# 40<sup>th</sup> Annual Awards Reception



# **CSUF** COLLEGE OF Natural Sciences and Mathematics

## Friday 28 April 2023 CSUF Titan Student Union

5:30 p.m. Check-In and Dinner 6 p.m. Awards Ceremony



### Welcome

Dean Marie Johnson, Ph.D.

### Emcees

Dr. Sean Walker and Mr. Jeremy Hansen

#### **Presentation of Awards**

Recognition of Graduating Research Scholars College and Health Professions Awards Department Scholarships and Awards Teaching and Service Awards Research and Special Recognition Awards Undergraduate Achievement Awards Graduate Achievement Awards Faculty and Staff Awards

To download the program, visit: <u>http://nsm.fullerton.edu/awards/program</u>

To download the photos from this evening, visit: http://anderkid.smugmug.com Gallery: NSM 2023 Password: awards

#### **Table of Contents**

#### Group A: Recognition of Graduating Research Scholars

- Bridges to Stem Cell Research Program (BSCR)
- CSU-Louis Stokes Alliance for Minority Participation Program (LSAMP)
- Maximizing Access to Research Careers Training Program (MARC)
- Southern California Ecosystems Research Program (SCERP)

#### Group B: College and Health Professions Awards

- A. James Diefenderfer Memorial Scholarship
- Professor & Mrs. Ting K. Pan Memorial Scholarship
- Miles D. McCarthy Health Professions Scholarship for Outstanding Graduating Student
- Kenneth L. Goodhue-McWilliams Award for Outstanding Community Service
- Robert and Shirley Belloli Award for Service and Academic Accomplishment in the Health Professions

#### Group C: Department Scholarships and Awards

- Russell V. and Betty L. Benson Scholarship for Undergraduate Mathematics Students
- Russell V. and Betty L. Benson Scholarship for Graduate Mathematics Students
- Bonsangue Family Scholarship
- Cheryl and Carl Carrera Mathematics Scholarship
- Dr. Gerald Gannon Scholarship
- Brandon Nghi Tran Memorial Scholarship
- The Maijian Qian and Bob Houghton Mathematics Scholarship
- Lawrence Weill Applied Mathematics Scholarship
- Dan Black Family Fellowship
- Louis and Sara Shapiro Scholarship Fund
- Dr. Robert W. Kedzie Award
- Dr. Margaret Skillman Woyski Scholarship
- Searcher's Gem and Mineral Society Award
- David L. Willoughby Scholarship
- Advancing in STEM scholarship
- Robert C. Belloli Future Chemistry Teacher Scholarship
- Wegner Family Scholarship
- Glen and Takeshi Nakaya Scholarship

6

8

9

- Constance Beech Eiker and Raymond V. Adams Creativity Fellowship
- Dr. and Mrs. Donald B. Bright Environmental Scholarship
- Dr. and Mrs. Marvin J. Rosenberg Scholarship
- Jerome Wilson Memorial Scholarship

#### Group D: Teaching and Service Awards

- NSM-ICC Executive Officers
- Dimensions Journal of Undergraduate Research
- Lyle Wallace Service Award
- Mark Lackey Award for Graduate Teaching
- Clemens-Knott<sup>2</sup> Scholarship
- Candice L. Jones Outstanding Service Award
- Kenneth Goodhue-McWilliams Metamorphosis Award for Teaching Excellence

#### Group E: Research and Special Recognition Awards

- Outstanding MARC Scholar Award
- David L. Walkington Memorial Scholarship
- CSUF Research and Instructional Safety Office Scholarship
- James Sternberg Scholarship
- Dr. Andrew and Kay Montana Endowed Scholarship in Chemistry
- Brad van Mourik Interface of Computers with Chemistry
  Award
- Phil Berriman Award for Research Excellence with Instrumentation
- Glenn Nagel Scholarship
- Prem K. Saint Hydrology Award
- John D. Cooper Field Camp Award
- John D. Cooper Field Camp Scholarship
- Department of Geological Sciences Alumni Field Camp Scholarship
- Marilyn A. Brown Award
- Armstrong Travel Award
- Paul DeLand Mathematics Research Fellowship
- Stiel Prize for Excellence in Mathematics
- Ferguson Research Fellowship

19

22

#### Group F: Undergraduate Achievement Awards

- Glorya Welch Scholarship
- Outstanding Academic Achievement, B.A. Earth Science
- Outstanding Academic Achievement, B.S. Geology
- Outstanding Major, B.A. Earth Science
- Outstanding Major, B.S. Geology
- American Chemical Society Award
- American Institute of Chemists Award
- Rose Klein Award in Algebra and Probability for the Secondary Teacher
- Physics Outstanding Undergraduate Senior Award
- Rachel Carson Scholarship in Conservation Biology (UG)
- Jewel Plummer Cobb Scholarship
- Greg Wright Fellowship

#### **Group G: Graduate Achievement Awards**

- Coppel Graduate Science Award
- Rachel Carson Scholarship in Conservation Biology (GRAD)
- Violet Horn Graduate Research Fellowship in Ecology, Evolution, and Conservation Biology
- Murray Fellowship
- Stanley Hillman & Lon McClanahan Scholarship in Plant or Animal Physiological Ecology
- Physics Outstanding Master's Candidate Award
- Physics Outstanding Teaching Associate Award
- Applied Math Scholarship in Honor of Lila B. and Major Theodore Hromadka
- Outstanding Graduate Student Award in Geology
- Outstanding Graduate Teaching Associate in Geology
- Maria Linder Nielson Endowed Graduate Fellowship

#### Group H: Faculty and Staff Awards

- Outstanding Lecturer
- Outstanding Teaching
- Distinguished Faculty Member
- Outstanding Untenured Faculty Member
- Staff Excellence Award

39

34

30

#### BRIDGES TO STEM CELL RESEARCH PROGRAM (BSCR)

The Department of Biological Science at CSUF was awarded \$1.28 million from the California Institute for Regenerative Medicine (CIRM) to place 10 undergraduate students as interns in stem cell research laboratories at Children's Hospital of Orange County, UC Irvine, UC Riverside, University of Southern California, and Stanford University. The Stem Cell Scholars enroll in a special, 3-unit laboratory course during summer, volunteer full-time in one of the selected laboratories during summer, and receive a stipend for working at their internship sites full-time for seven months.

#### Presented by: Dr. Nilay Patel

Ramadhan Ahmed Nimrah Ashfaq Michelle Baez Jose Cedano Greer Cisneros Amber Cramer Adrian Escobar Elaine Lai Ashley Ling Ashley Neil Megan Schreiber

#### CSU-LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION PROGRAM (LSAMP)

The goal of the CSU-Louis Stokes Alliance for Minority Participation (LSAMP) Program is to increase the number of targeted students who graduate with degrees in the sciences, technology, engineering, or math (STEM). Several strategies are employed to meet this goal including academic year workshops in key "gatekeeper" courses, a CSU-LSAMP Community College Transfer Scholars Program which provides up to three new transfer students with \$1,000 during their first year at CSUF, assistance with admission to graduate schools, and funds to attend research conferences.

#### Presented by: Dr. Zair Ibragimov

Monte Davityan Erica Esteban Melissa Fernandez Samantha Hubard Gildardo Limon Yulia Potyrina

#### Ashleigh Quiroz Annabelle Recinos Jennifer Rodriguez Kim Yumul

#### MAXIMIZING ACCESS TO RESEARCH CAREERS TRAINING PROGRAM (MARC)

The Minority Access to Research Careers (MARC) training program offers an extraordinary opportunity for minority students seeking careers in biomedical research. The goals of the program are to provide first-rate research training of undergraduate participants, to place undergraduates into respected graduate programs, and to ensure their success in those programs.

#### Presented by: Dr. Amybeth Cohen

Kristen Abe Alva Duenas Alvarez Daniela Hernadez Mackenzie Rosales Katie Van Gorder Ryan West

#### SOUTHERN CALIFORNIA ECOSYSTEMS RESEARCH PROGRAM (SCERP)

The Southern California Ecosystems Research Program (SCERP) offers undergraduate biology students opportunities to perform independent research and prepare for careers in ecology and environmental biology. SCERP provides up to two years of support for students to pursue their own research in conjunction with a faculty mentor, travel to scientific conferences to present their research, and develop a plan to reach their career goals. (For more information on the program and scholars, please visit www.fullerton.edu/scerp/)

#### Presented by: Dr. William Hoese

Trina Miller Renee Serna

#### GROUP B - COLLEGE AND HEALTH PROFESSIONS AWARDS

#### A. JAMES DIEFENDERFER MEMORIAL SCHOLARSHIP

Established in 1990 to honor A. James Diefenderfer, the former Dean of the College of Natural Sciences and Mathematics.

