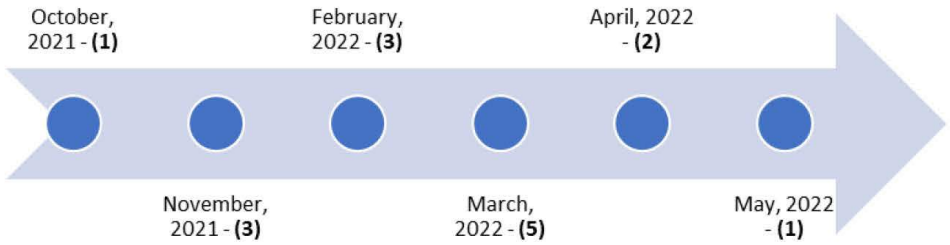
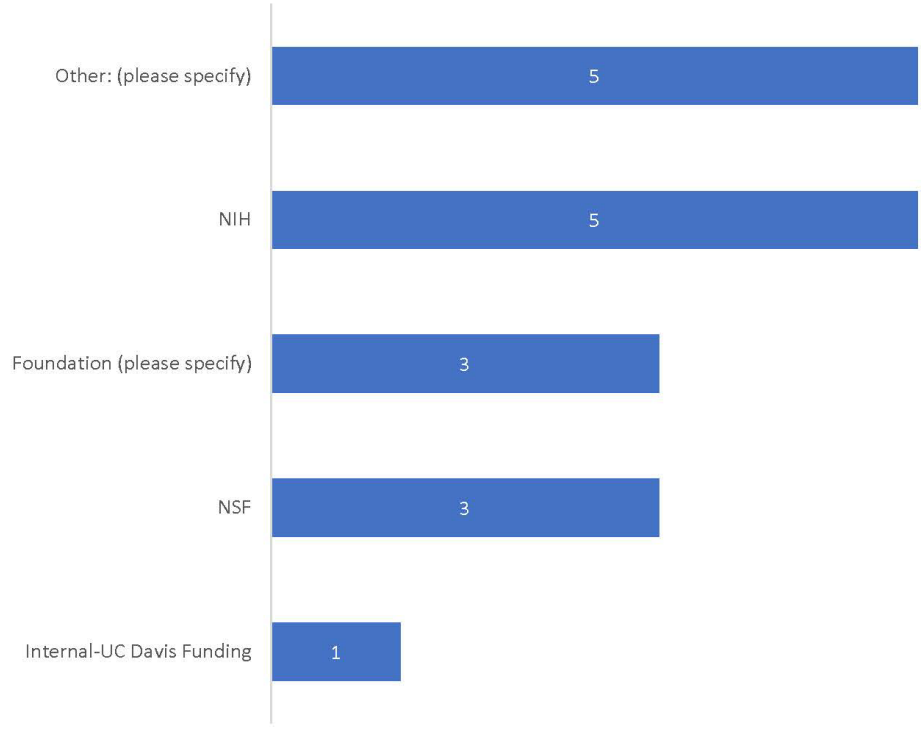
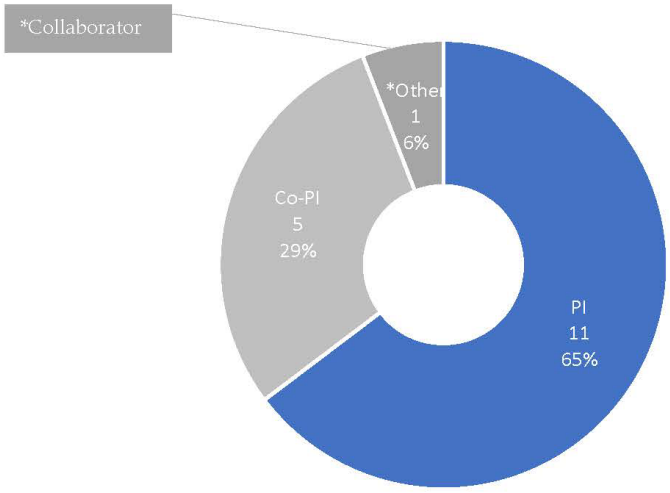


Figure 26: Funding agencies for proposals submitted



Other:
DOE (2)
The Tobacco-Related Disease Research Program; administered by RGPO at UC
American Institutes for Research
CA Dept of Public Health
Foundations:
W.T. Grant Foundation
Spencer Foundation
Hellman Foundation

Figure 25: Faculty who participated in grant writing intervention describe their role.



1	Society of Hellman Fellows Grant
2	NINDS K01 for Advancing Faculty Diversity
3	DOE-BER
4	TRDRP
5	NSF
6	K01
7	R01 AG079184-01
8	Spencer Foundation Large Grant
9	PA-18-358 Joint NINDS/NIMH Exploratory Neuroscience Research Grant (R21 Clinical Trial Optional)
10	COVID-19 and Equity in Education Mini-Research Grant for Emerging Scholars
11	DOE-BER
12	CA Dept of Public Health
13	Institutional Challenge Grant
14	PA-19-056 NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)
15	Public Impact Research Initiative Grant, University of California, Davis, Public Scholarship and Engagement
16	NSF STC pre-proposal

Table 9: Faculty report about any conference or journal writing they did this year. (Grant proposals will be covered in another section)

I wrote a new manuscript (submitted to a peer-reviewed journal) and two manuscript revisions (one currently under review, another accepted).
I am currently working on a research manuscript, which we will submit to eLife by the end of April. Additionally, my graduate student wrote and submitted an abstract for the 2022 Biophysics Annual Meeting.
I attended two conferences this past year to present updates on a project focused on filtration processes in porous media. The first meeting was for InterPore, and the second for the fall meeting of the American Geophysical Union.
I wrote a research manuscript accepted for publication in the Function journal and a review paper.
Daza-Torres ML, Garcia YE, Schmidt AJ, Pollock BH, Sharpnack J, Nuno M*. The Impact of COVID-19 Vaccination on California's Return to Normalcy, medRxiv 2021.06.01.21258187. Schmidt AJ, Daza-Torres ML, Garcia YE, Ashby JL, Pollock BH, Sharpnack J, Nuno M*.COVID-19 vaccination in California: Are we equitable yet? medRxiv 2021.05.25.21257807.
I resubmitted a manuscript for publication. It was finally published in September 2021.

Figure 24: Faculty participating in writing a grant proposal this academic year

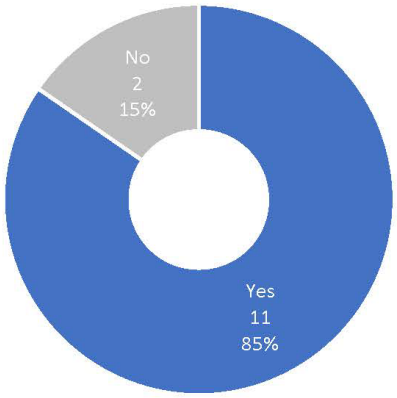


Figure 23: Faculty participated in these forms of academic writing

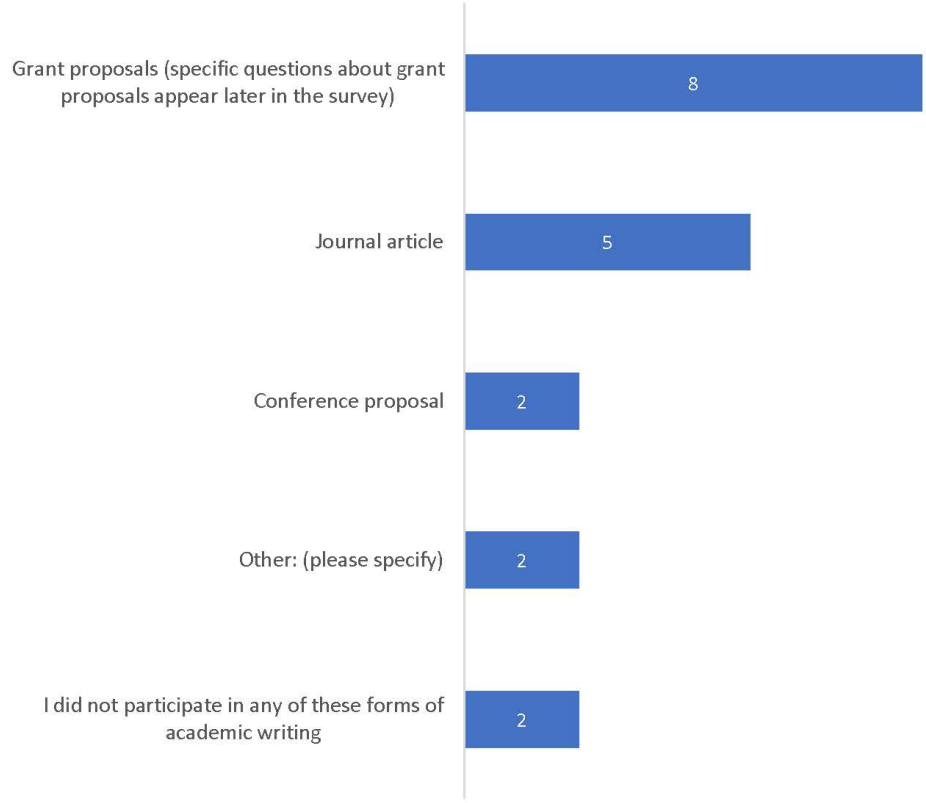


Table 8: Faculty reasons for being unable to participate in ENHANCE writing workshops this academic year

It was cancelled at the time I could attend.
I was on modified maternity leave the majority of this year and was not ready/able to participate.

