

**COLLEGE OF NATURAL SCIENCES & MATHEMATICS
39TH ANNUAL AWARDS RECEPTION**

**Thursday, April 21, 2022
CSUF Titan Student Union**

5:30 p.m. Check-In and Dinner

6:15 p.m. Awards Ceremony

Welcome

Dean Marie Johnson, Ph.D.

Emcees

Dr. Sean Walker and Ms. Tatiana Pedroza

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

Achievement Awards

Faculty and Staff Awards

To download the program, visit:

<http://nsm.fullerton.edu/awards/program>

To download the photos from this evening, visit:

<http://anderkid.smugmug.com>

Gallery: NSM 2022 **Password:** awards

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- Glenn Nagel Scholarship
- Constance Beech Eiker and Raymond V. Adams Creativity Award
- Prem K. Saint Hydrology Award
- John D. Cooper Field Camp Award
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- Outstanding Academic Achievement, B.S. Geology
- Outstanding Major, B.A. Geology
- Outstanding Major, B.S. Geology

- Rose Klein Award in Algebra and Probability for the Secondary Teacher
- Physics Outstanding Senior Award
- Rachel Carson Scholarship in Conservation Biology (UG)
- Jewel Plummer Cobb Scholarship
- Greg Wright Fellowship

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- Rachel Carson Scholarship in Conservation Biology (GRAD)
- Violet Horn Graduate Research Fellowship in Ecology, Evolution, and Conservation Biology
- Murray Fellowship
- Coppel Graduate Science Award
- Stanley Hillman and Lon McClanahan Scholarship in Plant or Animal Physiological Ecology
- Physics Outstanding Master's Candidate 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

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- Outstanding Contributions to Student Success
- Outstanding Research
- Outstanding Lecturer
- Outstanding Untenured Faculty Member
- Staff Excellence Award

GROUP A – RECOGNITION OF GRADUATING RESEARCH SCHOLARS

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

**Samira Alwahabi
Hala Berouti
Joshua Martinez
Alan Bortoncello Napole
Hanh Dan (Dani) Nguyen
Alex Michael Parker
David Sebastian Perez
Thomas Rintoul
Tyler John Schoon**

CSU-LOUIS STROKES 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

**Tiffany Azusada
Noora Ghadiri
Ramzieh Kanaan
Elston Lewis
Miriam Marroquin
Marlo Ramo Morales
Thuan Truong
JieQi Yan**

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

**Vanessa Barragan
Jasmine Castellanos
Christopher Creighton
Ronald Horne
Deja Rodgers
Manuela Velez**

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.

Presented by: Dr. William Hoes

**Angelina Guzman
Alisa Hernandez
Joann Lam
Nicholas Torres**

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: Dr. Marie Johnson

Trina Miller

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: Dr. Michele Mouttapa

Keytiana Hempstead completed her Bachelor's degree in Political Science at UCLA prior to attending CSUF to complete the Pre-Health Post-Baccalaureate Certificate Program. She immersed herself in a variety of on-campus and off-campus activities, including the Evolutionary and Genomics Research Lab (Dr. Shahrestani) and Latino Medical Student Association. Keytiana has received offers to multiple medical schools, including Kaiser Permanente and UCLA.

Ashley Le-Pham completed her Bachelor's degree in Biochemistry. Notable accomplishments during her time at CSUF are her involvement in Dr. Meyer's research lab, which culminated in a research presentation at the U.S. Capitol in Washington, D.C., and serving as the NSM representative for ASI. She is currently a first year medical student at Virginia Commonwealth University.

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: Dr. Michele Mouttapa

Gabrielle Dao is completing her Bachelor's degree in Biology this spring semester. Notable accomplishments during her time at CSUF includes her service as a JOYA Scholar, a Supplemental Instructor in the Department of Biology, and her leadership in the Pre-Dental Society and the Student Health Professions Association. Gabrielle is currently applying to dental schools.

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: Dr. Michele Mouttapa

Naman Shah is completing his Bachelor's degree in Biochemistry this spring semester. He has been dedicated to the CSUF Student Health Profession Association (SHPA), having served as Vice President, Treasurer, and President. Another notable accomplishment is Naman's involvement in Dr. Curtis's Analytical Chemistry research lab. Naman is looking forward to applying to allopathic medical schools soon after graduation.

GROUP C – DEPARTMENT SCHOLARSHIPS AND AWARDS

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

Kimberly Cao has a medical degree from a school in Vietnam. She has a bachelor's degree in Mathematics from CSUF. Kimberly had to learn English to be a mother of two young girls and a student in the USA. Her courage, persistence, and positive outlook on life are an inspiration for her family. This scholarship best serves its purpose for the Cao family. Kimberly will not disappoint you.