#### Presented by: Dean Marie Johnson

**Elizabeth Munoz** is a Mathematics major who aspires to be a high school mathematics teacher. She participated in Project RAISE working with Dr. Roberto Soto on developing culturally relevant pedagogy.

#### **PROFESSOR & MRS. TING K. PAN MEMORIAL SCHOLARSHIP**

This scholarship was established and funded by Emeritus Professor, Dorothy Pan Wong and named in memory of her parents. The scholarship is to assist international students or students who are the first in their family to attend college.

#### Presented by: Dean Marie Johnson

**Oscar Sosa Cordova** is a Civil Engineering major. He is President of the Society of Hispanic Professional Engineers here at CSUF and volunteers at the Titan Dreamers Resource Center.

#### MILES D. MCCARTHY HEALTH PROFESSIONS SCHOLARSHIP FOR OUTSTANDING GRADUATING STUDENT

Presented annually to an outstanding graduating health professions student to recognize and honor academic performance as well as a commitment to serve humanity. Criteria for the award are scholastic achievement, school or community service, and acceptance into a health professional school.

#### Presented by: Ms. Monique Garcia and Ms. Lauren Meier

**Milan Patel** is a Biochemistry major with a 4.00 cumulative GPA. Milan worked in the Keppetipola Lab investigating how adding a phosphate group to a certain RNA binding protein affected its function. Milan worked for 4 months as a COVID vaccine clinic volunteer in early 2021 and was Co-President of the CSUF American Medical School Association club as a senior.

#### KENNETH L. GOODHUE-MCWILLIAMS AWARD FOR OUTSTANDING COMMUNITY SERVICE

Recognizes a student for outstanding contributions to community, membership in the Student Health Professions Association, and volunteering in a health profession setting.

#### Presented by: Ms. Monique Garcia and Ms. Lauren Meier

**Gianeece Serrato** is a Biology major who serves as Pharmacy Chair of the Student Health Professions Association. While continuing to pursue a CSUF degree, Gianeece is a licensed Pharmacy Tech and works for CVS.

# ROBERT AND SHIRLEY BELLOLI AWARD FOR SERVICE AND ACADEMIC ACCOMPLISHMENT IN THE HEALTH PROFESSIONS

Recognizes outstanding scholastic achievement and noteworthy community or clinical service. The award is open to pre-health profession undergraduate students at CSUF in any major. Students should have a minimum of 50 hours of community or clinical service and should have completed CHEM 301A, CHEM 301B, and CHEM 302, and at least two upper division courses in their major. At the time of application, the student should have at least two semesters before graduation.

#### Presented by: Ms. Monique Garcia and Ms. Lauren Meier

**Alonzo Ozuna** completed his Biology degree with a concentration in Cell and Developmental Biology. As an undergraduate, he was a member of Dr. Soledad Ramirez's research group where he studied pathogen interactions between a specific bacteria strain and various probiotic strains. He is now working in an orthodontic and children's dental office as he pursues his dream of becoming a dentist.

#### **GROUP C – DEPARTMENT SCHOLARSHIPS AND AWARDS**

#### RUSSELL V. AND BETTY L. BENSON SCHOLARSHIP FOR UNDERGRADUATE MATHEMATICS STUDENTS

Established by the Dr. Russell V. Benson and Betty L. Benson Endowment Fund for Undergraduate Mathematics Students. Awarded to junior or senior undergraduate mathematics majors.

#### Presented by: Dr. Kristin Kurianski

**Aubree Krager** is an extremely active young researcher. Aubree was selected as a SoCal Data Science Fellow in 2022 and completed her research on the effect of smartphones on infant language developments under the supervision of Drs. Behseta and Jaynes, and Dr. Stephanie Reich from UCI. She is currently a member of Dr. Behseta's Alzheimer's data modeling research team.

#### RUSSELL V. AND BETTY L. BENSON SCHOLARSHIP FOR GRADUATE MATHEMATICS STUDENTS

Established by the Dr. Russell V. Benson and Betty L. Benson Endowment Fund for Graduate Mathematics Students. Awarded to students pursuing a Master's degree in the Department of Mathematics.

#### Presented by: Dr. Sam Behseta

**Travis Caldwell** is in the Master's in Mathematics, Teaching Option program. Travis earned his undergraduate degree in Mathematics, Teaching Concentration in Spring 2022 and currently works as a math Teaching Associate. He plans on earning his PhD in Statistics Education. Travis has gone dog sledding in the middle of the night in minus 35 degrees F weather.

**Ashley Jubb** is earning her Master's in Computational and Applied Mathematics. Ashley earned her undergraduate degree in Physiology and Neuroscience at University of California, San Diego and currently works at UC Irvine School of Nursing as a data analyst. After her degree, Ashley plans to seek a computational biology or data analyst industry job. She enjoys crochet, knitting, weaving, and riding her bike.

#### **BONSANGUE FAMILY SCHOLARSHIP**

Established by Martin and Nancy Bonsangue to assist students majoring in mathematics who will be the first in their family to complete a bachelor's or master's degree.

#### Presented by: Dr. Alison Marzocchi

**Ivan Ortega** is a mathematics major who transferred to CSUF from Santa Ana College in 2022. He is one of our outstanding TMMT associates with an overall GPA 3.54. Mr. Ortega is currently an apprentice in one of our active learning classes and aspires to be a secondary mathematics teacher.

#### CHERYL AND CARL CARRERA MATHEMATICS SCHOLARSHIP

Established by Dr. Cheryl Carrera to recognize a student majoring in mathematics who faces unique challenges, personally and/or academically.

#### Presented by: Dr. Scott Annin

**Natalie Medina** epitomizes the Titan spirit of never giving up even when the odds are against you. Over seven years at CSUF, she has grown to become one of the most brilliant and dedicated minds in the mathematics program. For Natalie, the future is brighter than she ever expected, and we will all bask in her glow.

#### DR. GERALD GANNON SCHOLARSHIP

Established by the family and friends of Dr. Gerald Gannon to assist students who are or are planning to become secondary or community college teachers of mathematics.

#### Presented by: Dr. Scott Annin

**Yulia Potyrina** is a senior pursuing a Bachelor's in Mathematics and a mother of two. Yulia has overcome many obstacles to pursue her education and her love of math. She sees math everywhere and her plans are to continue sharing her passion as a teacher and show others the beauty of mathematics.

#### **BRANDON NGHI TRAN MEMORIAL SCHOLARSHIP**

Established by the parents of Brandon Nghi Tran to recognize distinction in mathematics study and to provide financial assistance.

#### Presented by: Dr. Sam Behseta

**Brian Ly** is in his second year in the mathematics department at CSUF in the pure concentration. Despite his young age, Brian has already taken upper-division mathematics courses, such as differential geometry. He has participated in research projects with multiple mathematics faculty, and has submitted a solution to a problem in the American Mathematical Monthly. In the future, Brian is interested in pursuing graduate school in mathematics.

#### THE MAIJIAN QIAN AND BOB HOUGHTON MATHEMATICS SCHOLARSHIP

Established by Dr. Maijian Qian and Mr. Bob Houghton to recognize distinction in mathematics study and to provide financial assistance.

#### Presented by: Dr. Kristin Kurianski

**Victoria Bender** is a senior in the mathematics department at CSUF in the teaching concentration. She has consistently proven herself as one of the strongest performing mathematics students in all of her upper division mathematics courses. Victoria's natural ability and passion for teaching sets herself up for a bright future as a mathematics educator.

**Milka Perez Cazarez** is working towards her Bachelors degree in Applied Mathematics and is currently a fellow for the Southern California Data Science Program. Milka is a very dedicated student and is also actively involved in undergraduate research and is a member of the SIAM and SMART Girls clubs. After graduation, Milka plans to attend a PhD program for Applied Mathematics.

#### LAWRENCE WEILL APPLIED MATHEMATICS SCHOLARSHIP

Established by family and friends in memory of Dr. Lawrence Weill, professor of applied mathematics at CSUF from 1980 to his retirement in 2001, to assist students who are pursuing a degree in Applied Mathematics.

