



College of Natural Sciences & Mathematics Newsletter

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A Welcome Message from Dean Johnson



Hello NSM Nation,

Our hallways are noisy, the escalators once again run to the fourth floor, and parking is difficult. Three sure signs that the new academic year is underway and our students are back! Welcome to the new academic year everyone and a special warm shout out to our newest faculty, staff and student Titans. We've been waiting for you all summer and are so happy to now have you fully in our midst.

The promise of a new academic year is one of the best things about being associated with a university. We are all given a fresh start. This year seems especially promising as it marks the 60th anniversary of Cal State Fullerton's founding; our year will be studded with events celebrating our Diamond Jubilee. Equally compelling, the first Monday of our academic year coincided with a spectacular solar eclipse visible from coast to coast across the entire United States. Many of us gathered on the south lawn of Dan Black Hall to look through filtered telescopes and special safety glasses provided by our own Department of Physics and to marvel together at one of nature's most awe-inspiring wonders. Imagine what the ancients thought when they gazed on such a sight?

Now, while the academic year is still young, please take the time to identify what you want to accomplish this year. And then keep your eye trained on this mark throughout the inevitable peaks and valleys which will occur along the journey. May each of us find the strength and courage to pursue our dreams relentlessly. In an academic year that literally began with the Super Bowl of celestial events, surely all things are possible for us.

Marie C. Johnson, Ph.D.
Dean, College of Natural Sciences and Mathematics



Welcome New Faculty and Staff

Dan Curtis

Associate Professor of Chemistry



Kelvin Billingsley

Assistant Professor of Chemistry



Marcos Ortega

Assistant Professor of Biochemistry



Doreen Camacho

ADMINISTRATIVE COORDINATOR I



Kristyn Yim

Administrative Support Assistant II



CNSM DEAN'S OFFICE

LOIDA DE LEON

DEVELOPMENT ASSOCIATE



CNSM DEAN'S OFFICE

NICOLE BAILEY

ASSOCIATE DIRECTOR OF CORPORATE and FOUNDATION RELATIONS



CNSM DEAN'S OFFICE

Megan Drangstveit

PROJECT RAISE PROJECT DIRECTOR



CNSM DEAN'S OFFICE

Angela Sardan-Long

PROJECT RAISE ACADEMIC SUCCESS COORDINATOR



CNSM DEAN'S OFFICE

Kulsoom Sizar

PROJECT RAISE ADMINISTRATIVE ASSISTANT



CNSM DEAN'S OFFICE

César Montenegro

PROJECT RAISE TRANSITION COORDINATOR



Faculty Receive Recognition for Service and Achievement

Among the recent honors and awards given to Cal State Fullerton faculty members were two CNSM faculty.

- Maijian Qian, professor emeritus of mathematics, honoring 25 years of University service.
- Ernie Solheid, professor emeritus of mathematics, in recognition of 29 years of service.

Cooper Center



Curator's Children's Book Focuses on OC's Native American Cultures

Jeannine Pedersen-Guzman, associate curator for archaeology at the John D. Cooper Archaeological and Paleontological Center, is the author of a new children's book, "Ehéngmay and the Raven" that focuses on the Native American cultures of Orange County.

The book tells about the Tongva and Kizh (Gabrielino) and the Acjachemen (Juaneno) tribes and will be used mainly in third grade classrooms since that is when students are taught local history.

The Cooper Center — a partnership between CSUF and OC Parks — and the Orange County Historical Commission sponsored a printing of 600 books, which will be donated and distributed in the fall to public elementary schools in Orange County. The Orange County Department of Education will facilitate the distribution of the books to the schools. Anne Handberry, the book's illustrator, is a volunteer at the Cooper Center.

<http://news.fullerton.edu/2017su/oc-native-americans>



Tucker Wildlife Sanctuary



Come enjoy a day of fun, education and adventures at Tucker Wildlife Sanctuary! Explore native habitats along the family-friendly nature tra

Join the fun at Batnight 2017 Oct. 21, 2017 from 4-8 pm.

For more information on upcoming events visit <http://tuckerwildlife.org/news-and-events2/calendar>



NSM in the News

The CSU Fullerton representatives for the CSU Council on Ocean Affairs, Science & Technology (COAST) announce the COAST Undergraduate Student Research Support Program for AY 2016-2017

Anticipated Award Amount: \$500-\$1,250

Anticipated number of Awards: 2-5

Applications are due 10/23/17

This program supports undergraduate research that relate to ocean and coastal issues, broadly defined. This includes the open and coastal ocean, coastal zones (bays, estuaries, and beaches), and coastal watersheds to the extent that the organism, material, or process ultimately articulate with the coast (e.g. anadromous fishes, surface groundwater flow and water quality, land use, etc.). Priority will be given to those projects that advance knowledge of California's natural resources and provide a clear connection to the needs of California.

Examples of appropriate use of funds for this program include:

- Research supplies or materials
- Sample analysis costs
- Purchase of specialized software to analyze samples or data
- Travel for research purposes (within the parameters set by CSUF travel regulations)
- Travel to present research results at a conference (within the parameters set by CSUF travel regulations).

This will require proof of application for matching funds (e.g., through COAST student travel awards or CSUF ASI or NSM-ICC funds).