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 a Junior pursuing a Bachelor's in Mathematics. She is a dedicated student and a driving force for community building in her courses. Aubree has served as a Supplemental Instruction Leader and as a grader. She is currently participating in the California Data Science Program, during which she will spend the summer working on research at UCI.

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

Marisa Katsuda is a full-time eighth grade mathematics teacher at Haskell STEM Academy. She is currently pursuing an MA in Mathematics, Teaching Option. She is passionate about teaching mathematics using social justice contexts and culturally-relevant pedagogy. Ms. Katsuda shares her expertise with other educators through conference presentations such as the California Mathematics Council Conference in Palm Springs.

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

Alexis Reyes Cruz is graduating this year and will enter the teaching credential program at CSUF. He has excelled in his mathematics courses and conducted his work on his Bachelor's degree with great competence and professionalism. After a few years teaching at the high school level, he hopes to return to complete a Masters degree in math or education.

FARNHAM FAMILY ENDOWED SCHOLARSHIP

Established by Paul and Dena Farnham to help students pursuing a graduate degree in either the Teaching or Applied Math option and who are also currently teaching or have taught at the secondary school level.

Presented by: Mr. Paul Farnham

Lindsay Nolte is currently in the Master's in Mathematics - Teaching Option. Lindsay earned her math credential at CSUF and teaches high school math at Capistrano Unified School District. In addition to her strong conceptual understanding of algebra, Lindsay enjoys playing and coaching softball, has a huge sweet tooth, and is a Kansas City Chiefs football fan.

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: Scott Annin

Francisco Zepeda received his B.A. in mathematics (Teaching Concentration) in 2021 and is currently one of our graduate students, also in the Teaching concentration, as well as one of our TAs. He aspires to be a community college instructor after completing his Master's degree and he hopes to inspire a love of mathematics in his future students.

KATHRYN GODSHALK MEMORIAL SCHOLARSHIP

Established by the family of Mrs. Kathryn Godshalk to recognize distinction in mathematics study and to provide financial assistance to graduate students.

Presented by: Dr. Scott Annin

Kevin Ringuette received his B.A in mathematics from CSUF in 2016. He is currently teaching mathematics at a junior high school in San Juan Capistrano and is involved in directing summer camps for foster youth. He has also spent time working with organizations that provide tutoring in developing countries and plans to continue this work after graduation.

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

Brittnie Villasenor has a great interest in modeling and analyzing data. For that reason, she applied for the NSF sponsored *Southern California Data Science* program and was selected as one of the 20 fellows admitted to the program. Currently, Brittnie is taking a course on the foundations of data science and is planning to apply for PhD programs in Data Science.

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

Ayah Halabi is working towards her Bachelor's degree in Applied Mathematics and currently is a fellow for the Southern California Data Science Program through the National Science Foundation. She has a positive work ethic, is extremely motivated, has a strong ability to communicate, and a passion for learning and understands the value of higher education.

Brittnie Villasenor is a senior pursuing her Bachelor's in Mathematics with a concentration in Applied Mathematics. Brittnie is a detail-oriented student and has excellent communication skills. She is interested in exploring mathematics research and is currently participating in the California Data Science Program, where she will gain valuable experience and preparation for a career in mathematical sciences.

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

If not already a data scientist, **Nathan Villavicencio** is well on his way to becoming one. On top of excelling in his first-year courses in the master's program in computational applied mathematics, he's also working with Chemistry professor Michael Groves to optimize algorithms that explore molecular structures with machine learning techniques.

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. Ionel Tifrea

Avnish Pandey is a first year graduate student in physics. He is working with Dr. Hal Fearn on a project that investigates the feasibility of producing a quantum sized wormhole in the lab for the purpose of "instantaneous" radio transmission. He plans to pursue a PhD once he graduates from our Masters Program.

Axel Verduzco is a first-year physics graduate student. He obtained his Bachelor's degree in physics at CSUF in spring of 2019. He is currently doing his first year of research under Dr. Meng Shen in computational soft matter. He plans to learn more about computational analysis and apply it to data science of non-equilibrium systems in soft matter.

Eric Palacios is a physics undergraduate and amateur musician that does research in computational soft matter physics with Dr. Meng Shen. He is a recipient of the John Philip Sousa award in music. Currently, he is working on simulations involving ion-exchange membrane selectivity. He plans to continue studying computational physics in graduate school.

Eve Chicas is a first year masters' student in physics. She is working with Dr Michael Loverude in physics education research. Her current project involves investigating the mathematics requirements for physics degrees in departments across the US.

Bryan Gworek is a physics major with a minor in film study and does research in the Soft, Living, and Active Matter Lab with Dr. Wylie

Ahmed. Bryan is working on creating molecular scale "rockets" and will attend an REU program at Brandeis University this summer to learn DNA Origami. Bryan's future plans include pursuing a Ph.D. in Biomedical Physics.