#### Presented by: Dr. Nick Brubaker

**Ayah Halabii** is a senior pursuing a bachelor's in applied mathematics. She is an ambitious student who has participated in two summer research programs, including the SoCal Data Science Program and as an Environmental Science Researcher at Chapman University. Ayah is an active contributor to the campus community and serves on the SIAM Student Chapter Executive Board.

#### DAN BLACK FAMILY FELLOWSHIP

Awarded to physics majors who show promise for a successful physics-related career. This scholarship is funded through the generous ongoing commitment of Dan Black to the Physics program.

#### Presented by: Dr. Joshua Smith

**Erick Leyva,** an MS student in the Physics Department, won the Black Family Fellowship Award for his high-speed microscopy research on molecular-scale activity. He earned his BS in Physics from our department and presented his work at the APS March Meeting. After graduation, he plans to pursue an industry research job.

**Matthew Lockerby** is a first year graduate student that started working in the theoretical condensed matter group under Dr. Tifrea's supervision. He works on a project that investigates the superconducting state in multiband electronic systems. Matthew plans to complete his Masters degree at CSUF and either move into a PhD program or find a job in industry.

**Luke Nolan** is a senior undergraduate at CSUF, majoring in both physics and mathematics. He is projected to obtain his Bachelor's degrees in the fall of 2024. He is currently doing his first year of research under Dr. Meng Shen in computational soft matter. He plans to learn more about analytical modeling of nano-scale fluid transport.

**Megan Perez** is currently a senior majoring in mechanical engineering and minoring in physics at CSUF. She will obtain her Bachelor's degree in spring of 2023. She was awarded the Dan Black Fellowship to continue research under Dr. Meng Shen on computational physics of soft matter. She looks forward to learning more about computational analysis during her Masters.

**Ashley Robinson** is a first-year undergraduate student at the Department of Physics who will start to do experiments under the supervision Dr. Peshkov. She won the Black Family Fellowship Award to study the possibility of displacing objects and producing flows using the power of active matter. After graduation at CSUF she plans to pursue a master or PhD program.

#### LOUIS AND SARA SHAPIRO SCHOLARSHIP FUND

Established and funded by Dr. and Mrs. Mark Shapiro to provide scholarship support to continuing physics students.

#### Presented by: Dr. Geoffrey Lovelace

**Andrea Ceja** is concluding her final year as an undergraduate physics major. Her research focuses on using supercomputer calculations to model gravitational waves from merging black holes, working with Dr. Geoffrey Lovelace. She has also completed a summer research project

at Cornell, where she helped enable SpECTRE, a next-generation numerical relativity code, to calculate the recoil of the black hole left behind after two black holes merge.

#### **ROBERT W. KEDZIE AWARD**

Provided by a generous endowment funded by the family of the late Dr. Robert W. Kedzie who, as a retiree, voluntarily tutored our physics students and left a strong impression on them. This award is for students who have improved their performance in physics courses.

#### Presented by: Dr. Leigh Hargreaves

**Blaise Richelieu** is the Most Improved student for 2023. Blaise will be completing his degree in the Fall semester.

#### DR. MARGARET SKILLMAN WOYSKI SCHOLARSHIP

Established through the generosity of Dr. Woyski, her family, and the alumni and friends of the Department of Geological Sciences, this scholarship is awarded to students involved on campus.

#### Presented by: Dr. Vali Memeti

**Ashleigh Quiroz** Quiroz is an excellent BS Geology major with a 3.51 GPA. She is an LSAMP scholar working with Dr. Memeti on dating volcanic and plutonic rocks in the Sierra Nevada, results of which will be presented at the upcoming GSA conference. The scholarship will help offset lost income while away for field camp.

#### SEARCHERS GEM AND MINERAL SOCIETY AWARD

Established by The Searchers Gem and Mineral Society and awarded to an undergraduate or graduate student who has demonstrated an interest in mineralogy, petrology or science education, with 2.5 or better GPA during the previous academic year, and the recommendation of the faculty.

#### Presented by: Dr. Vali Memeti

**Corey Stratton & Sofia Kabbara** share the Searchers Gem and Mineral Society Award for their great interest in minerals and rocks as demonstrated by their exceptional performance in Earth Materials and Igneous and Metamorphic Petrology. They are both excellent students with high GPAs who are conducting senior thesis research on the Borrego Springs shear zone with Dr. Akciz.

#### DAVID L. WILLOUGHBY SCHOLARSHIP

Given in memory of the late David Willoughby, an alumnus of the department, in recognition of his passion for sedimentary geology and paleontology. This scholarship is open to undergraduate students who are studying geology or paleontology, or who are participating in course-related fieldwork. Recipients must possess a minimum GPA of 2.5 or higher in Geological Sciences at the time the scholarship is awarded.

#### Presented by: Dr. Vali Memeti

**Sadie Durning** is our Outstanding BS Geology major awardee, who will take CSUF field camp this summer before graduating with the BS in Geology and starting graduate school with Dr. Memeti this fall. She is a USGS field mapping student and will no doubt excel at field camp also. The scholarship helps offset lost income while away for field camp.

#### ADVANCING IN STEM SCHOLARSHIP

Established by Stacy Guzman '18, who wants to support first generation undergraduates who intend to further their education in graduate school or medical school and will be seeking a professional degree in a STEM-related field. In appreciation of the financial assistance and support she received from faculty, she wishes to help smart, trailblazing, talented students with the financial resources they need to achieve their professional goals.

#### Presented by: Dr. Andrew Petit

**Celine Diep** is a biochemistry major in Dr. Petit's research group, where she uses high-performance computing to unravel the light-driven chemistry of atmospherically relevant molecules. The class of molecules Celine is studying, brown carbon chromophores, have a poorly understood impact on climate change. Celine is an exceptional, firstgeneration college student who plans to pursue a PharmD after graduating from CSUF.

#### ROBERT C. BELLOLI FUTURE CHEMISTRY TEACHER SCHOLARSHIP

This scholarship is open to graduating senior majors in Chemistry and Biochemistry committed to becoming chemistry teachers in junior high or high school and who have applied to the secondary teaching credential in chemistry and passed the CSET in chemistry.

#### Presented by: Dr. Daniel Curtis

**Kim Nguyen** is originally from Sacramento but is currently residing in Whittier pursuing her religious vocation with the Lovers of the Holy Cross in Los Angeles. She is a third-year BA Chemistry student and is conducting research in the Curtis Laboratory, studying the optical properties of atmospheric aerosols and how they impact the Earth's climate. After graduation, she plans to focus on her religious formation to become a sister and hopes to use her degree and experiences to become a chemistry teacher.

#### WEGNER FAMILY SCHOLARSHIP

Established in 2014 in memory of the late Dr. Patrick A. Wegner, former faculty member and Chair of the Department of Chemistry and Biochemistry. Dr. Wegner was an innovator in his field, a talented teacher of general and inorganic chemistry, a successful researcher, and an accomplished chemist who always helped students in chemistry. He engaged in pioneering work in chemical education and software development.

#### Presented by: Dr. Nicholas Salzameda

**Rumeysa Gurler** is a university honors student with a strong record of success in her chemistry classes, and she was particularly outstanding in her general chemistry classes. She is now progressing through organic and analytical chemistry courses and beginning research in Dr. Haan's lab where she uses electrochemical methods to identify new forms of renewable energy.

#### Presented by: Dr. Andrew Petit

**Emily Birlea** is a biochemistry major in Dr. Petit's research group, where she uses high-performance computing to determine the mechanism for a light-driven reaction that assembles three different molecules together into a single product. Emily also volunteers at a local hospital and serves as a worship leader at her church. After graduation, Emily plans to pursue a career in medicine.

#### **GLEN AND TAKESHI NAKAYA SCHOLARSHIP**

Established in memory of Glen Nakaya, an outstanding biochemistry graduate of CSUF. The scholarship is given to an outstanding student who has shown academic potential or achievement.

#### Presented by: Dr. Andrew Petit

**Aline Vu** is a biochemistry major in Dr. Keppetipola's research laboratory. Aline started undergraduate research as a freshman and is currently engaged in understanding how research is conducted to address phenomena related to tissue specific gene expression.

#### CONSTANCE BEECH EIKER AND RAYMOND V. ADAMS CREATIVITY FELLOWSHIP

Funded by former distinguished professor and department founder Ray Adams in memory of Constance B. Eiker. Awarded to physics majors who, with faculty supervision, design an experiment for use as a lecture demo or in a department teaching laboratory.