- Travel to a workshop or short course to learn skills directly related to research (within the parameters set by CSUF travel regulations)

NOTE that funds cannot be devoted to student pay / stipends.

If you have any questions contact either Dr. Ryan Walter (rwalter@fullerton.edu) or Dr. Joe Carlin (jcarlin@fullerton.edu).



Biology in the News

Presentations and Publications

Prof. Joel K. Abraham was awarded (co-PI) an NSF IUSE grant for a collaborative project entitled **“Grappling with Graphs: Researching and Improving Student Graphing Skills Using An Interactive Digital Graphing Tool.”** Over the next three years, Dr. Abraham will be working with project PI, Stephanie M. Gardner, and co-PI Eli Meir to develop and test computer-based research and instructional tools to improve our understanding of student difficulties with common graph types used in biology instruction.

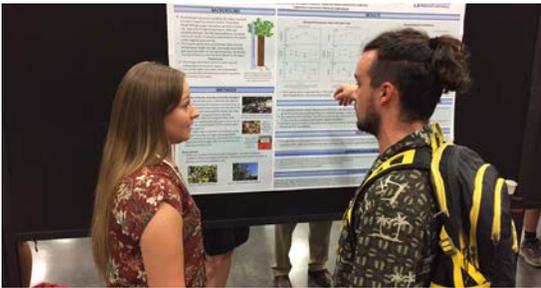
CSUF undergraduate biology major Kyle Gunther and CSUF biology master’s students Laura Song, Miriam Morua, and Victoria Woods presented their research at the 2017 Ecological Society of America Conference in Portland, OR. Dr. Joel K. Abraham, Dr. Jochen Schenk, and Dr. Darren Sandquist were also in attendance.



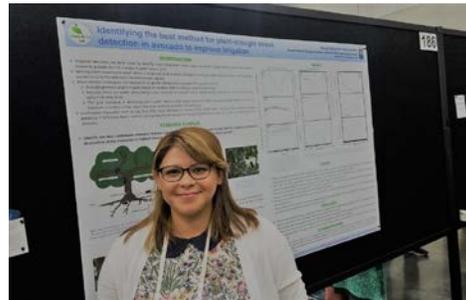
Kyle Gunther: Possible allelopathic potential of a non-native herb, *Foeniculum vulgare*. Funding: Rose Society of Saddleback Mountain; Biological Science.



Laura Song: Influence of resource availability on the growth and reproduction of *Brassica tournefortii* (Sahara mustard) Funding: Judith A. Presch Desert Research Scholarship, Giles T. Brown Graduate Student Travel Grant.



Tori Woods: Dissolved atmospheric gas in plant xylem and its relationship to embolism. Funding: Giles T. Brown Graduate Student Travel Grant, ESA Physiological Ecology Section.



Miriam Morua: Identifying the best method for plant-drought stress detection in avocado to improve irrigation. Funding: NSF, Giles T. Brown Graduate Student Travel Grant.

Professor Ryan Walter’s graduate student Stacey McIntyre won best student poster entitled "Transcriptomic Response to Reduced Salinity and Increased Temperature in Oysters *Ostrea lurida* and *Crassostrea gigas*" at the 2017 Western Society of Malacologists (WSM) Meeting held on June 19-23 in Los Angeles.

Prof. Walter recently published two papers:

Walter RP, Roy D, Hussey NE, Stelbrink B, Kovacs KM, Lydersen C, McMeans BC, Svavarsson J, Kessel ST, Porsmoguer SB, Wildes S, Tribuzio CA, Campana SE, Petersen SD, Grubbs RD, Heath DD, Hedges KJ, Fisk AT (2017) Origins of the Greenland shark (*Somniosus microcephalus*): impacts of ice-olation and introgression. *Ecology and Evolution* DOI: 10.1002/ece3.3325

Moody KN, Gagne RB, Heim-Ballew H, Alda F, Hain EF, Lisi P, Walter RP, Higashi GR, Hogan JD, McIntyre PB, Gilliam JF, Blum MJ (2017) Invasion hotspots and ecological saturation of streams across the Hawaiian archipelago. *Cybiurn* 41:127-156.

Biology in the News

Publications and Presentations:

Biology Student researchers are working alongside Cal State Fullerton neuroscientist Math P. Cuajungco this summer contributing to advances into the mysteries of a rare inherited disorder that affects the brain, eyes and stomach.

Over the last decade, Cuajungco and scores of student researchers have been studying Mucopolipidosis type IV, known as ML-IV, a lysosomal storage disorder, which means that toxic materials, such as too much zinc, build up in the body's cells, causing the cells to die. The disorder affects motor skills, including walking and grasping objects, as well as speech and vision, and causes muscle weakness and digestive issues. The genetic condition is prevalent in people with Ashkenazi Jewish ancestry.

You can read more of Dr .Cuajungco and his student's research at: <http://news.fullerton.edu/2017su/rare-disease-research>



Biological science professor Math P. Cuajungco and his student Vanessa Sanchez inspect bacteria as part of ongoing research to better understand the function of the TMEM163 protein.



Using computer modeling, Amber Cornelious and Jonathan Chacon, both biological science majors, check variation in the DNA sequence of the TMEM163 gene.