Academic Products Survey Data

The basis of the survey was to gather data on faculty regarding their experience with academic writing and grant proposal writing as a CAMPOS scholar during the 2021-2022 academic year. Thirteen (13) faculty responded to the survey. Each Figure and table descriptions below delineate the basis of the questions asked. Survey items consisted of a mix of asking faculty to select responses from a variety of options provided or to indicate their level of agreement to statements presented, as well as soliciting written responses where appropriate. Some respondents did not answer all the questions.

The data visualization below displays the aggregate response of the group. Some responses allowed faculty to select more than one choice. Most questions with a selection of choices also allowed the respondent to provide an additional "other" written response if the options provided did not address their particular situation.

All data in this document has been self-reported by the respondents and visualized by the evaluator, where appropriate, to best display the instructor's responses.

Figure 22: Faculty report whether they had or have a disability

Faculty share additional thoughts about the program.

"CAMPOS has positively impacted my career, and I hope we can strengthen the program to support many more generations of excellent faculty."

Figure 20: Faculty report their current gender identity

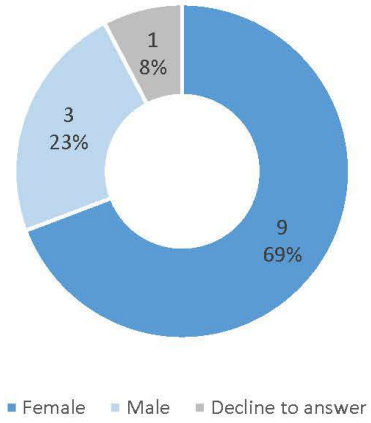


Figure 21: Faculty consider themselves

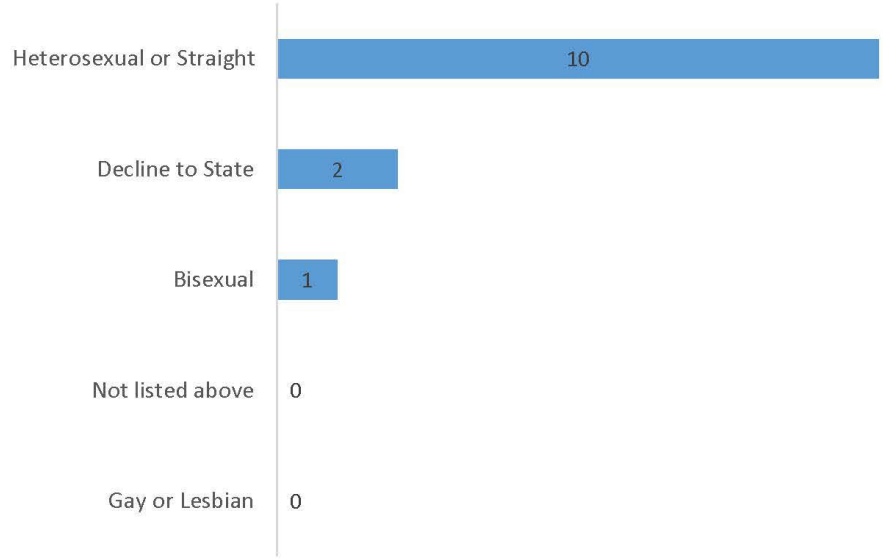
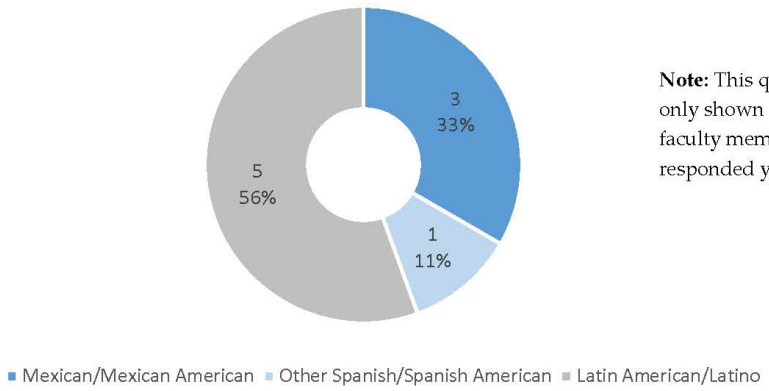
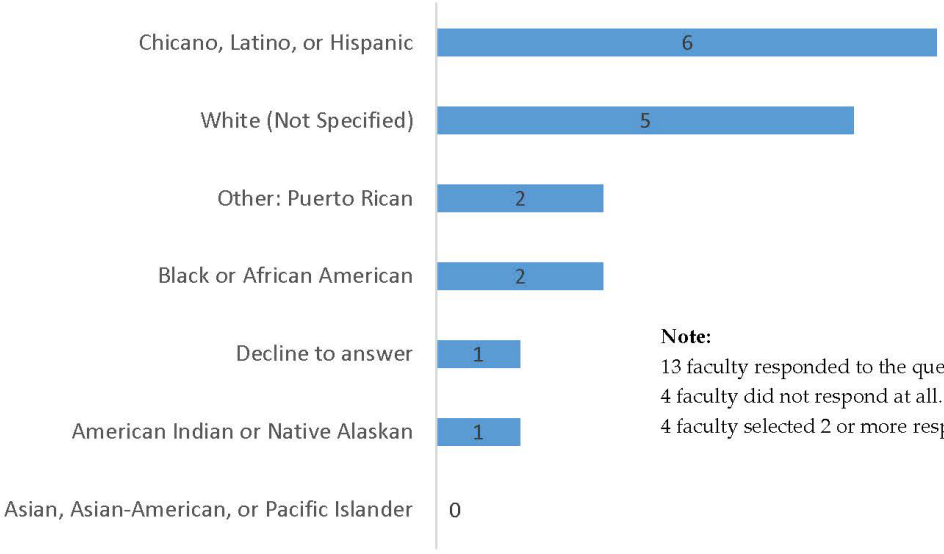


Figure 18: Faculty who reported being Hispanic or Latino select the description(s) that best describes them



Note: This question was only shown to those 9 faculty members who responded yes in figure 17.

Figure 19: Faculty provide their race/ethnicity



Note:
13 faculty responded to the question.
4 faculty did not respond at all.
4 faculty selected 2 or more responses.

Figure 16: Faculty report the resulting decision of their review

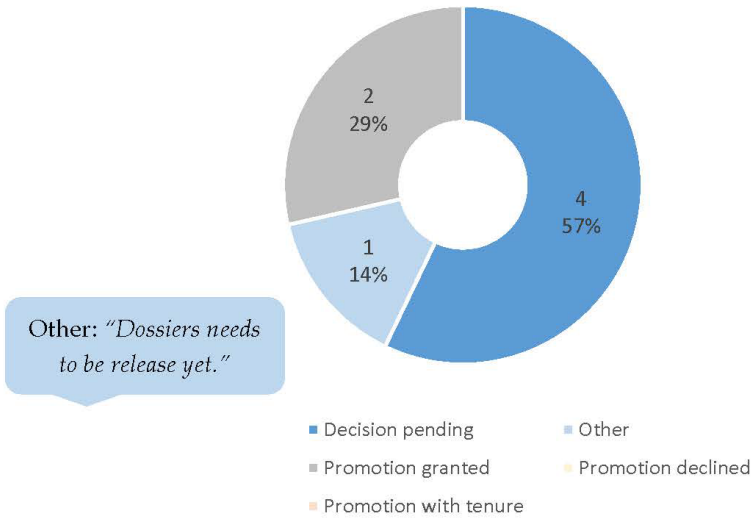


Figure 17: Faculty report whether they are Hispanic or Latino (A Person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.)