#### Presented by: Dr. Wylie Ahmed

**Mauricio Gomez Lopez**, an MS student in the Physics Department, earned this award for his high-speed microscopy research on molecular-scale activity. He earned his BS in Physics from our department and presented his work at the APS March Meeting. After graduation, he plans to pursue an industry research job.

**Farbod Movagharnemati,** an MS student in the Physics Department, was awarded this fellowship for his research on collective motion of robotic crawlers. He earned his BS in Physics and Computer Engineering and presented his work at the APS March Meeting. After graduation, he plans to pursue industry work or PhD research.

# DR. AND MRS. DONALD B. BRIGHT ENVIRONMENTAL SCHOLARSHIP

Established in summer 1994 in memory of the late Donald B. Bright, former faculty member and chair of the Department of Biological Science. Dr. Bright's professional energy in the latter part of his career was devoted to his consulting firm, which assisted both the private and public sectors in solving various problems associated with the environment, including biological studies, habitat restoration, and issues of hazardous waste, air quality, and land use planning.

#### Presented by: Dr. Merri Lynn Casem

**Barbara Orozco** is a M.S. student in Dr. Jennifer Burnaford's lab, where she conducts research on the impacts of sand on the California mussel. She is President of SACNAS's CSUF Chapter and a Teaching Associate in BIOL151. After pursuing a PhD, Barbara plans on a career in science education about marine organisms working for a non-profit or government agency.

#### DR. AND MRS. MARVIN J. ROSENBERG SCHOLARSHIP

Established by Dr. Marvin J. Rosenberg in 2007 in cherished memory of his wife, Shayna I. Rosenberg, and also to commemorate his 35 years at CSUF as faculty member, chair of the Department of Biological Science, and Associate Dean and Acting Dean of the College of Natural Sciences & Mathematics.

#### Presented by: Dr. Merri Lynn Casem

**Megan Marentes** is an undergraduate majoring in Biological Science. She is in Dr. Cuajungco's Lab, working on the pathology of neurodegenerative disorders. Megan has volunteered for various outside organizations, including the Presbyterian Intercommunity Hospital Breast Health Center in Whittier. She has participated in several Project Raise events. Megan's future career goals include joining an MD/PhD program.

#### JEROME WILSON MEMORIAL SCHOLARSHIP

Established in memory of former biological science faculty member, Dr. Jerry Wilson. It is awarded annually to an undergraduate or graduate biology student with an interest in genetics.

#### Presented by: Dr. Misty Paig-Tran

**Julia Teeple** is a MS student working with Dr. Paig-Tran pursuing a thesis investigating the material properties of armadillo armor. Julia is a recipient of a NSF Post-Baccalaureate Research Experience Grant, a CSUF SCERP alumnus and mentor to the SCERP program. Julia plans to continue her passion for biology education and outreach as a community college professor.

#### **GROUP D – TEACHING AND SERVICE AWARDS**

#### NSM-ICC EXECUTIVE OFFICERS

The Natural Sciences and Mathematics Inter-Club Council is one of the eight academic inter-club councils at CSUF funded by Associated Students, Inc. The NSM-ICC consists of an executive staff, as well as NSM club representatives. Its main functions include sponsoring student travel to present or attend local and national conferences, providing funding for club events, hosting the annual Science and Math Symposium, and promoting collaboration among clubs. The NSM-ICC promotes student advocacy, leadership, and success within the college.

### Raquel Moreno, Chair

Ana Retana-Goez, Vice Chair/Director of Finance Paulette Matthews, Director of Administration Zoe Adriel Amba, Events Coordinator Nick Furtado, ASI Board of Directors Jennifer Uribe, ASI Board of Directors

#### DIMENSIONS JOURNAL OF UNDERGRADUATE RESEARCH

The Dimensions Journal of Undergraduate Research is organized, written, and edited by students in the College of Natural Sciences and Mathematics and includes full research articles and abstracts. Dimensions highlights undergraduate research and faculty mentoring by annually publishing CSUF students' best work in biology, biochemistry, chemistry, geology, mathematics, and physics. The College of NSM collaborates with the College of the Arts to select top graphic design students to design the cover and layout.

> Ashleigh Quiroz, Section Editor: Geology Christian Giron, Section Editor: Mathematics Kristen Abe, Section Editor: Biology and Chemistry Marlene Lopez, Section Editor: Biology Alyssa Ng, Section Editor: Biology

#### Special THANKS to Fernando Del Rosario's Graphic Design class for creating a cover!

#### LYLE WALLACE SERVICE AWARD

Given for outstanding service to the Department of Chemistry and Biochemistry.

#### Presented by: Dr. Stevan Pecic

**Ryan West** is a MARC scholar pursuing a B.S. in Biochemistry. Previously, she conducted research on viral replication under the guidance of Dr. Ortega. Presently, she is exploring medicinal chemistry under Dr. Stevan Pecic's supervision with a focus on developing therapeutic approaches for Alzheimer's disease. Ryan's academic achievement has earned her graduate admission offers from esteemed universities such as UC Davis, UC Riverside, UC Irvine, and USC. She will commence her doctoral studies in Pharmaceutical and Translational Sciences at USC in fall 2023.

#### MARK LACKEY AWARD FOR GRADUATE TEACHING

Given for outstanding teaching by graduate students. Recipients of this award are nominated by the Department Personnel Committee based on evaluations and comments by students as well as input from the laboratory coordinators. This award is funded through the Titan Shops Scholarship Program.

#### Presented by: Dr. Zhuangjie Li

**Steven Pham** earned his BS degree in Chemistry at UC Riverside, and he came to CSUF shortly after to pursue a MS degree in Chemistry. Mr. Pham joined Dr. Li's research group in which his research focuses on kinetics investigation of high molecular weight aldehydes reaction with hydroxyl radicals, and on air sample collection from wildfire smoke. He plans to pursue a Ph.D. upon receiving his MS degree at CSUF.

#### **CLEMENS-KNOTT<sup>2</sup> SCHOLARSHIP**

This scholarship was established by faculty members Diane Clemens-Knott and Jeffrey R. Knott. It is awarded to an undergraduate who will be attending the C.S.U Fullerton field camp or a similar geologic-mapping-focused field camp in the upcoming summer. Women are encouraged to apply.

#### Presented by: Dr. Adam Woods

**Ashley Hansen** Ashley is an outstanding student in both the class and laboratory. As a CSUF Summer Undergraduate Research Academy-funded student, Ashley's research thesis has focused on the fire history of Chino Hills State Park. Keep up the good work, Ashley.

#### CANDICE L. JONES OUTSTANDING SERVICE AWARD

Awarded to the student who has made a significant contribution to the mission, operation and/or well-being of the Geology Department community. Examples of service include but are not limited to: taking a leadership role in Geology Club activities; serving as a TA, tutor, or volunteer in GEOL classes; and selflessly assisting others in meeting their educational, research, or outreach objectives.

#### Presented by: Dr. Vali Memeti

**Ashley Quiroz** is not only an excellent BS Geology major and LSAMP researcher, but an exemplary departmental citizen, who selflessly goes above and beyond to help others. She is active in the Geology Inclusivity Forum and advocates for inclusive field practices for persons with disabilities. Quiroz is an enthusiastic teacher who shares her love for rocks in the NSM success center.

#### KENNETH GOODHUE-MCWILLIAMS METAMORPHOSIS AWARD FOR TEACHING EXCELLENCE

Established by biology Professor Kenneth Goodhue-McWilliams, who passionately supported active learning and high-quality teaching. This award recognizes a graduate TA who demonstrates a continuing focus on student learning as evidenced by their efforts to implement effective teaching methods, innovations, or assessments in their courses. Recipients are nominated by faculty and have served as role models for their peers as they seek to improve their ability to positively influence student learning in biology.

#### Presented by: Dr. Paul Stapp

**Katherine Biardi** served as a graduate TA in Biol254L. Katie mentored several new TAs, helped develop new animal behavior experiments, and in the spring of 2022 crafted a series of new experiments when conditions were too rainy and cold for the students to conduct their planned observations. Katie has made strong contributions to the department's teaching mission and student success.

#### **GROUP E – RESEARCH AND SPECIAL RECOGNITION AWARDS**

#### OUTSTANDING MARC SCHOLAR AWARD

Given to a graduating Minority Access to Research Careers (MARC) scholar who has demonstrated commitment to a biomedical research career, has performed high quality research and course work at CSUF, and will be attending a high-quality Ph.D. program in the fall. This award is funded through the Titan Shops Scholarship Program.