Grad Student:

Life's Direction Discovered in Research Lab

I'll begin with a secret: I never imagined myself as a researcher. Like many young women, I had dreams of being surrounded by horses and becoming a veterinarian. Life had other plans for me, and at one point in my undergraduate career, I found myself feeling rather despondent and directionless — the only career option I had ever considered suddenly out of the question. That semester, I happened to sign up for an upper-division cell biology course. This one small decision, made as an afterthought, would end up changing my life.

Continue reading Heather Lynch's guest column in the Orange County Register. <http://news.fullerton.edu/2017su/msclip-ocr-titan-voice-lynch>

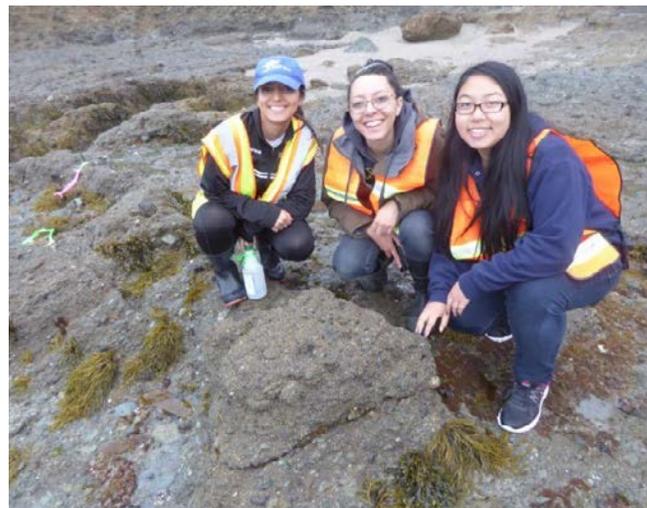


Biology in the News

Science gets messy in CSUF boot camp for future biologists



Jacob Javier measures the temperature of exposed golden rockweed in Laguna Beach, during a research program for aspiring biologists. (Photo courtesy of Bill Hoese)



Students Amber Sanderson, Brittany Cook and Shannon Chou pose in the rocky intertidal zone while conducting experiments over the summer. (Photo courtesy of Bill Hoese)

Read about a lab experiment, and it sounds logical.

Perform a lab experiment, and it seems inevitable.

Get out and do an experiment in the field?

That's when things get messy, said Bill Hoese, professor of biological science. Sometimes up-to-the-knees-in-mud messy.

Undergraduate students learn that lesson each summer in the Southern California Ecosystems Research Program run by Cal State Fullerton. In a three-week boot camp, students interested in pursuing careers in ecology and environmental biology run intensive short-term research projects in local ecosystems.

Read more at <http://www.oregister.com/2017/09/19/science-gets-messy-in-csuf-boot-camp-for-future-biologists>



Geology in the News



Dustin Williams and Ross Kovtun, students in Sinan Akçiz's Geological Field Techniques class, join their professor, center, in reconnaissance field work. The researchers use a high-accuracy GPS unit to map the Whittier Fault, where Akçiz hopes to investigate the ages of the last several surface-rupturing earthquakes.



Earthquake engineer Kristijan Kolozvari, with downtown Los Angeles skyscrapers in the background, studies the resiliency of such tall buildings following a major earthquake.

Hollywood depicted “The Big One” devastating the San Francisco Bay Area and Los Angeles — California’s most populated regions — in a multimillion-dollar feature film. Such a mighty earthquake along the San Andreas Fault could strike in our lifetime, says earthquake scientist Sinan Akçiz.

The estimated 15- to 20-million-year-old San Andreas Fault, especially the southern section near Orange and Los Angeles counties, is capable of producing an earthquake that can cause strong seismic shaking. “It’s not a matter of if, but when,” Akçiz points out.

While California prepares for the next big seismic force, Cal State Fullerton experts are shaking things up in earthquake research. Over the last decade, Akçiz has been searching for clues of the next temblor, digging into the past to find evidence of large earthquakes along the Southern California section of the San Andreas Fault. Collaborative research with his students, as well as geologists from UC Irvine and Arizona State University, could better explain the geological complexity of the 800-mile fault system, which crisscrosses through the San Francisco area in the north to the Southland and across the Mexican border.

Akçiz started his earthquake research in 2005 within Kern County’s Carrizo Plain National Monument. He was part of a research team that discovered evidence of at least six major surface-rupturing quakes over the last 700 years on the southern section of the fault system. The earliest temblor occurred in the 1350s, with the last one on Jan. 9, 1857, when a 7.9-magnitude temblor ruptured a 250-mile section of the fault between Monterey County’s Parkfield — dubbed the “Earthquake Capital of the World” — and Wrightwood.

<http://news.fullerton.edu/2017su/Bracing-The-Big-One>



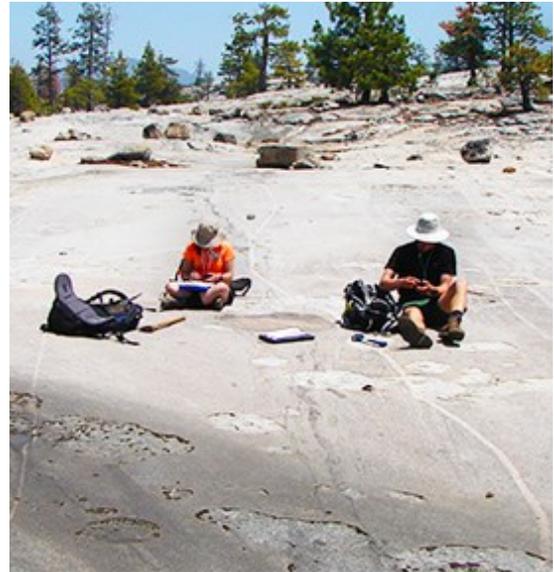
Biewer, J., J.F. Parham, J. Velez Juarbe. Eleven new skulls from the Los Angeles basin, Southern California, shed light on the timing of major walrus radiations. 73rd Meeting of the Society of Vertebrate Paleontology (Calgary, Canada).