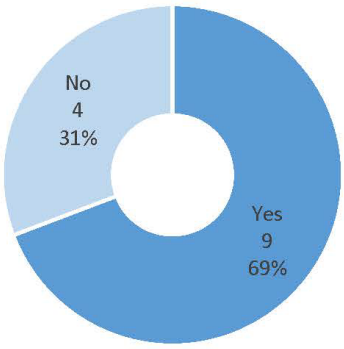


Figure 14: Current faculty rank

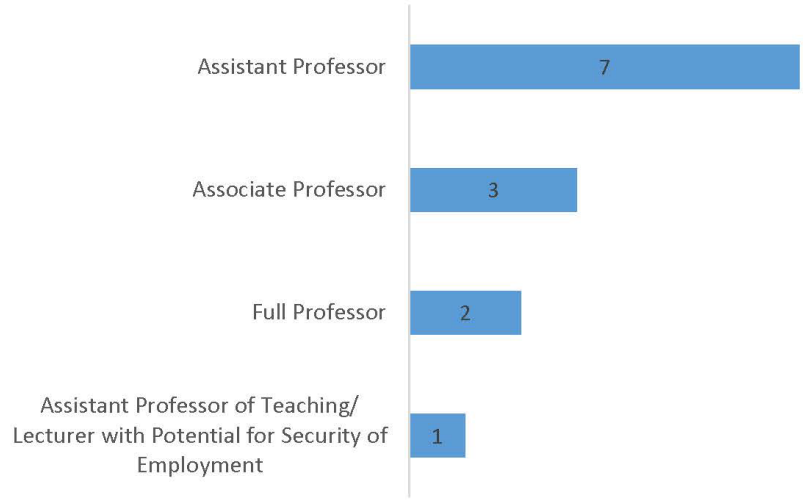


Figure 15: Faculty that had a promotion/tenure review during AY2020-21 or AY2021-22

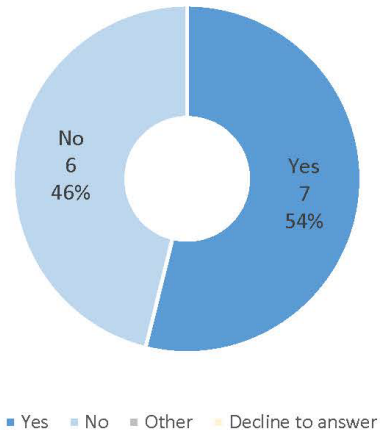


Table 7: Faculty report what they need to help them navigate the challenges in teaching and research caused by the CoVID-19 pandemic

Better support for teaching i.e., more readers for grading, some reductions in teaching or allowance for buyout, and priority in course scheduling between 9:00-17:00 to be able to manage work and family.
An administrative assistant.
Time. I need more time.
Seed grant to support students.
During the pandemic, I continued to support my grad students and undergraduates even though they couldn't do much of the work. I hate to say that it all comes down to money, but time can't be recovered, so it really is whether we can have more support to try to "catch up" to our deadlines. In my case, a fully funded 1-year graduate student or postdoc (or even a 50% split) would make the world of a difference. My college doesn't allow for teaching buyouts so that is not an option.
For teaching, I would appreciate more timely planning and support for remote teaching requests. Currently, requests are organized on an emergency basis. This adds to the uncertainty of things. In terms of research, I look forward to more writing retreats or groups to help propel these efforts forward.
For teaching, I need more support in the classroom. This could be addressed by increasing the number of TAs from 2 to 3. For research, support for graduate students and/or postdoctoral fellows would be very helpful.
Ability to pay Graduate students. Also help recruiting grad students.
To have more workshops for grant writing. They help a lot because you are 'forced' to reserve to time for grant writing but, more importantly you get peers to read your draft. For me this is the most valuable aspect, to have many other eyes over your draft and getting feedback from people that are not doing the same research that you do.
More resources for teaching effectively under these circumstances. More seed funding that does not require extensive applications and reporting. More internal support for student researchers, or subsidies on student tuition.
Research money to start new research investigation.

Figure 13: Faculty rate their level of satisfaction or dissatisfaction with the following aspects

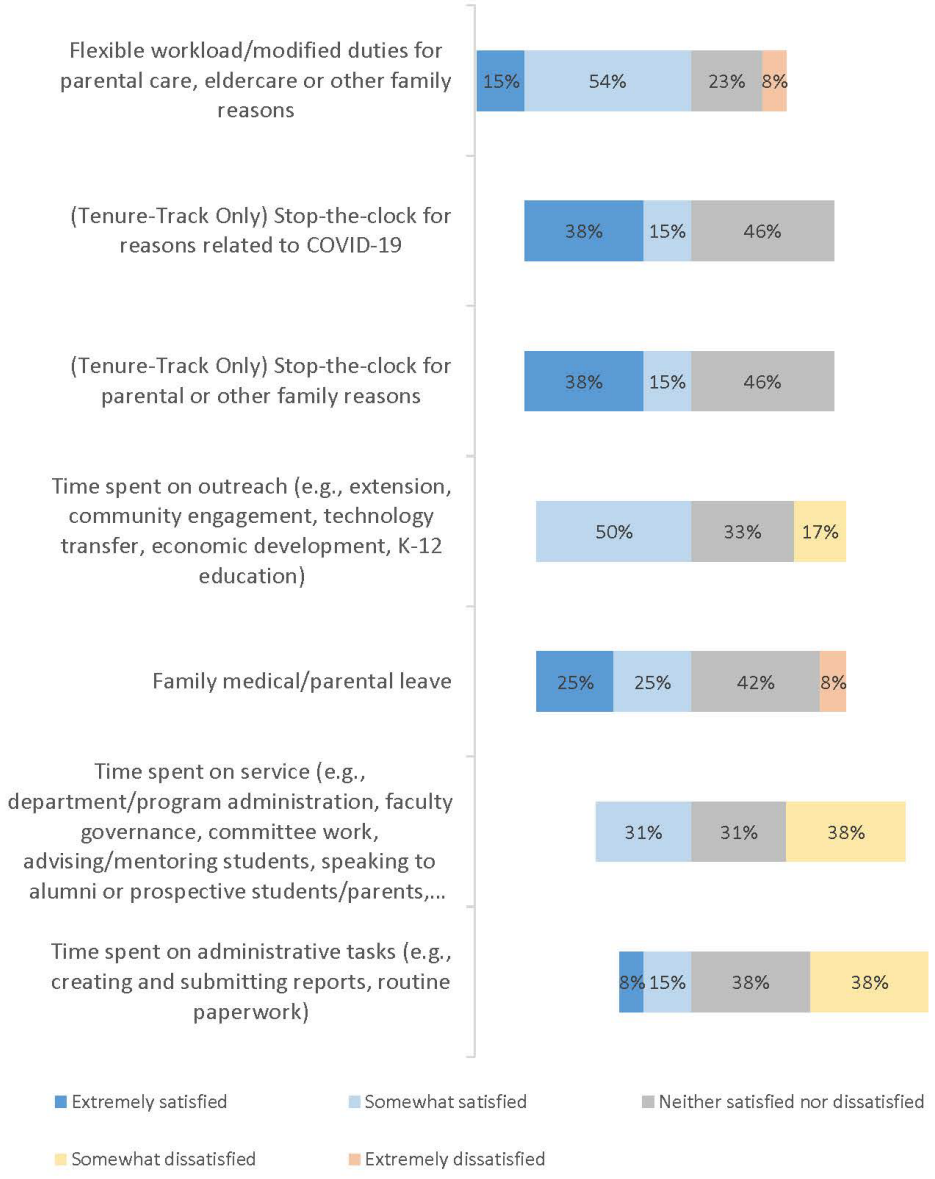
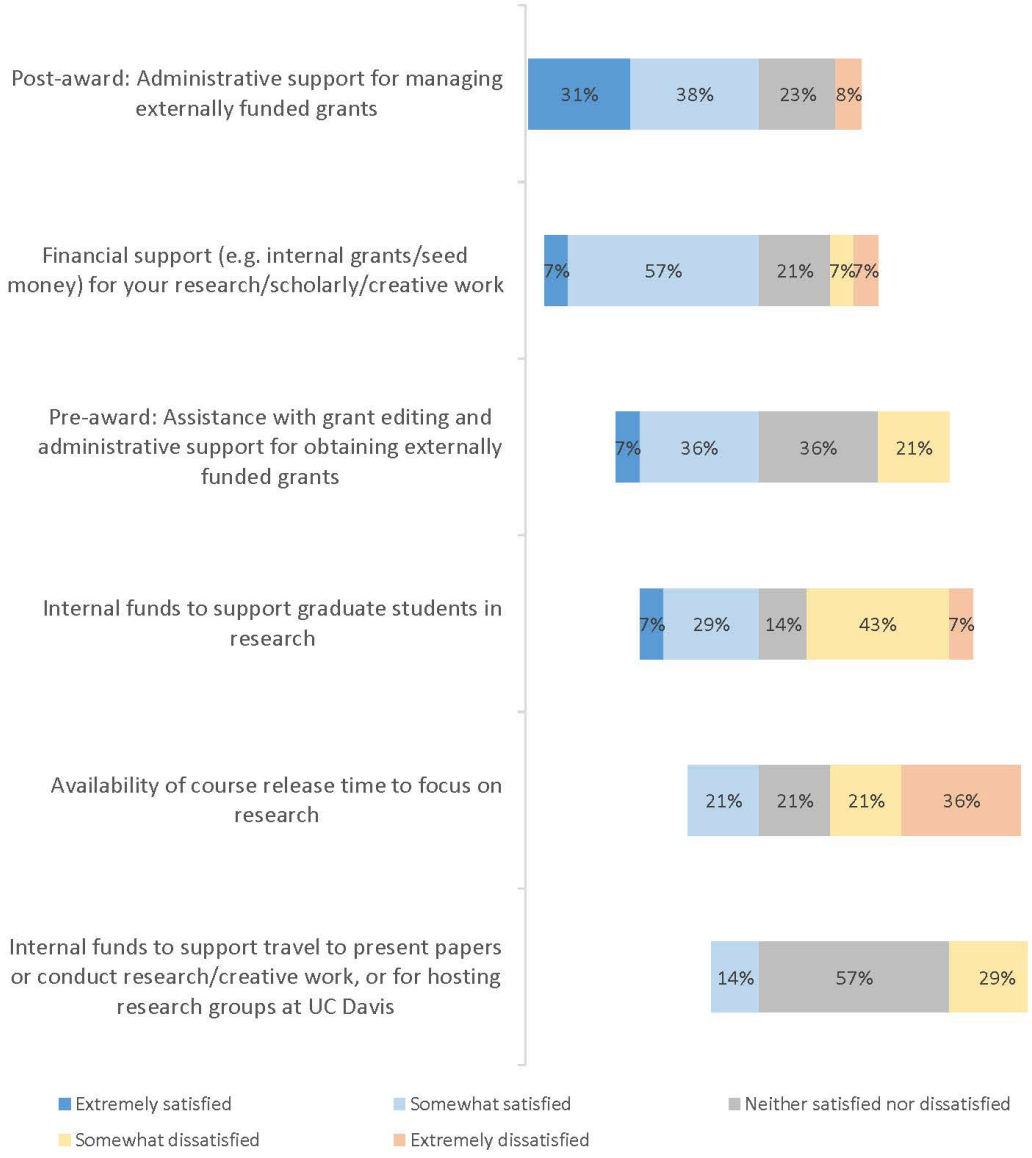