Daniel Martinez is a senior physics major working in the GWPAC experimental physics lab with Dr. Joshua Smith. He has co-authored a paper on the effects of high-temperature annealing on thin-film optical coatings and is working on developing and automating the group's cryogenic vacuum system. Daniel plans to enter the CSUF physics Master's program this Fall.

Erick Leyva is a physics major and does research in the Soft, Living, and Active Matter Lab with Dr. Wylie Ahmed. Erick is working on understanding how chemical energy can do mechanical work at the molecular scale in active fluids. Erick will continue his research in the CSUF MS Physics program.

Oli Patane is a first year master's student working in the GWPAC experimental physics lab with Dr. Joshua Smith. Their research is focused on characterizing the optical scattering of coating materials being considered for upgrades to gravitational-wave detectors.

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

Bianca Cervantes is a physics major working in the research lab of Dr. Gina Passante. She has published her work on student access to quantum information education and is currently researching the dynamics involved in students discussing and debating physics ideas in virtual learning environments.

Noora Ghadiri is a physics major pursuing research in the Nicholas and Lee Begovich Center for Gravitational-Wave Physics and Astronomy. Working with Dr. Geoffrey Lovelace, Noora has contributed to the development of a new numerical-relativity code, in part by calculating how spacetime curvature would twist local observers. Noora will begin pursuing a Ph.D. in physics in fall 2022.

Marc Penuliar is a senior physics major working with Dr. Jocelyn Read on interpreting the gravitational waves from neutron star mergers. He

has presented his work on mass measurements to the American Physical Society and is writing a paper on his results, while also working on his CSUF Data Analytics Certificate.

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

Emily Wuchner is a physics major working on research in the Nicholas and Lee Begovich Center for Gravitational-Wave Physics and Astronomy with Dr. Jocelyn Read. She is simulating the capabilities of current and future observatories to measure the properties of neutron stars.

Ken Jones is a double major in physics and chemistry who has performed well in the physics curriculum. He is interested in continuing his research work in the Chemistry Department and eventually pursuing a PhD in an interdisciplinary field where he can use his physics and chemistry skills.

Kevin Kimes is a junior physics major who has performed well in the physics curriculum and is interested in a career in teaching or research. He is planning to start research in the GWPAC center this 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. Adam Woods

Vincent Mugica is a B.S. Geology major and an excellent student. An LSAMP scholar, he is working with Dr. Memeti on his senior thesis using cathodoluminescence and plagioclase geochemistry to investigate magma processes and sources that formed a sheeted plutonic complex in Yosemite National Park. Vincent is an avid reader and learner, and is especially fascinated by the geology of Mars.

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. Adam Woods

Sadie Durning receives the SGMS award for her great interest in minerals and rocks as demonstrated in her exceptional performance in Earth Materials, Igneous/Metamorphic Petrology, and her overall 4.0 CSUF GPA. This spring, she started her senior thesis research on the Jackass Lakes pluton with Dr. Memeti, and will be conducting 4 weeks of field mapping and petrology research this summer/fall.

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. Adam Woods

Caitlin Bates is an outstanding student (4.0 GPA), who starts CSUF graduate school this Fall after completing field camp and her BS Geology this summer. She conducted research on Sierran mafic dikes with Dr. Memeti. Caitlin is recipient of the Searchers Gem and Mineral Society award, the Mineralogical Society of America undergraduate prize, and tutors geology/chemistry in the NSM success center.

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: Mrs. Debbie Stevens

Leeza-Marie Rodriguez is an undergraduate Biology major, with a Chemistry minor. She has been conducting Olympia oyster restoration research in Dr. Danielle Zacherl's lab. She has been active in Scholars for Conservation Leadership Program, the Ecological Society of America, and many other regional or CSUF groups. Leeza will next pursue a PhD degree related to conservation biology and coastal habitats.

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. Marvin Rosenberg

Brian Bartter is a graduate student in Dr. Walter's laboratory where he is investigating California pipefish by identifying genetic markers to allow for the quantification of genetic variation within and among pipefish populations. Brian is a PADI Divemaster who has volunteered in the restoration of Newport Bay. He plans on pursuing a career in teaching and conservation biology.

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. Merri Lynn Casem

Emilio Hernandez, an undergraduate biology major, is involved in the Latino Medical Student Association and the Student Health Professions Association as he aims to go to medical school to become a psychiatrist. Emilio was also an undergraduate research assistant in Dr. Shahrestani's laboratory where he investigated the use of *Drosophila* as a model organism for bacterial infection.