Geology in the News

Researchers Explore Yosemite for Clues About Volcanic Eruptions



CSUF student researchers conducted fieldwork in Yosemite for their volcano-related research, where Half Dome is made of granodiorite or granite that once crystallized out of magma



Geology graduate student researchers Cullen Schell and Melissa Chambers collect data near Lake Vernon in Yosemite National Park for their research projects.



Geology students and their professor encountered black bears, thunderstorms and smoke from nearby wildfires. But that didn't stop the Cal State Fullerton researchers from searching for clues about the nature of magma chambers of molten rock that caused ancient volcanic eruptions in Yosemite National Park.

Students had the chance to apply the geology knowledge they learned in the classroom out in the field, miles away from civilization with no cellphone reception, showers or fresh food for days.

Led by Vali Memeti, assistant professor of geological sciences, the faculty-student team spent several weeks in August backpacking deep into Yosemite's wilderness, looking at rocks and retrieving samples for chemical analysis back in her campus lab.

<http://news.fullerton.edu/2017su/yosemite-volcano-research>



Geology in the News Publications and Presentations:

Bursztyn, N., Shelton, B., Walker, A., and Pederson, J., 2017. Increasing undergraduate interest to learn geoscience with GPS-based, augmented reality field trips on students' own smartphones: *GSA Today*, 27(5):4-11.

Bursztyn, N., Walker, A., Shelton, B., and Pederson, J., 2017. Assessment of student learning using augmented reality Grand Canyon field trips for mobile smart-devices: *Geosphere*, v. 13, no. 2, p. 1–9, doi:10.1130/GES01404.1.

Feng, X., Chen, Z.-Q., Woods, A., Pei, Y., Wu, S., Fang, Y., Luo, M., and Xu, Y., in press. "A Smithian (Lower Triassic) ichnoassemblage from Lichuan, Hubei Province, South China: implications for biotic recovery after the Late Permian mass extinction". *Global and Planetary Change*.

Paterson, S., Clausen, B., Memeti, V., and Schwartz, J.J., 2017, Arc magmatism, tectonism, and tempos in Mesozoic arc crustal sections of the Peninsular and Transverse Ranges, southern California, USA, in Kraatz, B., Lackey, J.S., and Fryxell, J.E., eds., *Field Excursions in Southern California: Field Guides to the 2016 GSA Cordilleran Section Meeting: Geological Society of America Field Guide 45*, p. 81–186, doi:10.1130/2017.0045 (04).

Alasino, P.H., Larrovere, M.A., Rocher, S., Dahlquist, J.A., Basei, M.A.S., Memeti, V., Paterson, S., Galindo, C., Macchioli Grande, M., da Costa Campos Neto, M., 2017, Incremental growth of an upper crustal, A-type pluton, Argentina: Evidence of a re-used magma pathway, *Lithos*, v. 284-285, p. 347–366.
<http://dx.doi.org/10.1016/j.lithos.2017.04.013>

Conference Presentations

Alasino, P., Larrovere, M., Rocher, S., Dahlquist, J., Basei, M., Memeti, V., Paterson, S., Galindo, C., Macchioli Grande, M., Costa Campos Neto, M., 2017, Incremental growth of an upper crustal pluton, Sierra de Velasco: evidence of a re-used magma pathway: XX Congreso Geológico Argentino, Tucuman, Argentina, Aug. 7-11, 2017.

Ardill, K., Paterson, S., Memeti, V., Stanback, J., Green, S., Gutierrez, E., 2017, Hypabyssal porphyry intrusions across the central Sierra Nevada. Characterizing vertical links between focusing plutonic and volcanic fields: International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) conference, Portland, Aug. 14-18, 2017.

Bursztyn, N., Jackson, D., Walker, A., Shelton, B., and Pederson, J., 2017, Increased student engagement through augmented reality – a catalyst for learning? *Goldschmidt*, Paris, August 13-18.

Gutierrez, E., Memeti, V., 2017, Investigating the volcanic-plutonic connections using geochemistry in the Minarets caldera, Eastern-Central Sierra Nevada Mountain Range, California: *Geological Society of America Abstracts with Programs*. Vol. 49, No. 4 doi: 10.1130/abs/2017CD-293058

Memeti, V., Barnes, C., Werts, K., Williams, D., Oppenheim, L., Barnes, M., Paterson, S., 2017, Using mineral geochemistry to unravel waxing and waning magmatism in the Tuolumne Intrusive Complex plumbing system, central Sierra Nevada, California: International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) conference, Portland, Aug. 14-18, 2017.