Figure 12: Faculty rate their level of satisfaction or dissatisfaction with UC-Davis institutional support



My situation is somewhat unique as I do research in education, so many of my research projects had to be completely halted or terminated as the world reality had changed. In addition, I have 3 small children under 5 (only 2 when the pandemic started), and securing childcare was extremely complex and stressing during 2020. In addition, even with childcare, having the kids home when trying to work was extremely difficult. In addition, the graduate and undergraduate students working with me had to also deal with their own challenges, so our overall productivity was low there too. I thought that I would get papers out and grants written but it really just wasn't possible. Trying to be able to hold office hours online without a child jumping into my lap was complex enough. While some research projects were able to continue (mostly those looking at historic data) the rate of advance was slow. While NSF was understanding and I was able to apply to a no-cost extension year, my grant from the California Learning Lab was very strained by the circumstances as deadlines were not moved at all. This was a seed grant of $100,000 that could lead to an invitation to submit a much larger grant ($750,000 - 1M), all focused on improving student outcomes, but the data collected during the pandemic and data collection itself was impaired. Yet I assume that everyone had similar problems, so I am not sure I have any right to ask for additional help. I was fortunate to have a job that I could continue and work.
Most of the burden has come from increased teaching load, but also the stress that comes with the disproportionate effect COVID has had on my community. It makes concentrating and finding time for research much less feasible and limited.
My majority of my research program requires in person testing. Thus, the pandemic greatly disrupted our ability to conduct experiments. My graduate students also suffered emotionally from the isolation and difficulty in making progress on their respective projects.
Increases childcare demands. Also, general increase in distraction and stress and decision making for me and research team.
Preparing new classes online
I didn't get new student volunteers because I worry about being able to properly and safely train new students while feeling confident that they could work independently. Additionally, me and my staff had severe health issues that further limited our work. Grant submission was delayed, and a foundation that I relied for grants will not be considering new grant submissions because the pandemic limited their fundraising capacity. Lastly, I also had trouble getting some mice through an MTA because the provider couldn't breed the mice during the lockdown.
Suboptimal workspace at home during lock down, reduced ability to work on campus due to family responsibilities and risk of infection. Limitations experienced by several lab members that hindered their ability to work productively.
Absolutely, I have kids at home

Figure 11: Faculty report how much their time devoted to teaching duties has increased during the COVID-19 pandemic (since March 2020)

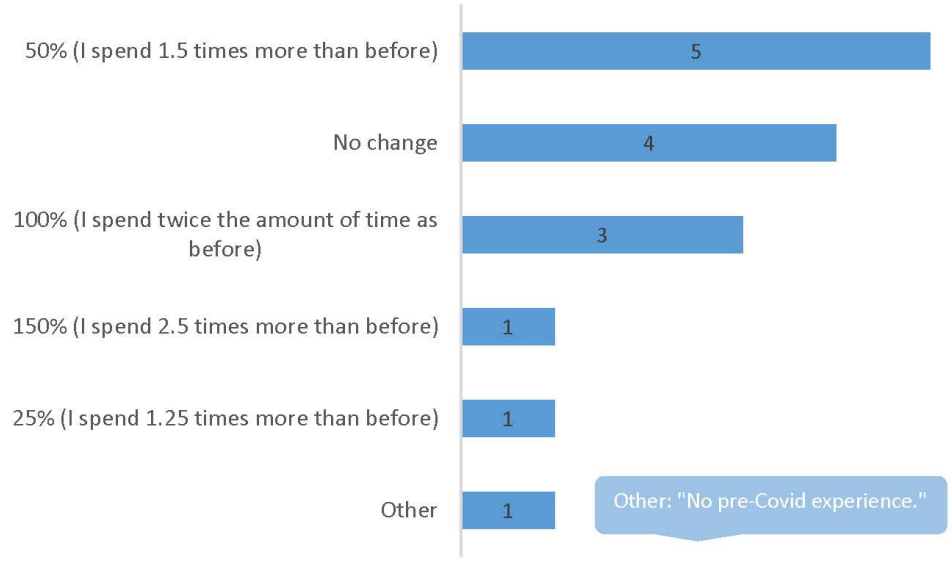


Table 6: Faculty report how the COVID-19 pandemic has affected their ability to do research productively

The reduced hours in our kid's CDC has cut out two hours of my day every day that I otherwise spend on research. Additionally, training new graduate students entirely online during the pandemic has been incredibly burdensome. Emotionally and mentally, the students are simply not all there when daily in-face interactions are missing. For these reasons, I decided not to recruit new people for a year, which has delayed progress in several projects. Moreover, delays prior to the pandemic to obtain adequate laboratory space and equipping it with experimental instruments were exacerbated further.
The lab was shut down for several months then only had restricted access for a year. This slowed down progress on all research projects.
Due to Covid limitations, my lab members were told to stay home and only come to lab if they had to. As we transition back to a more "normal schedule," it is impossible to ramp the work in my lab up to what it should be. In addition, I have missed out on a ton of in-person training opportunities with my lab members, and therefore they are not as independent as they should be. This then limits how much I can get done because I am the limiting agent for literally everything in the lab.
Due to the lock-down, research slowed down, and I postponed an NIH grant submission. Nevertheless, I published papers and procured extramural funding from a private agency.