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. Nicholas Salzameda

Daniel Cardona is a biochemistry major in Dr. Salzameda's laboratory synthesizing biologically active molecules with applications in cancer therapeutics. Daniel has been accepted into the 2022 UCSF summer research training program. Daniel is an excellent student and has been on the Dean's list for multiple semesters. After obtaining his undergraduate degree, Daniel plans on earning an MD/PhD.

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. Sachel Villafane-Garcia

Jun Hwang is a transfer student that wants to pursue a teaching career and inspire students in the classroom. He wants to make a difference and show students how science is related their lives by making chemistry easy to understand. Jun wants to help them see the world differently as they learn more about science and chemistry.

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. Paula Hudson

Christopher Badolian is a BS Biochemistry and BC Physics double major who started at CSUF in Fall 2019 and maintains a 4.0 GPA! He has previously won the Outstanding Chemistry SI Leader and the Undergraduate Award in Analytical Chemistry. In Fall 2021 he joined the atmospheric research lab of Dr. Hudson and plans to pursue a PhD after graduation.

Presented by: Dr. Niroshika Keppetipola

Azeem Horani is a biochemistry major and will be graduating in Spring 2023. Azeem is a member of Dr. Keppetipola's research group where he is conducting experiments to determine how proteins shuttle between the nucleus and cytoplasm in the cell. Azeem will be representing CSUF at the statewide CSU research competition this spring. Azeem plans to pursue a PhD upon graduation.

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. Niroshika Keppetipola

Michael Sullivan is a biochemistry major in Dr. Keppetipola's research laboratory conducting experiments to determine how gene expression is controlled tissue-specifically. Michael has been accepted into the 2022 Caltech summer research program. Michael plans to pursue a PhD upon graduation.

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.

Sean Zulueta, Chair

Andrew Vu, Vice Chair

Meaghan Swintek, Director of Administration

Susan Hipkins, Events Coordinator

Jessica Sherman, ASI Board of Directors

Tristan Torres, 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.

Mikayla Mays, Editor-in-Chief

Marlene Hernandez, Section Editor: Biology

Randall Ortega, Section Editor: Chemistry & Biochemistry

Desiréé Lucas, Section Editor: Geology

Breanna McBean, Section Editor: Math

Bianca Diaz, Section Editor: Physics

Gabriel Martinez, Cover Design & Layout Editor

ERIC AND ALYSE STREITBERGER SCIENCE EDUCATION ENDOWED SCHOLARSHIP

Established by Professor Emeritus of Chemistry Dr. Eric Streitberger to provide support to Chemistry majors who wish to pursue a career in middle or high school science education.

Presented by: Dr. Dan Curtis

Kim Nguyen is currently pursuing her religious vocation with the Lovers of the Holy Cross of Los Angeles. She is a BA Chemistry student conducting research in the Curtis Laboratory, where she studies the optical properties of atmospheric aerosols. After graduation, she plans to focus on her religious formation to become a sister and use her degree as a chemistry teacher.

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.

Presented by: Dr. Dan Curtis

Paul Nguyen is originally from Vietnam and has been in Orange County for 10 years. Paul earned his B.S. in Chemistry from Chapman University and is currently enrolled in the M.S. Chemistry program at CSUF, under the guidance of Dr. Daniel Curtis. After graduation, Paul hopes to apply the valuable skills he has learned in an industrial Research and Development laboratory.

CLEMENS-KNOTT² 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

Kimberlin Perkins is the inaugural recipient of the Clemens-Knott² field camp scholarship. Kim is one of the most enthusiastic undergraduates to pass through the department, and loves to be in the field exploring

deserts and, in particular, sand dunes. It took some time for Kim to find geology as a career, but we feel very fortunate that they did.

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. Adam Woods

Katya Beener, a MS student working with Joe Carlin, plays a significant part within our Geology community. Her leadership roles extend into club activities and serving as both a teaching assistant and a peer mentor to undergraduate students. She's someone who doesn't wait to be asked; rather, she steps up to take the challenge.

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

Kaitlyn Berry, a graduate student in the Stapp Lab, has been an integral part of the development of hybrid sections for non-majors biology, BIOL 101. Her contributions in the curriculum for the course will improve the experiences of students across campus. Her students describe the impact of her passion, content knowledge, and dedication to students' success on their performance in the course.

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

Vanessa Barragan is a Psychology major who works in the laboratory of Dr. Jennifer Trevitt, investigating the impact of diet on memory in a rodent model. As a MARC Volunteer Chair, Vanessa planned several volunteer events. She participated in the virtual 2021 UCSD STARS summer research program. Vanessa will enter the Behavioral Neuroscience PhD Program at Emory University in fall 2022.