Paterson, S., Ardill, K., Memeti, V., 2017, Regional scale magma focusing in the central Sierra Nevada, California: Evolving magma chamber and final intrusive sizes, shapes and volumes in the plutonic plumbing beneath volcanic center: International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) conference, Portland, Aug. 14-18, 2017.

Werts, K., Barnes, C., Memeti, V., 2017, Is Sphene 'Recycled' in the Tuolumne Intrusive Complex?: North American Workshop on Laser Ablation (NAWLA), Austin, Texas, May 25-27, 2017.

Geology in the News

Grants, Presentations and Alumni

Recently Funded Grants

Joe Carlin: “PRF-UNI: Linking decadal-scale changes in continental shelf sediment accumulation to variability in ocean and terrestrial processes.” American Chemical Society-Petroleum Research Fund, July 2017 – September 2019, \$55,000.

Matt Kirby and Joe Carlin: “Collaborative Research: The California Precipitation Dipole: Spatiotemporal Variability and Forcings Over the Past 3000 Years.” National Science Foundation (NSF) - Paleo Perspectives on Climate Change (P2C2) - Geomorphology and Land Use Dynamics Program. June 2017 - June 2020, \$345,802.

Nicole Bonuso’s sabbatical spring 2017

Two general themes emerged from my spring sabbatical: field work and food!



Top left: undergraduate student Travis Stone sitting on a 235 million year old fossil reef that he will be working on from Central Nevada; Top right: Sample of a 6 million year old oyster reef from Tuscany, Italy (Wonder Woman for scale); Bottom left: Me and University of Palermo colleagues sampling 235 million year old reef transect from Sicily; and Bottom right: our friends’ families met up with us in Tuscany. We all learned to make homemade pasta.



40 years of CSUF Geology alums at South Coast Geological Society meeting in July

Mathematics in the News

Summer 'MISS' for Young Women Delves Deep Into Math and Coding



Fifty high school girls from Orange County and the region spent July brushing up on their math skills through Cal State Fullerton's **Project MISS** — Mathematics Intensive Summer Session program.

Project MISS is offered to 10th- and 11th-grade girls who spend four weeks diving deep into algebra II and precalculus. The weekday program aims to assist college-bound young women enhance their mathematics skills — and the goal is to increase the population of female students who choose careers in the sciences, engineering and mathematics (STEM).

This summer's participants, in which 67 percent are Hispanic and 21 percent are Asian-American, hail from 22 area high schools in 18 cities across the region. The program culminates on Friday, July 28, with a MISS luncheon.

David L. Pagni, professor of mathematics, has been directing the program since 1990 and not only makes math appealing, understandable and fun for young people, he's also won numerous awards for his work — from the campus with the 1993 Outstanding Professor Award to the White House.

<http://news.fullerton.edu/2017su/Project-MISS-2017>

Changing the Stereotypes of Immigrants and Their Professions



Armando M. Martinez-Cruz, professor of mathematics, was the first in his family to graduate and obtain a bachelor's degree in mathematics from the Universidad Nacional Autónoma de México (UNAM). From there, he obtained his master's degree and doctorate from Ohio State University, proving that immigrants are more than stereotypes and prejudice.

"Many are afraid of math, but if you have the commitment and mentors to help you, you have the opportunity to increase your career options," says Martinez-Cruz. "I am happy to be an example that immigrants provide more than cheap labor; we are also preparing for bigger things." <http://news.fullerton.edu/2017su/msclip-hoy-martinez-immigrants-and-professions>

Mathematics in the News



Ruth Yopp-Edwards, Marty Bonsangue, Mark Ellis, and some of the Fellows from previous project MT2.

The project Advancing Teachers of Mathematics to Advance Learning for All (ATMALA) was funded in August 2017 by the National Science Foundation in the amount of \$2.8 million dollars for a five-year period. ATMALA aims to serve the national interest in strengthening mathematics teaching and learning for underserved students and communities in urban areas of Orange County in southern California. The primary focus of the project will be at the middle-school and early high school level, a pivotal time during which students' self-concepts about and interest in pursuing mathematics are crystallized. To this end, project ATMALA will create a cadre of twenty (20) Master Teaching Fellows—teacher-leaders in high impact districts serving a significant population of English language learners who will not only model effective instructional practice but support their peers in learning to do so. New standards in school mathematics emphasizing student reasoning, sense making, and problem solving require instructional shifts that move away from decontextualized demonstrations of procedures and toward practices promoting student inquiry, argumentation, and contextualized learning. ATMALA offers a model for supporting these instructional shifts in high impact districts where students historically have had less access to meaningful learning. Project ATMALA builds on the work of the highly successful NSF projects MT2 and TACIB at Cal State Fullerton. The project will be led by Dr. Mark Ellis (secondary education) Dr. Ruth Yopp-Edwards (elementary and bilingual education), and Dr. Marty Bonsangue (mathematics).

Publications and Presentations:

Dr. Alfonso F. Agnew along with his former student Brandon Gentile and emeritus professor John Matthews published a paper: Superexponentials: A Generalization of Hyperbolic and Trigonometric Functions Journal of Mathematical Economics and Finance, vol. 3, issue 1(4)

Dr. Bridget Druken was awarded a \$5000 Junior Grant from CSUF this past spring for the year 2017-2018. It is called, "*Investigating Mathematical Practices and Dispositions in Future K-8 Teachers at CSUF*".