Figure 9: Faculty report the amount of contact hours their most demanding class required **BEFORE** (prior to the COVID-19 pandemic) and **AFTER** March 2020

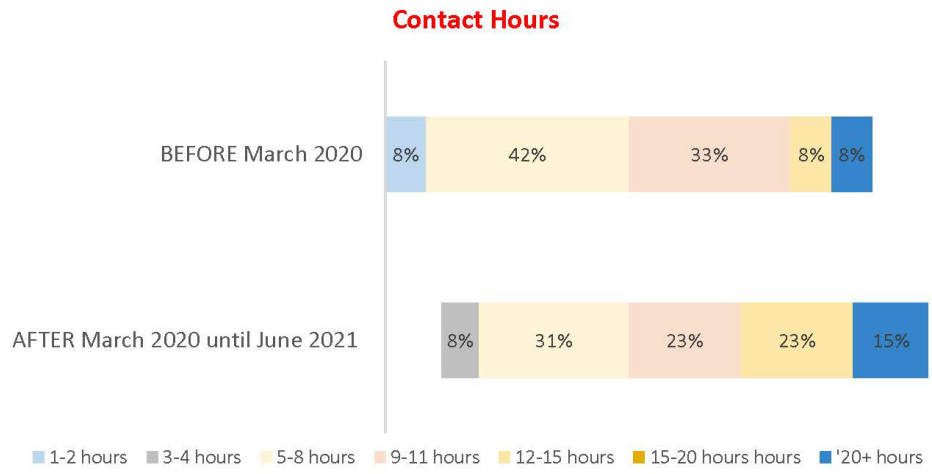
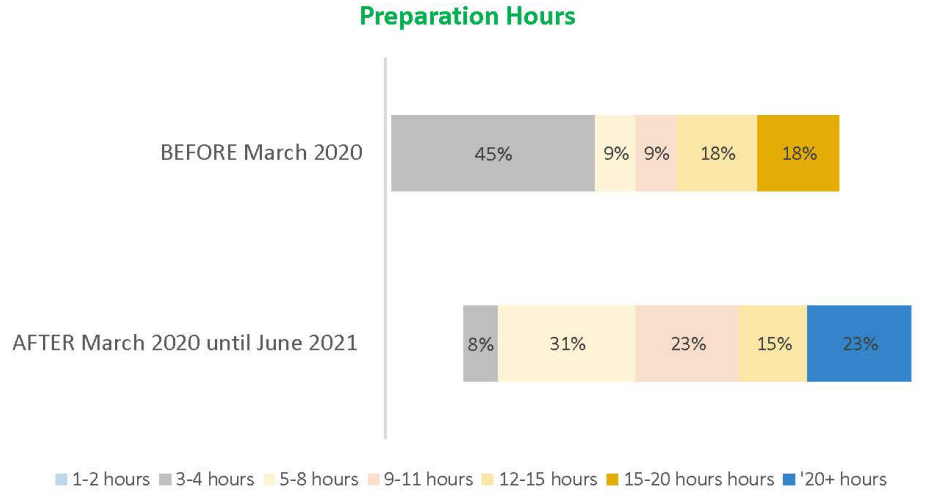


Figure 10: Faculty report the amount of preparation hours their most demanding class required **BEFORE** (prior to the COVID-19 pandemic) and **AFTER** March 2020



undergraduate 200 student course (co-taught twice) virtual undergraduate 150 student course virtual graduate course 2 students virtual
In Fall 2020 my class was approximately 150 undergraduate students, high enrollment, and virtual.
Low enrollment undergrad virtual.
1)150 students in each lecture 150 students split in 4 session per laboratory 9 students per problem-based learning (PBL) case, meeting 3 times for 2 hours 2) Lectures and PBL were on-line, laboratories in-person. 3) Each laboratory entailed double or four times more work. For instance, we usually split the class in two halves (they don't fit in the lab otherwise) so, each laboratory has two sessions of 2 or 3 hours. But we needed to split in fourth the class to facilitate social distance. That said, most of the time I needed to repeat the same laboratory four times so, double the time spent. One particular lab has 3 stations, meaning I needed to repeat the same station twelve times in one day. Plus much more work in sanitation and wearing more PPE than usual. 4) We needed also to write much more material and spend more time in discussion session on Canvas after a lecture or lab than before.
Medical school, 135 students. During Covid, mostly virtual
Undergraduate, high enrollment, virtual
One 3 credit class with 4 lab sessions and one 4 credit class with 2 lab sessions

Table 5: Faculty explain their class(es) in Academic Year (AY) 2020-2021 providing details to help the leadership team better understand their teaching burden (e.g. undergraduate or graduate, low or high enrollment, in-person or virtual, approximately how many students, and any other relevant information they wanted to share, etc.)

I taught one graduate (4 students, no teaching assistants) and one undergraduate (70 students, one reader + one teaching assistant) course. The third course I usually teach was released this year as a primary caretaker of a toddler. The teaching support for the undergraduate class could have been better to manage moving entirely online. The limited time I had to work (since my kid could not attend daycare) I spent almost entirely on preparing the course and grading, which affected my research significantly.
I teach two undergraduate courses each year, one I co-teach with another professor and the other I teach alone.
School of Medicine; Co-IOR IMD 466, Medical Spanish course (~ 60 hours). Due to COVID, the class was 100% through Zoom. (9 students) Graduate School; Co-IOR MCP 298 (~ 20 hours/quarter): Molecular Cellular and Integrative Physiology Companion Course. (10 students) IOR PHA199, a particular study group designed to provide undergraduate students with discovery-based learning, early access to personalized mentoring, research experience, and direct interaction with STEM role models. Due to the limitations imposed by the COVID pandemic, I had to come up with creative ideas to keep undergraduate students engaged in research and start a virtual research experience. New students participated in lab meetings, journal clubs, and one-one meetings with graduate students to discuss research. Students who had been with me before the pandemic and trained in using our imaging analysis software engaged in remote data analysis work. (1-2 students/ quarter). Lecturer: Besides the courses described above, I contribute to lectures for the graduate course Principles in Pharmacology and Toxicology III (PTX 203, Spring 2020 & 2021) and participated as a panelist in the "Mental Health" session of the MCP seminar Navigating Graduate School (MCP 290, Fall 2020). I also contribute 1-hour lecture for the School of Medicine on Anti-hyperlipidemic and obesity drugs in PH400 A (Spring 2020 and Winter 2021).
All my courses had to be converted to online format, which took a considerable amount of time. I also was the main go-to person for other faculty trying to use canvas resources (such as quizzes) for the first time in my department, which added to the workload. I single taught a medium upper division course (~100 students), a medium lower division course (~150 students), co-taught a large upper division course (~450 students, only 1 TA and 1 other instructor) and I coordinated supplemental instruction courses involving (~250 students, 6 TAs and 12 LAs during the year).

Figure 7: Faculty who taught in Academic Year (AY) 2020-2021

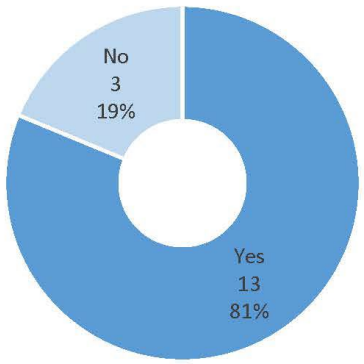


Figure 8: Faculty indicate the number of classes that they taught in Academic Year (AY) 2020-2021.

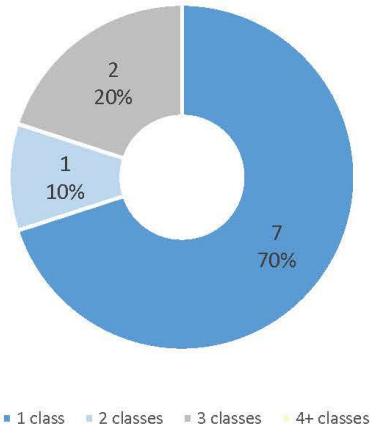


Figure 6: Faculty rate their level of agreement of how the COVID-19 pandemic affects them