Ronald Horne is a Biology major. He works in the laboratory of Dr. Amybeth Cohen, elucidating yellow light regulation of photosynthetic genes in the green alga *Chlamydomonas reinhardtii*. Ronald regularly supports CNSM and Biology events. He completed in-person research at the 2021 UCSD STARS summer research program. Ron will enter the Biomedical Sciences PhD Program at UC Riverside in fall 2022.

DHARM VIREO PELLEGRINI AWARD

Established by Laura Pellegrini, William Pellegrini, and Nancy Rinebold, in memory of Dharm Vireo Pellegrini, a self-taught ornithologist. This grant is intended to provide financial assistance to undergraduate or graduate biological science students undertaking ornithological field research.

Presented by: Dr. Paul Stapp

Katherine Biardi is pursuing her MS degree in the laboratory of Dr. Stapp where her project is examining the impact of changes in vegetation on the interactions between rodents that prey on nests for various species of songbirds in the shortgrass-steppe of north-central Colorado. Her work will contribute to a better understanding of the factors affecting shrub-steppe bird populations.

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. John Carroll

Brandon Quintana is a M.S. student in the laboratory of Dr. Zacherl, investigating bivalve health and water filtration services that they provide on oyster beds in a Living Shoreline restoration project in Newport Bay. He is committed to using his science to develop himself as an advocate for underrepresented people in science.

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: Mrs. Sue Fisher and Mr. Skip Hines

Anna Howe is a Biology major in the University Honors program. She is also preparing for Officer Candidate School and will join the U.S. Marines when she completes her B.S. She hopes to eventually pursue a graduate degree in marine biology after she completes her service, and to become a personal trainer to teach others about the importance of physical fitness.

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. Andrew Petit

Aerin Bridgers earned a B.S. in Chemistry from Augusta University and served as a Hazardous Response Platoon Leader before joining CSUF this spring as a M.S. student. As a member of Dr. Petit's group, Aerin uses computation to study atmospherically relevant light-driven

processes in collaboration with Dr. Kidwell's experimental research group. She plans to pursue a PhD upon graduation.

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. Julia Chan

Tung Nguyen is an outstanding second-year graduate student who has a passion for teaching and research. He conducts research in chemistry education with Dr. Chan and his work focuses on the development, implementation, and evaluation of growth mindset and study strategies workshops in first-year chemistry classes. After earning his master's degree, Tung plans to return to high-school and continue teaching.

Presented by: Dr. Stevan Pecic

Ryan West is earning a B.S. in Biochemistry. She is performing medicinal chemistry research in Dr. Stevan Pecic's lab. Her current project focuses on developing therapeutic strategies for the treatment of Alzheimer's Disease and chronic pain. Ryan is a MARC scholar who intends to apply to PhD programs in the fall and complete a doctoral degree in Medicinal Chemistry.

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. Andrew Petit

Ken Jones is earning a BS in Chemistry and a BS in Physics and will be graduating in Spring 2023. Ken is a member of Dr. Petit's group where he uses computation to understand pathways for energy transfer

in atmospherically relevant, light-driven processes. He is also a physics leader. He plans to pursue a PhD upon graduation.

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. Allyson Fry-Petit

Mara Milhander is a B.S. Chemistry major performing research in Dr. Fry-Petit's lab. She performed *in situ* synchrotron diffraction experiments at Argonne National Laboratory on materials of interest toward improving catalytic converters. She is performing quantitative data analysis of her complex data sets. Mara has already presented her progress at the Spring 2022 National American Chemical Society Conference.

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. Joya Cooley

Trevor Jost is a B.S. Biochemistry major and a member of the Cooley research group. His research focuses on synthesizing and characterizing earth-abundant oxide materials towards understanding and tuning their thermal expansion properties. He recently presented his results at the American Chemical Society National Conference in San Diego, and plans to pursue a PhD in chemistry.

CONSTANCE BEECH EIKER AND RAYMOND V. ADAMS CREATIVITY AWARD

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. Joshua Smith

Daniel Martinez is a senior physics major working in the GWPAC experimental physics lab with Dr. Joshua Smith. He has co-authored a paper on the effects of high-temperature annealing on thin-film optical coatings and is working on developing and automating the group's cryogenic vacuum system. Daniel plans to enter the CSUF physics Master's program this Fall.

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

Hank Dickey recently finished his MS degree with Matt Kirby . He is the faculty selected recipient of the Prem K. Saint Hydrology Award, one of the Department's special awards of the night. His project used sediments from Lake Mojave to infer late-Glacial hydrology. He was a great student and a pleasure to work with both in the lab and in the field. Congratulations, Hank.

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 faculty.