Druken, B.K. (2017). Three activities for growing new mindsets in mathematics. California ComMuniCator, 42(1), 16-19.

DiNapoli, J. & Marzocchi, A.S. (2017). Productive struggle: What can we learn from pre-service teachers. California ComMuniCator, 41(4), 10-13.

Physics in the News

Scientists Help Public in Viewing the Solar Eclipse



Campus and community members were invited to view the eclipse on campus with the help of special equipment and physics faculty members. Telescopes with filters designed to safely look at the sun, along with protective glasses, were available for viewers on Aug. 21 on the lawn on the south side of Dan Black Hall, off Nutwood Avenue. The viewing began at 9 a.m.; the eclipse started at 9:06 a.m. and ended just before noon.



Physics Department host campus Eclipse 2017 Event

Shovit Bhari mobilizes our biggest astronomy viewing event ever!

Over a thousand visitors from across campus and the local community stopped by the south lawn of Dan Black Hall Monday morning to enjoy the view from several of our telescopes along with a live feed from Wyoming of the solar eclipse of the decade.

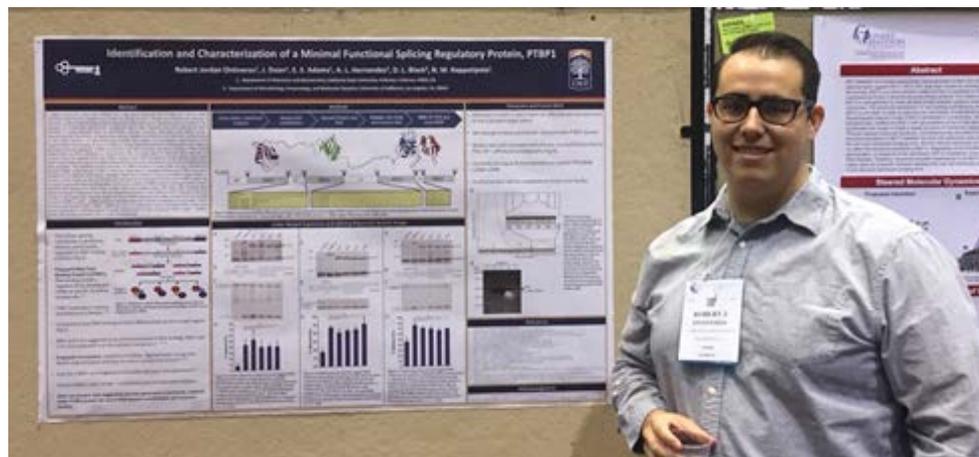
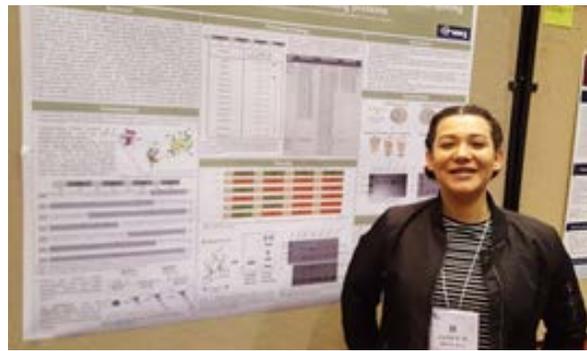
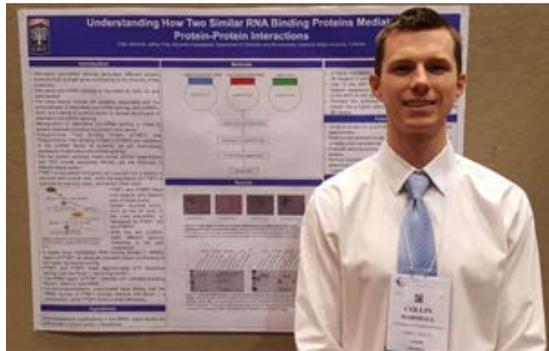
Shovit organized the occasion with big help from [Bobby Wright](#), [Steve Karl](#), [Jocelyn Read](#), [Geoffrey Lovelace](#), and [Josh Smith](#).

Shovit travelled with his family and student Matthew Jackson to Shoshoni, Wyoming to be in the path of totality with his telescopes and instruments to transmit the live feed back to the campus event. They had 2.5+ minutes of awesome totality.



Chemistry & Biochemistry in the News Publications and Presentations:

The Department of Chemistry and Biochemistry was represented at the National Experimental Biology meeting, April 22-26, in Chicago, with 3 undergraduate students presenting their research.



Undergraduates Collin Marshall (top left), Janice Reynaga (top right) and Jordan Ontiveros (bottom) presenting their research at the National Experimental Biology meeting.

“Understanding how two similar RNA binding domains mediate different protein-protein interactions”
Collin Marshall*, Jeffrey Pina# and Niroshika Keppetipola.

“Understanding the role of post-translational modifications in the splicing activity of two related RNA binding proteins” Janice Reynaga* and Niroshika Keppetipola.

“Identification and Characterization of a minimal functional splicing regulatory protein, PTBP1” Jordan Ontiveros*, Justin Doan*, Eric Adams and Niroshika Keppetipola.