#### Presented by: Dr. Amybeth Cohen

**Ryan West** is a Biochemistry major who works in the laboratory of Dr. Stevan Pecic on multi-target-directed ligands as potential agents against Alzheimer's Disease. In 2022, Ryan participated in Caltech's Amgen summer research program and won outstanding poster awards at the SACNAS and ABRCMS National Conferences. Ryan will enter the USC Pharmaceutical and Translational Sciences PhD Program in fall 2023.

#### DAVID L. WALKINGTON MEMORIAL SCHOLARSHIP

Awarded annually by the Friends of the Fullerton Arboretum to a Biology student who has chosen botany for their career. The scholarship is named in memory of Dr. David L. Walkington, Professor of Biology, renowned science educator, and director of the Fullerton Arboretum from 1985 to 1993. The award is presented at the annual meeting of the Friends of the Fullerton Arboretum.

#### Presented by: Dr. Paul Stapp

**Marlene Lopez** is a Biology major with a concentration in Ecology, who conducts wildlife research in Dr. Paul Stapp's lab, with a particular focus on the foraging of small nocturnal mammals. She is also an outstanding student who loves sharing her study skills as an SI leader. Marlene plans to attend graduate school in Ecology and Evolutionary Biology.

#### CSUF RESEARCH AND INSTRUCTIONAL SAFETY OFFICE SCHOLARSHIP

This scholarship was established by two staff members from the CSUF Research and Instructional Safety Office (RISO): Sue Fisher – Director (retired), Skip Hines – Chemical Hygiene Officer (retired), in memory of Irene Duncan – Secretary.

#### Presented by: Dr. Scott Annin

**Evelin Lopez** transferred to CSUF this year and has done nothing but add to what was already a stellar academic record. She earned top marks in the Math department's courses on Problem Solving and Proof Writing, and is currently demonstrating her keen intellect in Linear Algebra and Modern Algebra math courses. For Evelin, the best is yet to come!

#### JAMES STERNBERG SCHOLARSHIP

Established in memory of Dr. James Sternberg, a distinguished scientist with Beckman Instruments, to assist students who excel in academic performance and show promise in research.

#### Presented by: Dr. Sachel Villafañe-Garica

**Lael Cardinal** is a first-year graduate student working on chemical education research with Dr. Villafañe-Garcia. Lael came from Biola University where she completed a BS in Biochemistry. Lael wants to teach chemistry at a college level because she wants people not only to learn chemistry but also to enjoy it. She plans to pursue a Ph.D. after finishing her MS degree from CSUF.

#### DR. ANDREW AND KAY MONTANA ENDOWED SCHOLARSHIP IN CHEMISTRY

This scholarship was established in 2021 in memory of the late Dr. Andrew Montana, former faculty member and Chair of the Department of Chemistry and Biochemistry, who passed away in 2007. This scholarship is given to a full-time undergraduate and graduate student involved in research.

#### Presented by: Dr. Andrew Petit

**Aerin Bridgers** is a graduate student in Dr. Petit's research group, where she is characterizing light-driven reactions involving the important atmospheric pollutant nitrogen monoxide. Aerin also serves as a teaching assistant for general chemistry, a supplemental instructor for physical chemistry, and a member of the United States Army Reserve. Upon graduation, Aerin plans to pursue a Ph.D. in theoretical chemistry.

#### Presented by: Dr. Paula Hudson

**Abby Anastasi** is a biochemistry major in Dr. Keppetipola's research laboratory conducting experiments to determine how gene expression is controlled in neuronal cells. Abby is an excellent research student and has been accepted into the 2023 NYU Summer Research Training Program. Abby is also part of the inaugural Scholars Transforming through Research Program run by the Council on Undergraduate Research. Abby plans to pursue a PhD upon graduation.

#### BRAD VAN MOURIK INTERFACE OF COMPUTERS WITH CHEMISTRY SCHOLARSHIP

This award honors many years of service that Brad van Mourik provided the department as computer technician. It recognizes excellence on a project that combines chemistry or biochemistry with computation analysis

#### Presented by: Dr. Nicholas Salzameda

**Mason Davis** is a biochemistry major in Dr. Grove's research group where he will use machine learning to accelerate the characterization of the boundary layer between materials in next generation electronic devices. He commutes to campus to attend classes and research meetings by public transit from Vista which demonstrates his dedication to his education. After graduation he intends on finding a job in industry.

#### PHIL BERRIMAN RESEARCH EXCELLENCE WITH INSTRUMENTATION SCHOLARSHIP

This scholarship honors many years of service that Phil Berriman provided the department as Instrumentation Technician. It recognizes excellence on a research project that makes significant use of instrumentation.

#### Presented by: Dr. Paula Hudson

**Lucy Guzman** is a BS biochemistry major. She joined the Hudson lab in Spring 2022 and has repaired, maintained, and designed and conducted experiments for every instrument in the lab since that time. Dr. Hudson considers Lucy THE person who resurrected her lab from the COVID shut-down. Lucy plans to enter a graduate program after graduating this semester.

#### **GLENN NAGEL SCHOLARSHIP**

Established to honor the memory of Dr. Glenn Nagel. Professor Nagel was a strong advocate of undergraduate research experiences as a faculty member, department chair, and Associate Dean. This scholarship is given to an outstanding undergraduate student to provide financial support for undergraduate research experiences.

#### Presented by: Dr. Stevan Pecic

**Faye Yun** is an ambitious biochemistry transfer student from Chaffey College in Rancho Cucamonga, on track to graduate in Spring 2024. Passionate about learning, she thrives in challenging environments, with particular interests in nutrition, human metabolism, and drug design. Her hands-on experience in labs performing drug synthesis and operating instruments fuels her aspirations to conduct original research, develop innovative drugs and supplements, and potentially lead her own team of researchers.

#### PREM K. SAINT HYDROLOGY AWARD

Awarded to a Geological Sciences or Environmental Studies (with Environmental Sciences emphasis) major with a GPA of 3.0 or better for the previous academic year. The recipient must show outstanding academic performance in course work and/or research in Hydrology, Hydrogeology or Water Quality.

#### Presented by: Dr. Adam Woods

**Andrew Williams** conducted exciting MS-ENST work on a man-made wetland in Norco, CA. He collected water quality data over a period of time and compared it to historical readings from the same wetland. In doing so, he was able to evaluate the changes that have taken place and determine that the wetland was functioning as planned and was an effective filter for local runoff.

#### JOHN D. COOPER FIELD CAMP AWARD

Annual award to a declared Geological Sciences Major with outstanding performance in GEOL 481A-Geology Field Camp. Selected by field camp instructor with approval of all full-time geology faculty.

#### Presented by: Dr. Adam Woods

**Caitlin Bates** completed our summer field camp class in 2022 with the highest overall grade. Her performance in this capstone class was the culmination of hard work and tough decisions. Her deliberate, detailoriented observational skills and ability to articulate her findings and conclusions were exemplary. We congratulate you on your high academic achievement during the summer field camp class, and we wish you the best in your future endeavors.

#### JOHN D. COOPER FIELD CAMP SCHOLARSHIP

This scholarship was established in the name of the late John D. Cooper, a CSUF professor and renowned stratigrapher who valued geologic field work. The recipient will be enrolled in GEOL 481A – Field Camp in the upcoming summer.

#### Presented by: Dr. Vali Memeti

**Sadie Durning** Sadie is our Outstanding BS Geology major awardee, who will take CSUF field camp this summer before graduating with the BS in Geology and starting graduate school with Dr. Memeti this fall. She is a USGS field mapping student and will no doubt excel at field camp also. The scholarship helps offset lost income while away for field camp.

#### DEPARTMENT OF GEOLOGICAL SCIENCES ALUMNI FIELD CAMP SCHOLARSHIP

Established through the generosity of the alumni and friends of the Department of Geological Sciences, this scholarship is awarded to a declared geology major with 2.5 GPA or better for the previous academic year. The recipient of this scholarship must also demonstrate excellence in fieldwork and enroll in summer field camp.

#### Presented by: Dr. Vali Memeti

**Ashleigh Quiroz** is an LSAMP scholar and an excellent student. She will be taking CSUF field camp this summer before she graduates with her BS in Geology and starts her master's studies with Dr. Memeti in the fall. The scholarship will help offset lost income while away for field camp and pay for camp fees.