Presented by: Dr. Adam Woods

Tracey Donelli completed our summer field camp class with the highest overall grade. Although it was a virtual course, she cherished the opportunity to learn using new technological tools for collecting,

organizing, and analyzing remotely collected data. Project after project, she consistently demonstrated her ability to rise to any challenge she might face. We congratulate you on your high academic achievement during the 2021 summer field camp class, and we cannot wait to see all your future accomplishments.

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. Adam Woods

JieQi Yan loves field geology, taking extra field classes and tagging along on other classes' field trips. In addition to loving field geology, she is completing an undergraduate thesis project on a fossil dolphin skull from Orange County. Next fall, she will be attending graduate school for Environmental Policy at UC Davis.

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. Adam Woods

Jakob Montgomery is a B.S. Geology major, who is conducting his senior thesis with Dr. Memeti. He studies the Box Springs mountain plutonic complex in Riverside County in both field and lab. Jakob, who financially supports himself and his schooling, will be attending our field camp this summer and looks forward to working for a water utility or environmental company.

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

Tristan Stock graduated from the Department of Geological Sciences in Spring, 2021, with a BA in Earth Sciences and rejoined the department as a graduate student in the Fall. He is studying a well - preserved fossil sea turtle from Orange County and for years has been active in public outreach at the Natural History Museum of Los Angeles County.

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. Paul DeLand

Daniel Bustamante was awarded a DeLand Fellowship for the summer of 2021 to explore finding explicit expressions for orthogonal matrix polynomials and their three-term recursion relations. His research has led to explicit expressions for orthogonal polynomials of Chebyshev type, generalizing work of Christoffel and Szego. His work has been presented at multiple conferences, including SCCUR and AMS-MAA JMM and a manuscript in preparation.

During her DeLand Fellowship, **Bichthuy Ngo** built a series of machine learning models for characterizing the uncertainty of COVID-19 infection rates in Orange County, CA. Specifically, she utilized a class of time series generalized linear models, in order to estimate the effect of a group of predictors such as traffic flow and mass vaccination rate on the growth of the pandemic.

Than Nahn Phan is finishing up his degree this semester. He is an excellent student with an excellent track record which led to him being awarded the DeLand Fellowship. Coming from a physics background, he leans towards mathematics courses which are related to this field. In joint research with Solomon Huang he found new solutions to the Einstein vacuum equations. Their paper has been accepted by the

leading international undergraduate mathematics research journal "Involve".

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 has significant mathematical accomplishment outside of courses.

Presented by: Dr. Riley Casper

Solomon Huang is presented with the Stiel Award at the recommendation of three faculty members, Annin, Murphy, and Suceavă, earning stellar accolades from all of his research mentors. Graduating from our program with three papers published, he earned grades of A+ in almost every course in our undergraduate curriculum, including all of the courses considered traditionally to be the most difficult. For one of his projects he worked hard at understanding vector bundles and characteristic classes, which represents advanced graduate school material.

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. Paula Hudson

Ashleigh Burns is a BS Chemistry major who transferred to CSUF in Fall 2021 from Fullerton College. She enjoys the subject matter and the challenges that come with a Chemistry major. Education is a top priority for Ashleigh. She plans to graduate in Fall 2023 and wants to attend dental school to become an orthodontist.

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

Fatima Gonzales is the recipient of the Outstanding Academic Achievement for the Earth Sciences major. Fatima is an excellent student who excels consistently across her classes. In class she is an active participant, enthusiastic about learning, and a leader in group work. Fatima's enthusiasm for Earth Science is infectious, contributing to a great classroom experience for her peers as well.

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

Ashley Scholder is finishing her Bachelors of Science degree in the Department of Geological Sciences. She is currently working with Dr. Matt Kirby on her undergraduate thesis using lake sediments from the Salton Sea to infer climate change over the past 10,000 years. Ashley is

a hardworking, motivated student with a great career ahead. It is my pleasure to award Ashley the Outstanding Academic Achievement Award for her Bachelors of Science degree in the Department of Geological Sciences.

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

Elora Camacho is our Outstanding Major for Earth Sciences. Elora is an excellent student who is active in class and passionate about Earth Sciences. Elora has taken the initiative to get involved beyond her classes through participating in research in two different labs in the department working with Dr. Bonuso on invertebrate paleontology research and wetland sedimentation with Dr. Carlin.

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. Adam Woods

Kimberlin Perkins is a dedicated student, earning an overall GPA of 3.57, while working in the geology office and commuting from Riverside via Metrolink and bus. Kim is working in the Woods lab on a project reconstructing past marine environments in the Lower Triassic Union Wash Formation, and is planning on pursuing an M.Sc. degree at Southern Illinois University, Carbondale.

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. Alison Marzocchi

Christine Gamez is enrolled in the credential program to become a secondary mathematics teacher. As an undergraduate, she passionately pursued research endeavors to address inequities in mathematics. This experience allowed her to not only study algebra and probability for her own knowledge, but also to understand how traditional teaching of these topics impacts learning experiences for diverse students.