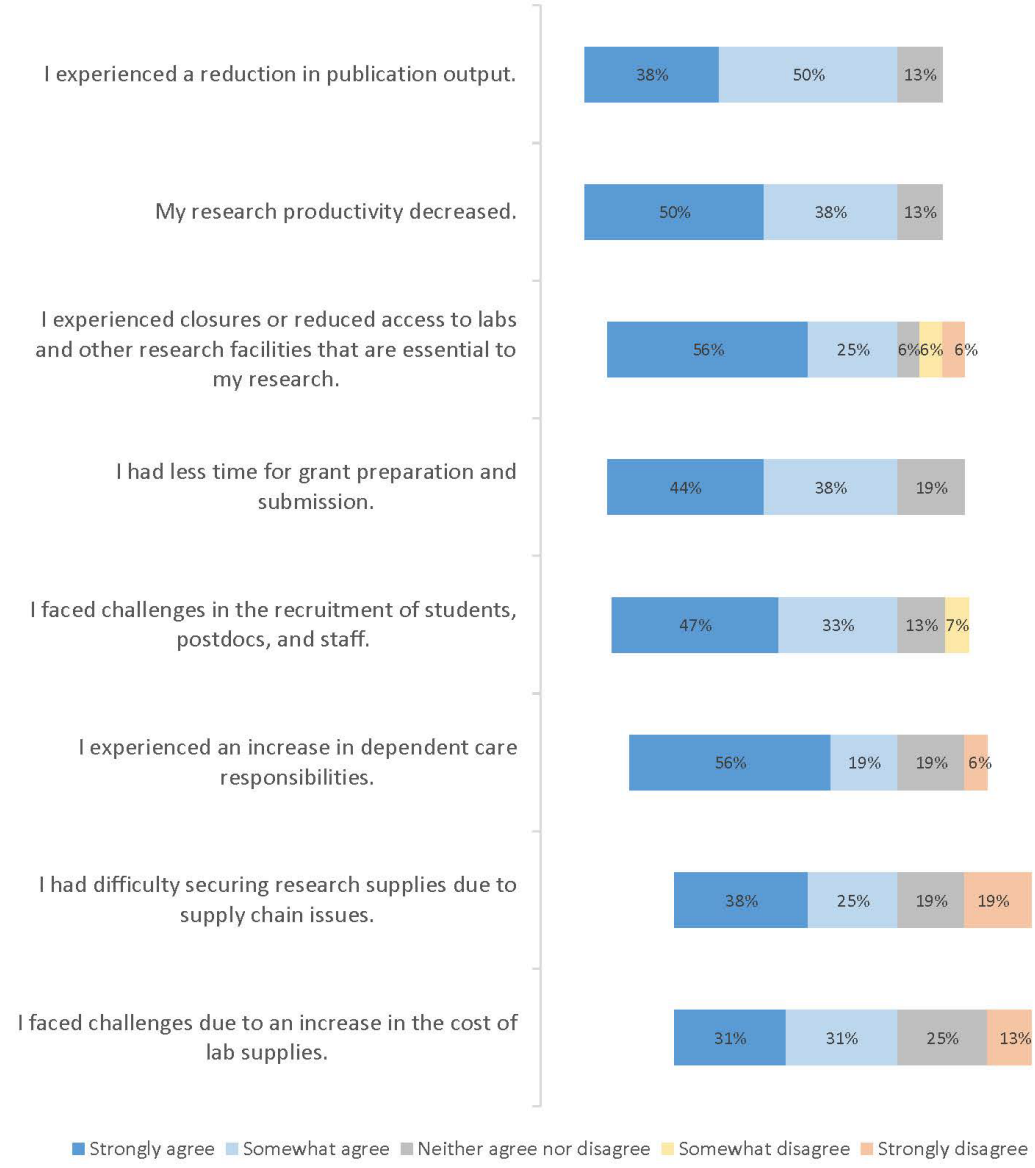
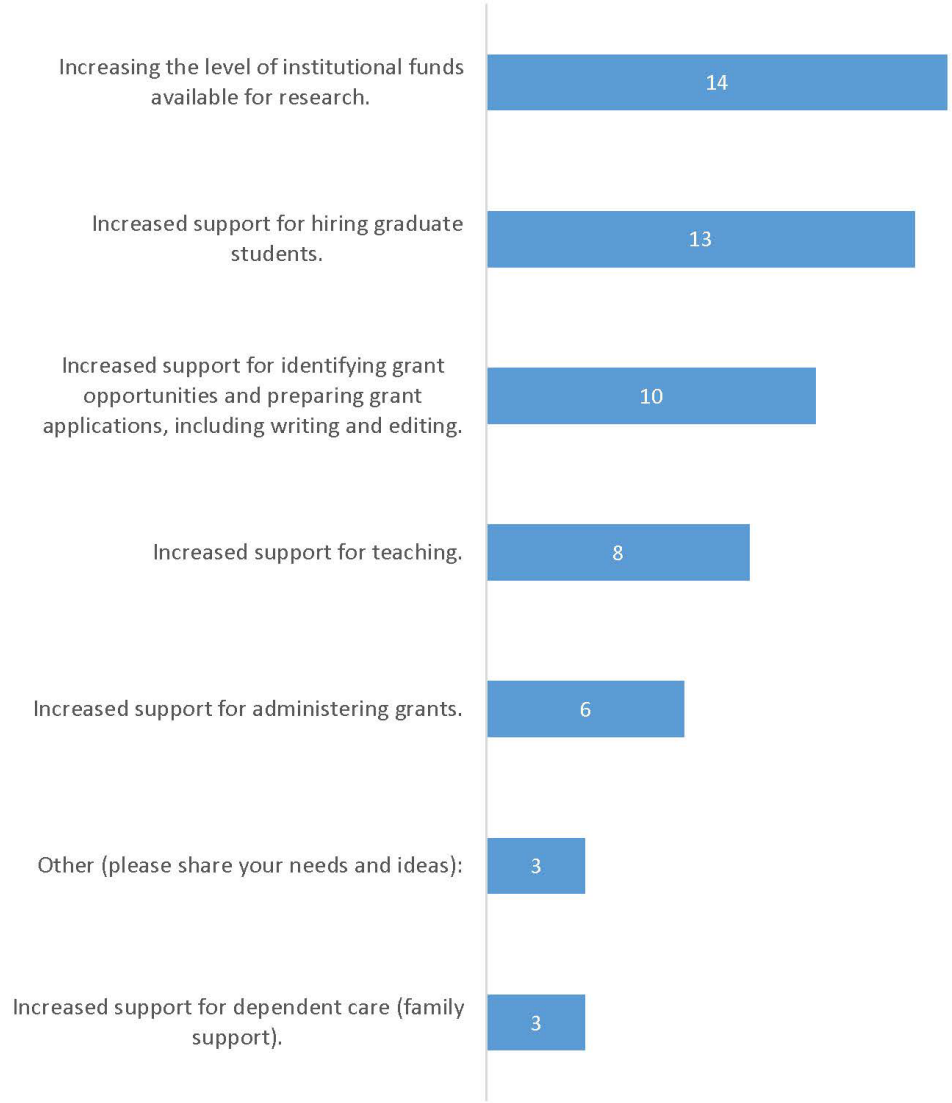


Table 4 : Faculty provide additional information about support desired from the UC Davis ENHANCE grant or UC Davis

Backing from ENHANCE and CAMPOS programs to secure adequate facilities for faculty to do their research. It took me nearly five years to obtain laboratory space where I could begin building my lab, which gives me about six months to spend the entirety of my startup meant for experimental equipment.
Given the diversity of research carried out by CAMPOS scholars grant application support would need to be highly personalized. Perhaps additional fund for research would be the easiest way to address additional support for diverse faculty.
If CAMPOS was able to offer professional grant editing via one of the services that already exist (https://www.lifescienceeditors.com/ for example), that would be very helpful. Prior to review of the finalized grants, having the ability to work with people on developing specific aims or even a monthly specific aims review with other CAMPOS scholars would be helpful for developing grant ideas.
I thought of Fellowships to support postdoctoral scholars, mainly from URM groups. Moving to a new place has a significant cost associated with it. It will be good to have small grants to help offset that cost.
Seed grants to support starting projects (in the order of ~$10,000) would be one of the best ways to support, as most funding agencies want preliminary results. Help navigating HR situations when one has childcare and thus guidance with applying to grant-agency supplements for family leave would also be amazing. An initiative that encourages collaborations between CAMPOS/ENHANCE scholars would be particularly interested. Either something like seed grants that are only available to groups of 2 or more CAMPOS scholars for example. Another idea that comes to mind is giving CAMPOS scholars with grad students a $5000 stipend for the student to conduct some research in the areas of DEIJ paired with another CAMPOS scholar for mentor.
One of my most pressing concerns is funding my graduate students. UC Davis has a number of T32s and institutional support for graduate students which is great, but this is remains a critical issue in being successful. If there was a way for UC Davis ENHANCE to help PIs fund graduate students (and/or postdoctoral fellows), that would be amazing.
I could always use more hands on deck for completing research or support grading or TAing courses. My most limited resource is time, and being able to work with graduate students (and pay) would be great.
Supplemental funds for graduate students or postdocs would help, especially as a new PI who is actively trying to obtain their first grant. This could be supplemental salary support or support for travel/conferences.
Support to submit grant proposals to NSF
1) More funding opportunities for pilot studies to generate preliminary data for other grants. 2) Grant writing workshops with peers reading the narrative draft, like the ones offered last September and the coming January. 3) Funding to hire graduate students and summer internships.
Stable and predictable assistance with grant preparation from an experienced research development professional.
Research seed grants

Figure 5: Faculty selected the types of support that would improve their ability to succeed in their merit and promotion cycles



CAMPOS-ENHANCE Needs/Climate Survey Data

The basis of the survey was to gather data on the needs and experiences of CAMPOS faculty members to provide leadership a comparison to the climate survey employed in the initial grant proposal. Eighteen (18) faculty responded to the survey. Each Figure and table descriptions below delineate the basis of the questions asked. Survey items consisted of a mix of asking faculty to select responses from a variety of options provided or to indicate their level of agreement to statements presented, as well as soliciting written responses where appropriate. Some respondents did not answer all the questions.

