DEPARTMENT OF GEOLOGICAL SCIENCES



Dig into it...



A few highlights...

Our faculty continue to put in extra effort to obtain grants for student-centered research. Here's a few:

- → Sinan Akciz Paleoseismic Investigation of the Van Matre Ranch Site, Carrizo Plain, CA (USGS)
- → Natalie Bursztyn Program SLO's from Freshmen to Seniors (CSUF)
- Joe Carlin (1) Understanding Southern California oyster reef abandonment in the recent Geological past (CSUF); (2) Linking decadal-scale changes in continental shelf sediment accumulation to variability in ocean and terrestrial processes (ASC-PRF)
- Diane Clemens-Knott Testing Models for the Formation of the Great Valley Basin using Detrital Zircon U/Pb Dates: An Early Cretaceous Forearc Basin or a Mid-Jurassic Pull-Apart Basin? (ASC-PRF)
- → Richard Laton Oversee Groundwater issues as they may pertain to construction and operations of the California High Speed Rail (CA High Speed Rail Authority)
- → Matthew Kirby (co-PI Joe Carlin) Collaborative Research: The California Precipitation Dipole: Spatiotemporal Variability and Forcings Over the Past 3000 Years (NSF)
- → Vali Memeti (1) Testing the Existence of Magma Mush Zones and Potential Processes of Magma Differentiation in the Mid-crust in situ Mineral Geochemistry (NSF); (2) Examining the Temporal, Spatial and Geochemical Focusing of Magmatism During a Continental Arc flare-up (NSF)
- Received \$7000 in donations, matched by NSM alum Dan Black, to fund research projects for 14 undergraduate students.
- Taught GEOL/BIOL336 Geo/Bio Field Investigations for 2nd time. This intersession course integrates geology and biology field investigations in Death Valley and Zzyzx. Next offering is this summer in Owens Valley and Yosemite.
- Held very successful 4th annual Alumni Reception 125 alumni and friends!! Save the date - next one is Oct. 6, 2017.
- Started campaign to develop a teaching rock garden on campus Dr. Sinan Akciz is leading those efforts.



CALIFORNIA STATE UNIVERSITY FULLERTON FACULTY SPOTLIGHT Dr. Sinan Akçiz



Sinan was hired in 2016 as our new Structural Geologist. He completed his Ph.D at MIT and followed this with postdoc and teaching positions at UC Irvine and UCLA.

- » He will be teaching a variety of courses, including structure, field techniques, and field camp, as well as courses in his specialty like paleoseismology, Earthquakes, and Quaternary tectonics.
- » Sinan's current and future research projects include paleoseismic investigations along the Carrizo section of the SAF and other fault systems, as well as strain partitioning across large active and inactive shear zones.
- Sinan is developing methods for digital field data collection and digital tools for education. He is also leading our department efforts to develop a teaching rock garden on CSUF campus.
- » Sinan lives in Pasadena with his wife Jessica and 5-year old son Kurt.
- An interesting tidbit about Sinan
 he loves to collect geologythemed stamps!

Welcome to The Dirt Spotlight Sinan!!







ALUMNI SPOTLIGHT Rene Perez - (BS 2002, MS 2009)...

Rene graduated with BS in 2002. His thesis was title "Genesis of the Quaternary terraces of the eastern Sierra El Mayor, northern Baja California, Mexico" with Phil Armstrong.

Rene graduated with MS in 2009. His Thesis titled "Genesis of the Quaternary terraces of the eastern Sierra El Mayor, northern Baja California, Mexico" with John Foster.

- » As a student at CSUF, Rene was the go-to person on help with GIS applications. Many of us benefited from Rene's GIS expertise, whether explicitly or via work done in the background.
- » Since graduating, Rene has continued to use GIS technology enhanced with new uses of drone technology on geologic, groundwater, and hydrologic problems. Rene works for Earth Consultants International.
- » Rene is a supporter of our department and is a mainstay at most department events, including our annual Alumni Reception in Fall and Student Research Day in Spring.
- » Rene and his wife live in Riverside with their four children.

Welcome to The Dirt Spotlight Rene!!

In the news...

Click on the links below to see news articles featuring CSUF faculty and students

Abrupt Sinking of Seal Beach Wetlands: Past Quakes at Fault

Geology Rocks This Summer in Montana For Future Geologists

Geologist Rocks Into Role as Dean

Methane-Eating Microorganisms: A Solution to Climate Change?

<u>'Prehistoric OC' Features Dinos, Volcanos, Storytelling & More</u>

<u>Weathering the Dry Spell - La Niña Is Here; Study</u> <u>Shows Evidence of Drought in CA</u>

Study of Extinct Seabirds Reflects Climate Change in OC, California

STUDENT SPOTLIGHT Danielle Jackson



Danielle is a BS in Geology student working with Dr. Natalie Bursztyn on assessing the use of augmented reality (AR) sandbox as a tool to help teach topographic map concepts at the introductory geology level.

- » Danielle aspires for a career in outreach and education in the National Park Service, and just accepted a position as outreach specialist at the Hagerman Fossil Beds National Monument in Idaho - Congratulations Danielle!
- » Danielle has been an active member of the Geology Club and the AWG chapter at CSUF. She has presented her research at GSA National meeting in Denver and at the South Coast Geological Society.
- » An interesting tidbit about Danielle she is actively engaged on campus as a dance instructor! She has taught classes at the Titan Rec Center in both tap and line dancing!

Welcome to The Dirt Spotlight Danielle!!

Upcoming Department Events/Seminars

Mar 15 - Dr. Claudia Faunt - USGS Mar 22 - Dr. Kiri Wagstaff - JPL Apr 5 - Dr. Adam Simon - U of Michigan Apr 19 - Dr. Aradhna Tripati - UCLA <u>Apr 26 -</u> <u>Research Day Fullerton Arboretum</u>

Oct 6 - 5th Annual Alumni Event