PHYSICS OUTSTANDING SENIOR AWARD

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

Presented by: Dr. Wylie Ahmed

Mauricio Gomez is a double major in physics and mathematics and does research in the Soft, Living, and Active Matter Lab with Dr. Wylie Ahmed. Mauricio has published three papers on microscopic swimmers, won several prestigious awards including the CSU Trustees' Award, and the opportunity to present at Posters on the Hill. Mauricio will continue his research in the CSUF MS Physics program.

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. William Hoes

Christina Ceballos is an undergraduate student in biological science. She is a scholar in the Southern California Ecosystem Research Program (SCERP) and member of the Burnaford Lab, where she conducts research on environmental factors affecting shorebirds, specifically Black Oystercatchers. Christina's future career goals include pursuing a graduate degree, educating young children about the environment, and potentially working at a National Park.

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. Merri Lynn Casem

Camille Capili is an undergraduate Biological Science major in Cuajungco Lab. She is investigating the effects of alterations to zinc transporter gene TMEM-163 to HeLa cells. Camille has volunteered for various organizations, including Stand Up for Kids, the American Medical Student Association, and was a staff writer for CSUF's Tusk Magazine. Camille's future career goals include attending medical school and working as a psychiatrist.

Emilio Hernandez, an undergraduate biological science major, is involved in the Latino Medical Student Association and the Student Health Professions Association as he aims to go to medical school to become a psychiatrist. Emilio was also an undergraduate research assistant in Dr. Shahrestani's laboratory where he investigated the use of *Drosophila* as a model organism for bacterial infection.

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

Vyanka Mezcord is a sophomore Biology major with a concentration in Molecular Biology and Biotechnology. She is studying antibiotic resistance in the laboratory of Dr. Maria Soledad Ramirez. She has co-authored one paper with a second in press. In addition to her research, Vyanka volunteers as a translator for minority communities.

GROUP G – GRADUATE ACHIEVEMENT AWARDS

RACHEL CARSON SCHOLARSHIP IN CONSERVATION BIOLOGY GRADUATE

Presented by: Dr. Shirel Kahane-Rapport

Jahnita DeMoranville is a graduate student in Paig-Tran Lab, investigating the biomechanics and functional anatomy of cephalopods. Jahnita has been active in organizations such as Minorities in Shark Science, Black in Marine Science, and Save The Bay and is a member of the Western Society of Naturalists and the American Elasmobranch Society. She is planning on pursuing a PhD degree and then on a career as an academic researcher.

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. Merri Lynn Casem

Taylor Naquin, is a graduate student in the Burnaford lab, where she investigates the chemical analysis of intertidal algae during stress. She was an undergraduate at CSUF, where she was a SCERP participant, and continues to work with the Multi-agency Rocky Intertidal Network. Taylor's future goal is to work with National Park Services.

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. Steven Murray

Barbara Orozco is a first-generation Master's student in the laboratory of Dr. Burnaford who is studying the impact of the movement of sand on California mussels in the rocky intertidal. Support from this fellowship will allow Barbara to attend a summer course at Friday Harbor Labs and receive critical training in the use of drones in research.

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 an outstanding biology and chemistry graduate student.

Presented by: Mrs. Susannah Burica

Taylor Naquin, a graduate student in the Burnaford lab, investigates the chemical analysis of intertidal algae during stress. She was an undergraduate at CSUF, where she was a SCERP participant, and continues to work with the Multi-agency Rocky Intertidal Network. The Coppel Scholarship will fund her travel up the West Coast to collect algal specimens for analysis.

Montana Melody is a second-year graduate student planning to graduate Fall 2022. She is a member of Dr. Keppetipola's research group where she is making major contributions to several projects in the lab that focus on understanding how gene expression is regulated tissue-specifically. Montana received the 2022 CSUPERB Crellin Pauling Student Teaching Award in recognition of her outstanding contributions to teaching.

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

Chelsea Bowers is a graduate student in Biology working in the laboratory of Dr. Misty Paig-Tran to understand the impact of microplastics on the marine food web of southern California. Her long-term goal is to pursue a career that will allow her to study and mitigate sources of marine pollution.

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. Joshua Smith

Alexandra Gruson is a graduating master's student working in the GWPAC experimental physics lab with Dr. Joshua Smith. For her master's research she is investigating the bulk scattering of silicon at 2 micron wavelength and at cryogenic temperatures. Alex has accepted a position with the Aerospace Corporation where she will work on space-based projects.

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

Nathan Villavicencio is excelling as a first-year graduate student in the computational applied mathematics master's program. In addition to excellent work on exams and homework, he demonstrated leadership in the classroom by asking questions, supporting classmates, and sharing his understanding of conceptual ideas. Nathan is on track to make a meaningful impact in data science!