**William Bourbis** is a hard-working student both in the class and in the laboratory. Billy's research thesis focuses on the precipitation history of Chino Hills State Park. Well deserved, Billy.

#### MARILYN A. BROWN AWARD

Awarded to a graduate student conducting research in the general areas of paleontology or stratigraphy, and having an expressed or demonstrated interest in teaching or educational outreach.

#### Presented by: Dr. Adam Woods

**Maren Jorgensen** is a budding, passionate paleontologist. Her dedication to the field is truly impressive and her contributions, invaluable. For the past year, she has taken Yvonne – an undergraduate thesis student – under her wing and provided a peer mentorship experience that's crucial to Yvonne's success. Her keen attention to new and innovated teaching methodologies brings excitement and curiosity to our general education students. But most importantly, her witty humor, love of black cats, and vast knowledge of 90's pop culture bring joy to our entire lab.

#### ARMSTRONG TRAVEL AWARD

This award is established by emeriti faculty members Tish Armstrong and Phillip Armstrong and recognizes their desire to promote undergraduate student attendance at professional meetings.

#### Presented by: Dr. Adam Woods

**Vincent Mugica** is the inaugural winner of the Armstrong Conference Attendance award. Vince used the award to attend the 54th annual Lunar and Planetary Science Conference where he presented research on a previously unstudied basaltic Martian meteorite known as a Shergottite. Vince plans to attend the graduate program at the Cascadia Meteorite Laboratory at Portland State University in the Fall.

#### PAUL DELAND MATHEMATICS RESEARCH FELLOWSHIP

Established by Dr. Paul DeLand to encourage undergraduate mathematics majors to participate in research and present that research in professional settings.

#### Presented by: Dr. Mathew Rathbun

**Sara Anderson** is completing her B.A. in Pure Math and has been accepted to a Ph.D. program in Mathematics at the University of Denver. She has explored Knot Theory and Euler's infamous 36 Officers Problem. She was awarded the Paul Deland Summer Fellowship, presented on her research in the Math Department Problem-Solving Seminar, gave a talk at the First CSU Mathematical Conference as well as co-authored a paper that will soon be submitted to a peer-reviewed journal.

#### Presented by: Dr. Scott Annin

**Sam Fleyshman** is a sophomore in the Actuarial concentration. He was awarded the Paul Deland Summer Fellowship for research investigating Euler's infamous 36 Officers Problem, presented his research in the Math Department Problem-Solving Seminar, gave a talk at the First CSU Mathematical Conference, and has co-authored a paper that will soon be submitted to a peer-reviewed journal.

#### Presented by: Dr. Kristin Kurianski

**Justin Solis** is a senior pursuing a bachelor's in applied mathematics. He conducted research on a system of differential equations that modeled interactions between normal, immune, and tumor cells in the human body. Justin performed stability analysis for a range of parameter values and used numerical simulations to implement a model for pulsed chemotherapy treatment.

#### Presented by: Dr. Cherie Ichinose

**Tiffany Yoo** is a graduating senior in mathematics. She is an honors student, with an overall GPA of 3.6, and one of our outstanding TMMT Scholars. Her research examines the effects of the Imposter Phenomenon, especially with underrepresented minority students. Ms. Yoo's future career goals include teaching mathematics at the secondary level and pursuing a graduate degree.

#### STIEL PRIZE FOR EXCELLENCE IN MATHEMATICS

Established by Dr. Edsel Stiel and Mrs. Laurie Stiel to recognize and honor students who have demonstrated a strong interest and ability in mathematics and have significant mathematical accomplishments outside of courses.

#### Presented by: Dr. Kristin Kurianski

**Taylor Grimes** is an exceptional student who has earned top grades in some of the Department's most challenging courses. He is an NSM tutor for 19 courses and has conducted research that resulted in poster presentations and a publication. After completing an internship with Blue Shield of California, he was offered a full-time position as an actuarial analyst.

#### FERGUSON RESEARCH FELLOWSHIP

Established by alumni James Ferguson and his family to support exceptional undergraduate student research in the Department of Mathematics and to enhance the student-scholar experience for our students and the teacher-scholar dynamic for our faculty members.

#### Presented by: Dr. Sam Behseta

**Aubree Krager** is an extremely active young researcher. Aubree was selected as a SoCal Data Science Fellow in 2022 and completed her research on the effect of smartphones on infant language developments under the supervision of Drs. Behseta and Jaynes, and Dr. Stephanie Reich from UCI. She is currently a member of Dr. Behseta's Alzheimer's data modeling research team.

**Tiffany Yoo** is a graduating senior in mathematics. She is an honors student, with an overall GPA of 3.6, and one of our outstanding TMMT Scholars. Her research examines the effects of the Imposter Phenomenon, especially with underrepresented minority students. Ms. Yoo's future career goals include teaching mathematics at the secondary level and pursuing a graduate degree.

#### **GROUP F – UNDERGRADUATE ACHIEVEMENT AWARDS**

#### **GLORYA WELCH SCHOLARSHIP**

Named in memory of Glorya Welch, this scholarship is awarded to an outstanding transfer student in their first year at CSUF.

#### Presented by: Dr. Zhuangjie Li

**Thai Hoang Mai Le** came from Vietnam, and she was a Fullerton College student and then transferred to CSUF pursuing a BS degree in Chemistry in 2020. Miss Le has made significant progress in her academic work, with a GPA of 3.85 and a grade of "A" in all chemistry classes. Her future professional interests include work related to Chemistry or Mathematics.

#### OUTSTANDING ACADEMIC ACHIEVEMENT AWARD – B.A. IN EARTH SCIENCE

Awarded to a junior or senior Bachelor of Arts in Geology major with an exceptional CSUF GPA. The number of units completed in Geology and the related fields are factored into the selection process.

#### Presented by: Dr. Adam Woods

**Kristin Shearer** receives the Outstanding BA Major award because of her excellence in academic achievement. Kristin consistently receives impressive marks despite personal and pandemic related hardships. Her devotion to coursework is an inspiration to her peers in the department. Congratulations Kristin!

#### OUTSTANDING ACADEMIC ACHIEVEMENT AWARD – B.S. IN GEOLOGY

Awarded to a junior or senior Bachelor of Science in Geology major with an exceptional CSUF GPA. The number of units completed in Geology and related fields are factored into the selection process.

#### Presented by: Dr. Adam Woods

**Edgar Villasano** is an outstanding BS in Geology major and Honors student with a 3.78 GPA. He is receiving this award for his high-quality performance and tireless effort in coursework and thesis research.

Edgar is completing his Honors thesis with Dr. Memeti and presenting his results at the GSA conference this May. He plans to apply for graduate school this fall.

#### **OUTSTANDING MAJOR AWARD – B.A. IN EARTH SCIENCE**

Awarded to an upper-division Bachelor of Arts in Earth Science major who demonstrates high quality performance in classes and service to the department, university, or community.

#### Presented by: Dr. Adam Woods

**Samuel Hippard** has excelled both in the classroom and in the laboratory. His research thesis focuses on late Holocene floods events in the Carrizo Plains National Monument. Sam will attend the University of Toronto for a Master of Environmental Science degree.

#### OUTSTANDING MAJOR AWARD – B.S. IN GEOLOGY

Awarded to an upper-division Bachelor of Science in Geology major who demonstrates high quality performance in classes and their undergraduate research project, as well as service to the department, university, or community.

#### Presented by: Dr. Vali Memeti

**Sadie Durning** is an exemplary BS in Geology major with a 3.94 CSUF GPA and recipient of numerous awards and scholarships. She is an outstanding, detail-oriented researcher, finalizing her USGS sponsored senior thesis in the Sierras with Dr. Memeti, which she will present at the upcoming GSA conference. Sadie will start her Yosemite focused master's project with Dr. Memeti this fall.

#### AMERICAN CHEMICAL SOCIETY AWARD

Given to a graduating senior chemistry/biochemistry major based on academic accomplishments. This award is funded through the Titan Shops Scholarship Program.

#### Presented by: Dr. Nicholas Salzameda

**Sofia Salas** is a graduating biochemistry major working in Dr. Salzameda's organic chemistry laboratory synthesizing novel therapeutics for the West Nile virus. Sofia is an outstanding student and has been on the Dean's list every semester with an overall GPA of 3.99 at CSUF. After earning her undergraduate degree, Sofia plans on attending an MD program.