Chemistry & Biochemistry in the News Publications and Presentations:

Several undergraduate students from the Haan lab worked together and published a manuscript on the first fuel cell that is fueled by vitamin C mixed in an alkaline solution:

Omar Muneeb, Emily Do, Timmy Tran, Desiree Boyd, Michelle Huynh, Greg Ghosn, and John Haan, “A direct ascorbate fuel cell with an anion exchange membrane,” *Journal of Power Sources*, 351, 2017, 74-78.

Dr. Zhuangjie Li's group published a paper in *Journal of Physical Chemistry*: Michael Phan and Zhuangjie Li “Kinetics Study of the Reactions of OH with n Undecane and n Dodecane Using the RR/DF/MS Technique” *J. Phys. Chem. A* 2017, 121, 3647–3654.

Chemistry's Stacy Guzman was selected as one of the 7 CSU Pre-Doctoral scholars.



The 2017 class of CSU Pre-Doctoral Scholars at Cal State Fullerton, are, from left, Mercy Tran, Stacy Guzman, Bahar Tahamtani, Jose Zamora, Elizabeth Mercado Ayon, Michelle Cadwell and Araceli Robles.

Stacy is a McNair Scholar and she recently applied for and was awarded a SACNAS travel scholarship to attend 2017 SACNAS in Salt Lake City, UT.

Stacy has done research at Harvard University's Broad Institute for the past two summers. Her first year she was an HHMI EXROP student (competitive award) to work on the synthesis of enantioenriched small molecules via “click-chemistry”. This year the PI at Harvard invited her back to work on finding a cure for the prion neurodegenerative disease.

This past summer Stacy won the 2017 Overcoming Challenges Award – a national award given by the American Chemical Society, Women Chemists Committee. The award consisted of a plaque, a monetary award of \$250, travel arrangements, and a \$1000 travel stipend to the 254th American Chemical Society National Meeting in Washington, DC August 20–24, 2017. The award was presented at the Women Chemists Committee Luncheon on Tuesday, August 22nd at noon. The Committee Chair, Laura Sremaniak, introduced Stacy and presented the award prior to the keynote speaker's presentation. Stacy was asked to speak for 2-3 minutes about herself, her challenges, and how she overcame them.

For more see: <http://news.fullerton.edu/2017su/Pre-Doctoral-Scholars-Named>

CAREER CENTER



Welcome to the fall 2017 semester! The Career Center has developed 5 ways that you can take advantage of the Career Center to impact your career success.

1. Sign up for an account on Titan Connection Job Database. Make sure to log in and create your account on Titan Connection. Titan Connection is your one stop shop to look for on campus, full/part time, and internship positions available to Cal State Fullerton students. Go to the Career Center's Website (www.fullerton.edu/career) and click on "Students," "Jobs and Internships" and click on "View Jobs and Internships on Titan Connection"

2. Visit NSM Drop In Office Hours (Tuesdays, 11am-12:30pm, MH-488) or Make A Career Center Appointment. Visit MH-488 every Tuesday from 11am-12:30pm to meet with Michelle Levy, NSM College Career Specialist, for a quick 10 minute walk in appointment.

You can also schedule an appointment with Michelle Levy by calling 657.278.3121.

Appointment types include

- Career Assessments
- Career Exploration
- Graduate and Professional School Preparation (Exploration, Statement of Purpose, and Interview Preparation)
- Resume/CV and Cover Letter Review
- Mock Interviews
- LinkedIn Set Up and Profile Review.

3. Register for Career Center Workshops & Events. The Career Center hosts various workshops during the school year that you can register for on Titan Connection. To view and RSVP for workshops click here: <http://www.fullerton.edu/career/students/workshops-info-sessions.php>. A highlight of some of the workshops taking place during the fall semester includes:

- Grad School Prep Weeks: Health Professions Exposed
 - o Another Route: Post Baccalaureate Program Overview, Monday, October 2nd, 10am-11:30pm, TSU-Heterbrink, RSVP HERE: <https://goo.gl/QLSLPL>
 - o Interviewing Strategies for Health Professions Schools, Tuesday, October 3rd, 12pm-1:30pm, TSU-Heterbrink, RSVP HERE: <https://goo.gl/RyR7na>
- Food and Drug Administration (FDA) Tour, Friday, October 13th, 10am-12pm, RSVP HERE: <https://goo.gl/V8oQab>
- Slice of Advice: The Pathway to Teaching at the Community College, Thursday, November 16th, 5:30pm-7pm, RSVP HERE: <https://goo.gl/214YVE>

4. Save the Date for Career Fairs and Expos.

- Internship & Career Expo, Tuesday, October 24th, 3pm-7pm, TSU Pavilions
- Part Time Job Fair, Thursday, October 26th, 10am-2pm, TSU Pavilions
- STEM Internship & Career Expo, Thursday, November 2nd, 10am-2pm, TSU Pavilions

5. Like the CSUF STEM Career Insights and Opportunities Facebook page Like the CSUF STEM Career Insights and Opportunity Facebook page (www.facebook.com/CSUFSTEMCareer) to receive informational STEM related career articles and job announcements.