The data visualization below displays the aggregate response of the group. Some responses allowed faculty to select more than one choice. Most questions with a selection of choices also allowed the respondent to provide an additional "other" written response if the options provided did not address their particular situation.

All data in this document has been self-reported by the respondents and visualized by the evaluator, where appropriate, to best display the instructor's responses.

Table 2: Changes faculty would make to the writing workshop

It was fantastic.
1) The venue was great but, the chairs needed a lumbar pillow or something to make them more ergonomic. 2) A printer. Sometimes you need to see things on ink-and-paper and scratch them out. 3) A microphone.
The workshop was fantastic and very productive. The only suggestion I have, if possible, is to have the small group discussions in a separate area not to disturb the writing group.
I would extend the time for people who want to take an additional afternoon of writing independently.

Table 3: Faculty final thoughts, comments, or questions about their experience.

I'll repeat if there's that option.
I was able to advance a lot in the current grant I am working for the next NIH cycle. However, these cycles happen 3 times in the year. If we could have this workshop often and continuity with grant consultation some hours -like twice a month- will be ideal to keep on track.
Fantastic experience!
I suggest asking faculty if they need any type of equipment or accommodation to make their writing more productive.

Table 1: Faculty found most valuable to them during the writing workshop

The uninterrupted writing time and Betty's advice.
Having feedback from an expert, and colleagues, as well as having a community committed to the same process.
The feedback from the facilitator and peers. Feeling supported while writing.
One on one help and written comments on the proposal.

Figure 4: Workshop faculty who took advantage of the child/family care financial support

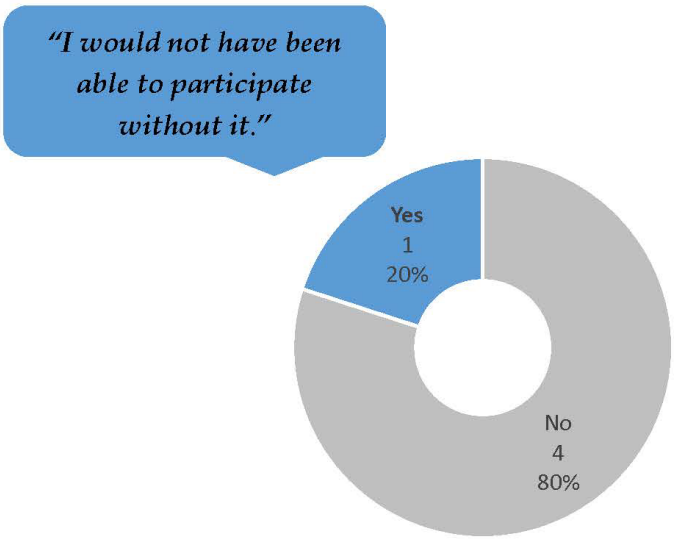


Figure 3: Faculty rate their level of agreement regarding the writing workshop

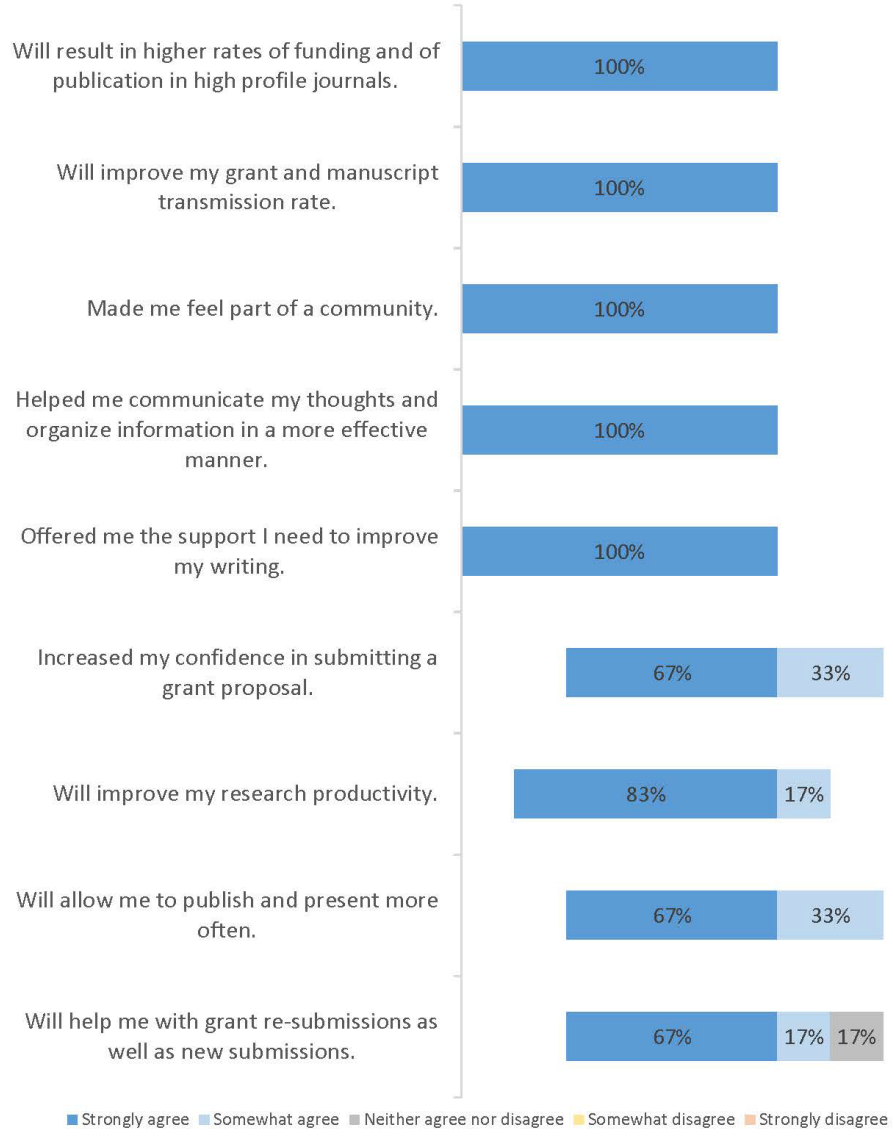


Figure 2: Faculty rate their level of agreement to the following statements before and after attending the writing retreat

Fall 2021 Grant Writing Workshop Survey Data

The basis of the survey was to gather data on the grant writing retreat experiences of CAMPOS faculty members to describe the workshop's impact. Six (6) faculty responded to the survey. Each Figure and table descriptions below delineate the basis of the questions asked. Survey items consisted of a mix of asking faculty to select responses from a variety of options provided or to indicate their level of agreement to statements presented, as well as soliciting written responses where appropriate. Some respondents did not answer all the questions.

The data visualization below displays the aggregate response of the group. Some responses allowed faculty to select more than one choice. Most questions with a selection of choices also allowed the respondent to provide an additional "other" written response if the options provided did not address their particular situation.

All data in this document has been self-reported by the respondents and visualized by the evaluator, where appropriate, to best display the instructor's responses.

Overall, attendees valued the grant writing workshop with faculty reporting that:

- The **feedback received about their writing** was **very helpful**, and they used most or all of the suggestions made.
- **Reading each other's work and discussing** it was **very helpful**.
- **Working with an individual consultant** was **very helpful**.

Leadership Meetings

Dr. LoRe met with the grant leadership team to direct the evaluation and report findings.

Fall 2021 and Spring 2022 Grant Writing Workshops Survey

The faculty completed a survey after each grant writing workshop in the fall of 2021 and spring of 2022 describing the workshop impact. See Appendix A for survey questions and format.

CAMPOS-ENHANCE Needs/Climate Survey

The faculty completed one annual needs/climate survey in the fall of 2021 describing the needs and experiences as a CAMPOS faculty member See Appendix B for survey questions and format.

Academic Products Survey

The faculty completed one annual academic products survey in spring 2021 describing their experience with academic writing and grant proposal writing as a CAMPOS scholar during the 2021-2022 academic year. See Appendix C for survey questions and format.