#### AMERICAN INSTITUTE OF CHEMISTS AWARD

Given to a graduating senior based on GPA and research accomplishments. This award is funded through the Titan Shops Scholarship Program.

#### Presented by: Dr. Allyson Fry-Petit

**Daniel Soriano** has a record of very strong performance at CSUF, earning grades of A+ in many core chemistry courses. He has led a team in the Haan research lab, developing new SOPs and training new students. His research efforts have led to a manuscript in preparation and preliminary data for a collaborative DOE grant proposal with Dr. Fry-Petit.

#### ROSE KLEIN AWARD IN ALGEBRA AND PROBABILITY FOR THE SECONDARY TEACHER

Established by Sidney Klein, Emeritus Professor of Economics, and his family in memory of Rose Klein to recognize academic achievement in the study of mathematics and to honor students who demonstrate outstanding academic performance in completion of the course MATH 401, Algebra and Probability for the Secondary Teacher.

#### Presented by: Dr. Scott Annin

**Isaiah Caballero** began his CSUF studies in 2019 and has studied extensively in mathematics, computer science and economics. He plans to graduate this spring with a B.A. in Mathematics with emphasis on Teaching, and plans to start an M.A. degree at CSUF in Economics. Eventually, he may pursue a teaching career. We commend Isaiah for his excellent work in mathematics!

#### PHYSICS OUTSTANDING UNDERGRADUATE SENIOR AWARD

Awarded to recognize physics majors for outstanding contributions to the department.

#### Presented by: Dr. Joshua Smith

**Kevin Kimes** is a graduating senior physics major who has earned a nearly perfect 3.97 GPA while also leading a cryogenic gravitational-

wave optics experiment in the GWPAC Lab. Kevin plans to extend his studies and research as a physics master's student at CSUF.

**Eric Palacios Pineda** is a senior undergraduate student in physics major at CSUF. He is projected to obtain his Bachelor's degrees in physics in fall, 2023. He joined Dr. Meng Shen's research group in computational soft matter in 2020. He has been doing research on transport in polymeric materials, and published a peer-reviewed paper on the subject as a co-author.

#### RACHEL CARSON SCHOLARSHIP IN CONSERVATION BIOLOGY UNDERGRADUATE

Established in 1990 by Biology professor Michael Horn to encourage Biological Science majors (one undergraduate and one graduate student) to pursue a career in the field of conservation biology. This discipline has grown out of the urgency for preserving the earth's dwindling biological diversity and restoring its damaged habitats and communities.

#### Presented by: Dr. Joshua Der

**Analisa Ayers** is an undergraduate working in two research labs! She is using niche models to investigate changes in Joshua tree geographic distributions impacted by climate change with Dr. Der while also pursuing a histopathology research project with Dr. Forsgren and the Orange County Sanitation District. She will pursue a graduate degree and, eventually, a career in restoration or conservation.

#### JEWEL PLUMMER COBB SCHOLARSHIP

Established in the name of former CSUF President Jewel Plummer Cobb, a cell biologist, to support and encourage students who have demonstrated outstanding scholarship in biological science.

#### Presented by: Dr. Paul Stapp

**Marlene Lopez** is a Biology major with a concentration in Ecology, who conducts wildlife research in Dr. Paul Stapp's lab, with a particular focus on the foraging of small nocturnal mammals. She is also an outstanding student who loves sharing her study skills as an SI leader. Marlene plans to attend graduate school in Ecology and Evolutionary Biology.

#### **GREG WRIGHT FELLOWSHIP**

The Greg Wright Fellowship provides a one semester undergraduate fellowship to a deserving student who shows remarkable academic merit in the areas of Cellular and Developmental Biology or Molecular Biology and Biotechnology

#### Presented by: Mr. Greg Wright

**Megan Marentes** is an undergraduate majoring in Biological Science. She is in Dr. Cuajungco's Lab, working on the pathology of neurodegenerative disorders. Megan has volunteered for various outside organizations, including the Presbyterian Intercommunity Hospital Breast Health Center in Whittier. She has participated in several Project Raise events. Megan's future career goals include joining an MD/PhD program.

#### **GROUP G – GRADUATE ACHIEVEMENT AWARDS**

#### COPPEL GRADUATE SCIENCE AWARD

Established in the fall of 1995 by retired CSUF science reference librarian Lynn Coppel and her husband, Claude. The Coppel Graduate Science Award is given annually to outstanding biology, chemistry, and geology graduate student.

#### Presented by: Mr. Alan Coppel

**Brandon Quintana** is a M.S. student in Dr. Zacherl's Lab. His thesis focuses on evaluating bivalve's health and is part of Living Shorelines, an initiative that supports restoration efforts in coastal areas. Brandon is an advocate for inclusive education and environmental justice, and aims to pursue a career in conservation biology, working at the interface of science, public outreach, and policy.

**Xiaohui Weng** is a graduate student in Dr. Pecic's lab at CSUF. Previously, she earned her bachelor's from Fordham University and worked as a quality control chemist. Her current research focuses on target identification for glioblastoma and the synthesis of new anticancer drugs. In the future, she plans to contribute to the development of novel therapeutics for existing diseases. **Caitlin Bates** is an outstanding graduate student and teaching assistant in her 1st year of her geology Master's degree. She is conducting research on two Jurassic plutons in the Sierra Nevada using mineral element geochemistry to examine volcanism during a period of lowvolume magmatism with Dr. Memeti. Caitlin has a B.S. in Geology from CSUF, where she received several awards and scholarships.

#### RACHEL CARSON SCHOLARSHIP IN CONSERVATION BIOLOGY GRADUATE

#### Presented by: Dr. Paul Stapp

**Katherine Biardi** is a M.S. student in Dr. Stapp's lab while working tirelessly as a TA for the Biology Department. Her thesis project explores the effects of herbivore-induced vegetation changes on interactions between rodents and songbirds in the shortgrass prairie. Katherine hopes to pursue a PhD and then launch a career in ecological research and resource management.

# VIOLET HORN GRADUATE RESEARCH FELLOWSHIP IN ECOLOGY, EVOLUTION, AND CONSERVATION BIOLOGY

Established in 2015 by Biological Science professor, Dr. Michael Horn, to support an outstanding M.S. Biology applicant with a stellar academic record, relevant research experience, strong recommendations, and potential for success as a research student at CSUF.

#### Presented by: Dr. Misty Paig-Tran

**Jordyn Neal** is a graduate student in the Functional Anatomy, Biomechanics, and Biomaterials lab studying filtration in the rare megamouth shark. Jordyn often volunteers doing outreach for organizations like Teen Girls in Ocean Science and the Girl Scouts of America. She hopes to continue on to a Ph.D. program following completion of her M.S. degree.

#### MURRAY FELLOWSHIP

Established in 2021 by Dr. Steven Murray, Emeritus Professor, former Chair of the Department of Biological Science, and former Dean of the College of Natural Sciences and Mathematics, to support student research with preference for graduate students committed to pursuing advanced degrees/careers related to Coastal Marine Science.

#### Presented by: Dr. Misty Paig-Tran

**Chelsea Bowers** is a M.S. student in Dr. Paig-Tran's laboratory. She has worked as both a TA and GA for the department during her graduate tenure. Her thesis project focuses on identifying microplastic pollution in commercially important food fishes. Chelsea hopes to work for a biological consulting firm or governmental agency enacting policy following graduation.

#### STANLEY HILLMAN AND LON MCCLANAHAN SCHOLARSHIP IN PLANT OR ANIMAL PHYSIOLOGICAL ECOLOGY

Established by Dr. Stanley Hillman and Dr. Lon McClanahan to support a graduate student in physiological ecology. Dr. Hillman, Emeritus Professor of Biology and former Chair of the Department of Biology at Portland State University, graduated from CSUF with a master's degree under Dr. Lon McClanahan, his thesis advisor and Emeritus Professor, and former chair of the CSUF Department of Biological Science. Dr. Hillman's gift is a token of his appreciation to the department. Dr. McClanahan's contribution continues his commitment to the importance of physiological ecology research.

#### Presented by: Mrs. Elaine McClanahan and Mr. Larry Murdock

**Marisol Sanchez** is a first-generation student M.S. student in the laboratory of Dr. Sandquist studying the ecophysiological function of blue grama, *Bouteloua gracilis*, an isolated grass species located in the San Bernardino Mountains. She is an active member of the Biology Graduate Students Club, the Southern California Botanists, and the California Native Plant Society.