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. Adam Woods

Julia Chen conducts trace element geochemistry and U-Pb zircon geochronology of K-feldspar megacrysts from Yosemite. Although her MS work with Dr. Memeti was hindered by COVID, she spent two months in labs at Princeton University and won a best poster award for her thesis proposal presentation at a South Coast Geological Society meeting. Julia is an excellent, detail-oriented and meticulous researcher.

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

Melonie Nguyen receives the Outstanding Teaching Associate in Geology award. Her commitment to students is an inspiration to other members of the department. This achievement is particularly noteworthy because of the ongoing COVID 19 pandemic, which has forced

educators to continuously adapt pedagogical approaches to accommodate student needs. Congratulations Melonie and thank you for your devotion to our students!

GROUP H – FACULTY AND STAFF AWARDS

OUTSTANDING CONTRIBUTIONS TO STUDENT SUCCESS

Presented by: Dr. Marie Johnson

Dr. Nicole Bonuso is a geologist whose research in invertebrate paleontology focuses on the paleoecology of marine communities. Dr. Bonuso is the standard for student success initiatives in the Department of Geological Sciences across various levels, from department governance to extracurricular program development and beyond. In addition to working directly with students in the classroom and her research lab, she has single-handedly worked to develop and implement the student success infrastructure in the department through her leadership in undergraduate advising and department-wide assessment. Dr. Bonuso is a champion for all students in our department and NSM, valuing their success and achievements above all else.

OUTSTANDING RESEARCH

Presented by: Dr. Marie Johnson

Dr. Jochen Schenk is an outstanding researcher and mentor in the Department of Biological Science. In his H₂O lab, Dr. Schenk studies the physiological and physical mechanisms of water transport in plants. During the last five years, he has supported his research lab with more than \$800,000 in grants and published 14 peer-reviewed articles in high-impact journals, 11 of them with student co-authors. His students participate in cutting-edge research and real-life STEM activities, often with international collaborators. Recent collaborators are from seven different countries and nine U.S. states, underscoring Dr. Schenk's highly collaborative and multidisciplinary approach to research.

OUTSTANDING LECTURER

Presented by: Dr. Marie Johnson

Ms. Sunny Le has received consistently high student evaluations teaching both calculus and statistics at multiple levels for the Department of Mathematics and has found a niche in one-semester calculus courses. She pioneered the department's experiment with large online sections of business calculus, replacing the "large lecture" model with active learning and peer support to achieve a greatly improved pass rate despite pandemic-related difficulties. She is also co-PI on an external \$1.4 million grant to redesign calculus for biological and geological science majors. Ms. Le expects to complete her Ph.D. in Mathematics and Education in the next couple of years.

OUTSTANDING UNTENURED FACULTY MEMBER

Presented by: Dr. Marie Johnson

Dr Nicholas Brubaker, from the Math Department, is a worthy recipient for the Outstanding Untenured Faculty award. His nomination file shows multiple confirmations of his outstanding accomplishments. These include several NSF grants, amounting to just under \$380,000 in the last two years and a stellar research program. He is also a popular and sought after student advisor and mentor. Dr. Brubaker recently co-edited a special issue of "Contemporary Mathematics," a well-known American Math Society (AMS) journal, and his work added important weight to the Departments of Mathematics' AMS 2022 award for "Programs That Make a Difference."

STAFF EXCELLENCE AWARD

Presented by: Dr. Marie Johnson

Emerio Martinez is the administrator for all high-performance computing (HPC) resources in CNSM. This includes the HPC clusters managed by the Center for Computational and Applied Mathematics (CCAM) and the Nicholas and Lee Begovich Center for Gravitational-Wave Physics and Astronomy. Emerio's support for CCAM has greatly exceeded his expected duties. Emerio has an impressive knowledge of hardware architecture and hardware performance optimization.

In May 2021, CCAM was awarded \$583,900 in funding from the U.S. Army to purchase a next-generation HPC cluster (Turing) for CNSM. Turing will support computational research activities across the college that will provide hundreds of CSUF students with hands-on experiences with HPC and big data. Emerio has been responsible for preparing the Turing HPC cluster for use. He has fully revised a plan for the HPC cluster, provided highly detailed feedback on technical documents from the Turing vendor, and consistently demonstrated a strong work ethic and expertise. He took on each challenge, carefully researched the issue, and developed a thoughtful plan for solving the problem. His expertise has been instrumental in the overall contextualization of the concepts associated with the HPC's equitable practices, and their manifestations in the emerging policies.

Emerio is an enormous asset to CNSM whose expertise and contributions deserve to be recognized