Individual Interviews

In spring of 2022, individual interviews were conducted with writing coaches and faculty who received ENHANCE funding for conference travel to attend writing workshops and prepare grant proposals. In these individual interviews, the faculty provided feedback about their experiences. See Appendix D for survey protocol.

All data in this document has been self-reported by the respondents and visualized by the evaluator, where appropriate, to best display the instructor's responses.

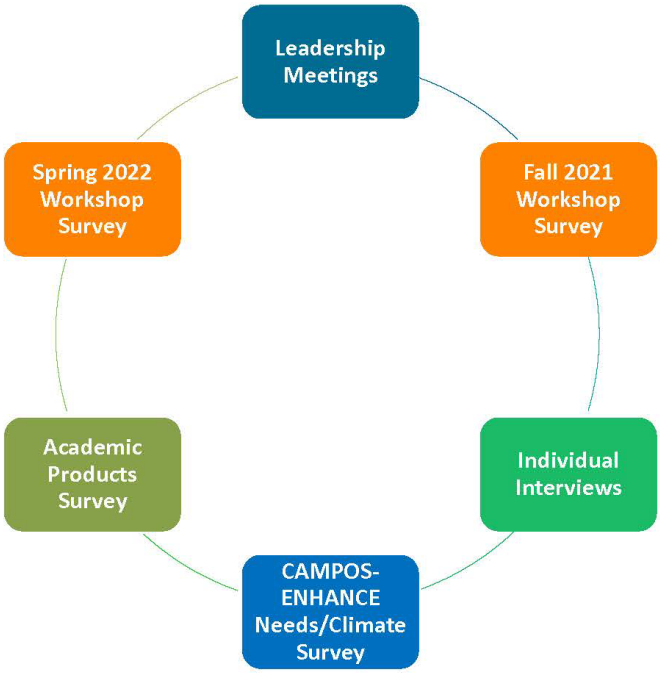
Data for the evaluation activities appears in the sections below.

Evaluation Activities

Under the direction of Dr. Sondra LoRe, SPEAR employed data-gathering measures to assist the ENHANCE: *Promoting Advancement and Retention of Underrepresented STEM Faculty by Enhancing Research Productivity and Centering Family Support* program to assess the grant writing workshops and define academic products.

This report contains information from the following evaluation activities, as seen in the figure below followed by a brief description.

Figure 1. Evaluation activities



Recommendations: Areas to Strengthen

In the second year of the program, it is recommended that the following objectives are achieved:

- Transition new Research Development (RD) Specialist to the position in the program.
- Continue providing support for on-line workshops for when in-person meetings are not feasible.
- Continue engaging new and supporting existing faculty in the development of academic products related to ENHANCE program goals.
- Seek additional funding to continue growth and expansion of the ENHANCE program.

"I wrote a new manuscript (submitted to a peer-reviewed journal) and two manuscript revisions (one currently under review, another accepted)."

"I am currently working on a research manuscript, which we will submit to eLife by the end of April. Additionally, my graduate student wrote and submitted an abstract for the 2022 Biophysics Annual Meeting."

The ENHANCE program has accomplished tasks related to its goals and the evaluator recommends continued funding to maintain this successful trajectory. Evaluation will continue in year two of the program with continued surveys to further track the success of the ENHANCE program.

Conclusions: Areas of Strength

The program has been successful in accomplishing tasks related to its goals. Accomplishments include:

- Positively contributing to the way faculty engage with academic writing and grant proposal development.
- Successfully conducting two in-person grant writing workshops (one other scheduled workshop was cancelled due to COVID uptick) attended by 10 faculty. Leadership also identified additional grant writing support for 6 faculty in January 2022.
- Providing dependent care stipends that allow faculty members to dedicate time toward academic products.
- Submitting fifteen (15) grant proposals since October 2021 totaling $8,036,776 resulting in $533,500 of funding with eight (7) proposals awaiting funder response and four (4) re-submitting. This is a direct result of the first two writing interventions.
- Providing enhanced and individualized professional support supplemented by trainings and grant-writing workshops.
- Instituting formative and summative feedback from data analysis of participant experience through surveys and interviews.
- Preparing faculty to build strong relationships with other STEM faculty members and to improve and advance their academic products.
- Improving faculty well-being, satisfaction, and advancement.

"CAMPOS has positively impacted my career, and I hope we can strengthen the program to support many more generations of excellent faculty."

The ENHANCE initiative comprises two interventions:

1. Research Development Support

Enhanced and individualized professional support, supplemented by trainings and grant-writing workshops.

2. Family Support-Caring Responsibilities Support

Grants are given to help pay for dependent care, allowing faculty members to free up time for research and reduce the stress associated with caring for others during the pandemic. Post-COVID-19, with continued subsidies for dependent care, faculty members attend research conferences, participate in collaborative work, and devote uninterrupted time to grant and manuscript preparation.

These interventions are designed to advance ENHANCE's goals to:

- contribute to research excellence overall
- build a stronger and more inclusive community of STEM researchers
- improve faculty well-being, satisfaction and advancement

If successful, the Co-PIs hope to see the activities of this grant extended to other underrepresented faculty groups across campus, which is especially urgent in light of the challenges that faculty are facing as a result of the continued COVID-19 pandemic.

(The above text was adapted from the ENHANCE website https://diversity.ucdavis.edu/enhance)

This evaluation report contains data collected by SPEAR evaluation consultants during the first year of the ENHANCE project. These include leadership evaluation planning meetings, surveys, and interviews. This report includes analysis and visual data of surveys and interviews.

Executive Summary

The Center for the Advancement of Multicultural Perspectives on Science (CAMPOS) received a grant from the Alfred P. Sloan Foundation to further advance STEM faculty diversity by assisting underrepresented minorities with research development and family care during and after the coronavirus pandemic.

> *"I would not have been able to participate without it."*
>
> -receiver of dependent care stipend

The generous award is intended for ENHANCE: *Promoting Advancement and Retention of Underrepresented STEM Faculty by Enhancing Research Productivity and Centering Family Support*. In addition to the Sloan grant, ENHANCE garnered in-kind support from the Office of the Provost, Office of Academic Diversity and Office of Research, as well as the four colleges, the Betty Irene Moore School of Nursing and three other schools, Education, Medicine, and Veterinary Medicine.

ENHANCE works with people of color, women, and other priority populations among the faculty in science, technology, engineering, and mathematics so that they can overcome barriers to advancement that the COVID-19 crisis has only magnified.

Even before the pandemic, STEM faculty from underrepresented groups often experienced isolation, lacked adequate support and felt enormous pressure to prove their research excellence, far beyond that of their non-minority colleagues.

During the pandemic, female faculty have experienced decreased networking opportunities and decreased research productivity, both a direct result of increased dependent care demands, according to "The Impact of COVID-19 on the Careers of Women in Academic Sciences, Engineering and Medicine," a March report from the National Academies of Science, Engineering and Medicine. The report warned that unless measures were taken to improve the engagement and hiring of female faculty, recent progress in removing structural barriers to promoting faculty diversity would be undone. Faculty belonging to other groups currently underrepresented in their disciplines face similar issues.

List of Tables

Table of Contents

List of Figures

UCDAVIS
Diversity, Equity and Inclusion

ENHANCE: Promoting Advancement and Retention of Underrepresented STEM Faculty by Enhancing Research Productivity and Centering Family Support

Annual Evaluation Report

June 23, 2022

Prepared By

Sondra LoRe, Ph.D.

STEM Program Evaluation, Assessment, & Research (SPEAR) Consultants

SPEAR
STEM · Program Evaluation · Assessment · Research

displaying our research, and accomplishments… it made my thoughts shift ..I don't feel like I have to apologize, I feel very proud to be a CAMPOS scholar. And so, I was even specifically very proud … I was, like, all these amazing people with all these different backgrounds, and we're enriching the academics in our community."

Being a mother in academia

While family support funds were most used for childcare, an additional theme that emerged during our interviews relates to the challenges of being a mother in academia. Everything from balancing breastfeeding to recognizing the needs for supports in lab settings to make feedings or pumping possible was discussed. While some interviewed have the support of partners or family, the critical role of many as a "food source" for their young children presents additional challenges for research, writing, and service, underscoring some of the ways in which academia is perceived as not conducive to mothering.

"I think that the program is really a fantastic one. And I was just surprised that that was even available. I think it's just really hard. You know, having just become a mom, I'm just surprised, how many things in our academic culture are really not conducive to being a new mom."

"And it's definitely a struggle, [referring to being a mother in academia] you know, so I think that just any support is like something I'm extremely grateful for."