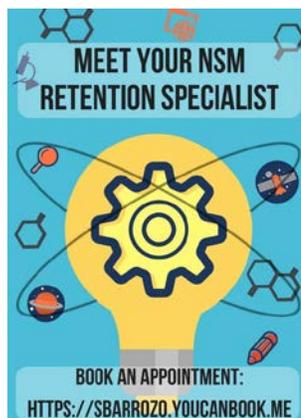
If you have any questions do not hesitate to contact your College Career Specialist, Michelle Levy at milevy@fullerton.edu or 657.278.3766 or the Career Center at careercenter@fullerton.edu or 657.278.3121.



SUCCESSFULLY NSM Workshop 1 for Fall



2017 students: College 101



On Friday, September 8th, from 1:00 pm to 3:00 pm in MH-513, 48 First-time Freshmen attended SuccessFully NSM's first workshop of the semester hosted by NSM Success Team Members, Sam Barrozo, Retention Specialist, Tatiana Pedroza, Graduation Specialist, Michelle Levy, Career Specialist, Dr. Colleen McDonough, Assistant Dean, and Dr. Lauren Fournier, from CAPS. At this workshop, students learned about time management techniques, stress reduction tricks, and set goals for the semester. Counseling and Psychological Services (CAPS) lead a discussion on coping mechanisms for stress and test anxiety, shared CAPS resources, and answered questions related to personal and academic challenges that can obstruct academic success.

Through the **SUCCESSFULLY NSM** program, in a series of 5 workshops, students will have the opportunity to learn and familiarize themselves with campus and college resources, meet and network with classmates, faculty, and staff in a small setting, and acquire skills to navigate their first semester. Program participants will each receive a success kit, which includes a USB drive, a shirt and a pen during the first 3 workshops, and will be entered to win one of three iPads at the end of the series. If students attend each session, they will receive \$50 in Titan Tenders that can be used at Titan Shops and/or for printing on campus. Lunch will be provided at all workshops!

NOTE: September 18 was the deadline to **WITHDRAW** from classes with a grade of "W" for serious and compelling reasons. November 9 is the **LATE WITHDRAWAL** deadline.

COLLEGE OF NATURAL SCIENCES & MATHEMATICS

RETENTION & GRADUATION SPECIALISTS

Your partners for NSM student success
Mon-Fri 9am-5pm, McCarthy Hall 488

GE ADVISING GRADUATION
REQUIREMENTS ACADEMIC
PROBATION STUDENT
SUCCESS ADVISING

Walk-Ins Welcome
Appointments Available

For Freshman/Sophomore standing students (0-59 units): Go online to <https://sbarrozo.youcanbook.me> and you can set up an appointment with Sam, the Retention Specialist.

For Junior/Senior standing students (60+ units): Go online to <https://nsmgradspecialist.youcanbook.me> and you can set up an appointment with Tatiana, the Graduation Specialist.

You will receive an email confirming your appointment.



SAM BARROZO



TATIANA PEDROZA

NSM CLUBS AND ORGANIZATIONS

NSM.fullerton.edu/student-resources/get-involved



Contact any of the organizations below to find out their meeting and activity information.

American Medical Student Association (AMSA): Is committed to improving health care and healthcare delivery to all people; promoting active improvement in medical education; involving its members in the social, moral and ethical obligations of the profession of medicine; assisting in the improvement and understanding of world health problems; contributing to the welfare of all pre-health professional students. AMSA@fullerton.edu

Biology Graduate Club (BGSC): Offers opportunities for association and interaction between students, faculty, and the administration of CSUF. bgsc.csuf@gmail.com

Chemistry and Biochemistry Club (CBC): provides information pertaining to opportunities and careers with the fields of Chemistry and Biochemistry, familiarizes students with department opportunities, and conducts community outreach. csuf.cbc@gmail.com

Geology Club: Unites geology majors and others by providing related information and volunteer activities on and off campus. geologyclub@fullerton.edu

Latino Medical Student Association Pre-Medical Latino - Undergraduate Society (LMSA PLUS): For anyone interested in medical school can join LMSA, you do not need to be of Latino/Latina heritage! lmsa.plus@exchange.fullerton.edu

Math Club: Encourages students to start joint research projects with each Faculty and attend conferences nationwide for observation and / or presentation. csufmathclub@gmail.com

NSM Inter-club Council (NSM-ICC): NSM clubs and students collaborates with each other and Associated Students (ASI) to provide events and travel funding to all NSM and CSUF students. The NSM – ICC organizes the NSM Symposium, Meet and Eat with the Deans and Chairs. nsmicc.csuf@gmail.com

Physics Club: organizes lectures from guest speakers as well as several events a year. All CSUF students are welcome. Physicsclub.csuf@gmail.com

SMART Girls Support Group (Sisters in Mathematics and Academic Relations in Teaching): holds monthly meetings, study sessions, and provides access to advisors. Learn how to be successful in math courses, relate undergraduate courses to high school teaching connect to school tutoring in schools and networking. Males may join as associate members. csufsmartgirls@gmail.com

STEM Outreach Club: Build a community with your peers. Form study-groups. Get involved in the community. Help promote science. And much more! ALL MAJORS WELCOME! csufmentor1@gmail.com.

SUCCESS (Students United with Community Collaborators to Enhance Success in Science): consist of students from all STEM disciplines who are interested in undergraduate research who collaborate together to hold workshops and events for CSUF students. SUCCESS@CSUF@gmail.com