**Vivian Sieu** is a M.S. student working with Dr. Burnaford investigating the effects of low tide temperature on predator-prey interactions between sea stars and limpets. As a first-generation student, she is passionate about marine science being a diverse, equitable, and inclusive environment in which all are welcome. Vivian anticipates continuing with a career in academia.

#### PHYSICS OUTSTANDING MASTER'S CANDIDATE AWARD

Awarded to recognize graduating master's candidates for outstanding scholarship in their physics coursework and for outstanding service as teaching assistants.

#### Presented by: Dr. lonel Tifrea

**Tanios Ayoub** is a graduating master's student, studying low-energy electron scattering from molecular hydrogen. Tanios will be commencing his PhD at Pennsylvania State University in the Fall.

#### PHYSICS OUTSTANDING TEACHING ASSOCIATE AWARD

The award is for the best Teaching Assistant.

#### Presented by: Dr. lonel Tifrea

**Avnish Pandey** has been working as the graduate supervisor for undergraduate student instructors in the tutorial room.. He is one of our best TA lab instructors. His masters research project involves relativistic Dirac electrons in curved spacetime. He's been accepted to Chicago graduate school for a PhD in physics and will be leaving for Illinois in the summer.

#### APPLIED MATH SCHOLARSHIP IN HONOR OF LILA B. AND MAJOR THEODORE HROMADKA

Awarded to the best first-year graduate student in the M.S. in Computational and Applied Mathematics program in honor of Dr. Theodore Hromadka's parents.

#### Presented by: Dr. Nicholas Brubaker

**Ren Padgett** has an exceptional work ethic, a broad understanding of fundamental concepts, and a persistent inquisitiveness about the applications of mathematics. Ren's outstanding performance as best first year graduate student not only indicates current excellence but also suggests that Ren will make impacts in any future pursuit, whether it be a Ph.D. program, an industrial job, or teaching the next generation of mathematicians and scientists.

#### OUTSTANDING GRADUATE STUDENT AWARD IN GEOLOGY

Awarded to a Geology graduate student who demonstrates excellent performance in classes and in their research as evidenced by, but not limited to, publications, presentations, collegiality, and/or leadership in the department.

#### Presented by: Dr. Kate Metcalf

**Diana Urda** has excelled in research, teaching, and service in the department. At the Geological Society of America annual meeting, she presented a poster, was awarded a graduate research grant, and was further recognized for her outstanding application. Diana is a dedicated teacher and completed a short course on teaching. She also serves as a mentor in the Geology department peer mentoring program. After completing her MS, Diana plans to pursue a PhD.

#### OUTSTANDING GRADUATE TEACHING ASSOCIATE IN GEOLOGY

Awarded to a Geology graduate student teaching associate (TA) who demonstrates outstanding performance based on, but not limited to, Student Opinion Questionnaires, in-class visitations by faculty, teaching, collegiality, and/or mentoring other TAs.

#### Presented by: Dr. Adam Woods

**Tracy Donelli** receives the Outstanding Teaching Associate in Geology award. Her commitment to teaching is exceptional and she consistently strives to better her pedagogical effectiveness in the classroom. Tracy manages to develop as a teacher while continuously working toward her Masters thesis. Congratulations Tracy and thank you for your devotion to our students!

#### MARIA LINDER NIELSON ENDOWED GRADUATE FELLOWSHIP

This scholarship was established by the late Dr. Maria Linder, former faculty member of the Department of Chemistry and Biochemistry, to recognize excellence in biochemistry research.

#### Presented by: Dr. Stevan Pecic

**Damian Ventuera** is a graduate student in Dr. Pecic's lab. He obtained his B.S. in Biochemistry from CSUF in 2022 and then immediately joined the graduate program to pursue MS in Chemistry degree. His 38 research is within the field of biochemistry and focuses on the design of a DNA aptamer-based biosensors. His career goal is to obtain a PhD and join either the private or government sector of industry.

#### GROUP H – FACULTY AND STAFF AWARDS

#### OUTSTANDING LECTURER

#### Presented by: Dr. Marie Johnson

**Ms. Amanda Martinez's** passion for student success is evident in everything she undertakes. Examples of her work include her efforts to increase graduation rates and eliminate equity gaps by creating a pathway for all students to complete their GE Math requirement and creating a pathway to Calculus by redesigning the Trigonometry course as a sought after faculty facilitator of the Mathematics Equity through Teaching Activity project. She is a gifted, dynamic, and engaging instructor that is dedicated to her craft and to issues of social justice and equitable mathematics teaching practices. In all she does, Ms. Martinez is an exceptional colleague and friend.

#### **OUTSTANDING TEACHING**

#### Presented by: Dr. Marie Johnson

**Dr. Jessica Jaynes** is an exceptionally worthy recipient of the Outstanding Teaching Award. She is an outstanding instructor, who has developed new courses in statistics and data science and built a learning environment that is innovative, adaptive, relatable, and values thought and discussion. Her priorities are empowering students, creating opportunities for them, and overcoming equity gaps. In the last five years, Dr. Jaynes has been awarded five grants with funding that directly impact student opportunities for learning and growth in statistics and data science, including as co-PI for a \$1.5 million grant "Harnessing the Data Revolution: Data Science Corps" from the National Science Foundation. During these five years, she has mentored four graduate students and numerous undergraduate students and published six peer-reviewed publications.

#### DISTINGUISHED FACULTY MEMBER

#### Presented by: Dr. Marie Johnson

Since becoming a faculty member of the mathematics department at Cal State Fullerton in 2012, **Dr. Cherie Ichinose** has immeasurably impacted student success. As a teacher, she employs innovative educational practices that narrow the achievement gap for underrepresented groups and improve student persistence. As a scholar, through an extensive and well-funded research program, she studies pedagogical methods, like the flipped classroom model, and quantifies their effects on engagement and achievement in learning mathematics. As a colleague, she leads by example, chairing committees and directing programs from the departmental level to the CSU level and at every level in between. These commitments are on top of the countless hours she puts into mentoring students and actively supporting colleagues. Dr. Ichinose's actions and dedication define what it means to be a distinguished member of our faculty, and it is an honor to present her with this award.

#### OUTSTANDING UNTENURED FACULTY MEMBER

#### Presented by: Dr. Marie Johnson

Dr. Stevan Pecic is a highly deserving recipient of the Outstanding Untenured Faculty Member Award. Dr. Pecic is a beloved teacher who strives to make his courses engaging and relevant. He has taught a wide variety of courses, including the full undergraduate organic chemistry sequence, medicinal chemistry lecture and lab, and a graduate course in organic reactions and mechanisms. Dr. Pecic has established a vibrant and highly productive research group focused on developing novel therapeutics for chronic pain and Alzheimer's disease, as well as systematically creating DNA-based aptamer biosensors. At CSUF, Dr. Pecic has received over \$450,000 in external funding and published 15 manuscripts, 8 of which have student co-authors. Dr. Pecic strongly champions his research students and fosters their continued growth as scientists. Students in the Pecic group have given 45 presentations outside of the department and earned 25 scholarships and awards. Dr. Pecic exemplifies being a team player, both within the Department of Chemistry and Biochemistry and as part of the broader scientific community.

#### STAFF EXCELLENCE FOR OUTSTANDING SERVICE, INITIATIVE, AND CREATIVITY AWARD

#### Presented by: Dr. Marie Johnson

**Ms. Mandy Villagran** is most deserving of this award. She has selflessly served NSM faculty, staff, and students as our Dean's Office Budget Analyst since 2017. A Titan through and through, Mandy graduated from Cal State Fullerton with a BA in Business Administration, concentration in Finance. She first worked on campus as a student assistant. Mandy daily brings to our office her drive to contribute her strong finance and accounting background towards the success of NSM. She maintains a \$21 million dollar state budget plus our philanthropic and auxiliary funds. Mandy is an all-college resource as she generously shares her wealth of experience and expertise with anyone who needs assistance. She has endless reserves of patience and is extremely knowledgeable on CSUF-CSU policies, protocols, practices regarding budget, travel, and Accounts Payable. Ms. Villagran is a rare gem and NSM is extremely fortunate to have her on our team.



THANK YOU FOR COMING TO CELEBRATE ALL THE HARD WORK AND DEDICATION OF OUR NSM STUDENTS, FACULTY, AND STAFF!

### FOR THE ONLINE VERSION OF THIS PROGRAM, PLEASE USE THE BELOW QR CODE

