UC Santa Barbara Earth Science

Chair's Letter: Alex Simms

"Change will come, change is here"—Reunion, Collective Soul. Although I am excited to step in as Chair, it is bittersweet as I reflect upon the changes that I have seen in the department since I arrived 15 years ago. We've lost a few friends and colleagues but we've also seen more than half of the currently active faculty join our ranks since 2010. Just this July, we congratulated Professors Toshiro Tanimoto and David Lea on their retirements. Luckily, many of our emeritus faculty still walk our halls and we were also fortunate enough to welcome a new faculty member, Professor Tobias Fischer, to our department. You can read about him and his research in the following pages.

Some changes are good. Our new faculty bring new ideas, new skills, and experiences. They also bring new students and offer new classes, adding vitality to our department. This year we welcome 15 new graduate students, 12 in the Fall and 3 in January, making this the largest graduate cohort in many years. Our undergraduate majors now top 159, with new students joining every quarter. We have three new labs being built to analyze materials ranging from volcanic gases to microbes, adding to our already world-class facilities.

Other changes bring challenges. As UCSB faces some pretty stark budget cuts from both the state and federal levels, we reflect on how we might adapt and continue to move forward. Although we are welcoming a robust graduate student class in the fall, uncertainty remains in how many we will be able to take in the future. We are now carefully counting our teaching and research assistantships and keeping our fingers crossed that we don't lose any more graduate student or other research funding.

Despite these headwinds, our faculty and students continue to conduct great research, go into the field, and earn impressive awards. Over the last year, our faculty have started new research projects on carbon cycling in Alaska, sedimentation rate variability in the deep ocean, lithium resources in Nevada, and microbial evolution during the Neoproterozoic. As I write this letter, we have students on three separate cruises across the Pacific Ocean.
Our classes have maintained their strong field curriculum with trips to the Owen's Valley, Joshua Tree National Park, the White Mountains, and Limuw (Santa Cruz Island). Much of this research and many of these trips would not have been possible without your generous support over the years. It has made a difference in the lives and education of our students. Thank you!

We of course enjoy hearing about our alumni too. In this newsletter you can read about a couple of your former classmates, but we'd love to hear from more of you. Please check in with us from time to time. We have a LinkedIn group and an updated website. We wish you a happy and productive year.

IN THIS ISSUE | FALL 2025

A free annual publication of the:
Department of Earth Science
1006 Webb Hall
UC Santa Barbara
Santa Barbara, CA 93106–9630
Information: (805) 893.4604
Giving: (805) 893.4604
geol.ucsb.edu

Header photo: Limuw (Santa Cruz Island)
Photo: John Cottle

Melting Arctic Ground and Carbon Cycling

by Gen Li

The Arctic landscape is under rapid changes over the recent decades, mostly due to the warming Earth's surface and consequent thawing of its ground—ancient, frozen soil known as permafrost. The warming-induced landform changes cause sediment movements that can trigger hazards such as bank erosion and landslides, threatening communities and damaging infrastructures. Those sediment movements also disturb the giant carbon pool stored in the permafrost (2x carbon in the atmosphere), liberating carbon in different forms and causing cascade effects—from emitting greenhouse gases to fertilizing algae blooms. A mechanistic understanding of warming-driven erosion and carbon release is in urgent need to mitigate the hazardous effect and quantify Arctic-climate feedbacks. Such understanding is partially limited by the lack of field data from the remote Arctic. In August 2025, a research team led by Gen Li (UCSB Earth Science) and Madison Douglas (UC Berkeley Earth and Planetary Sciences) and joined by a group of students and postdocs (UCSB: Fan Liu; Berkeley: Colin Baciocco and Tianran Zhang) traveled to the Baldwin Peninsula, NW Alaska, to study warming-driven landscape erosion and carbon cycling. They were particularly interested in small river channel ('gully') networks that are developing and occupying the landscape in the region, seeking to resolve the mechanics and geochemistry of gully systems. Formed by ice polygon melting and water track incision, those gullies are expanding rapidly in permafrost landscapes, extending at rates up to tens of meters per year and creating 'hotspots' of erosion and carbon release. In the field, the research team targeted multiple sites representing different stages of the typical lifecycle of a gully from a headwater channel to a stable, mature channel. They measured water and sediment fluxes in those channels, and collected samples for geochemical analyses. The team also monitored gullies before and after rainstorms to evaluate how erosion and carbon cycling respond to changing flow conditions. Ultimately, the team will utilize these field measurements, geochemical analyses, and theories of ice-water-sediment transport and carbon cycling to develop and calibrate a mechanistic model that can predict gully erosion and carbon fluxes in permafrost regions over decadal timescales.

Exposed ice polygon overlaid by modern soils at a slump site, Northwest Alaska. The thaw of the ice polygon caused landscape subsidence, incision, gully development and permafrost carbon release. Photo: Gen Li (August 2025)

Summer Field 2025

by John Cottle and Phil Gans

Limuw (Santa Cruz Island). Photos: Bella Welch (left), John Cottle (right); Bottom: Inyo Mountains Field Camp. Photo: Ryan Eden

The first half of our 2025 installment of Summer Field Geology (Earth 118) took 13 undergraduate students, 2 TAs (Ryan Eden, Bella Welch) and Professor Phil Gans to the White/Inyo Mountains of southeastern California where they conducted two rigorous mapping exercises. First, students cut their teeth on the complex folding and faulting at Poleta—a classic mapping exercise used by countless geology field classes. They braved high 90s daytime temperatures and a relentless rodent infestation at our camp (207 mice and rats exterminated in 10 nights) as they mastered the Eocambrian stratigraphy and mapped the area in detail to unravel the complex sequence of deformational events. From there, the class moved to the far more luxurious accommodations and pleasant temperatures of the Crooked Creek UCNRS White Mountain Research Station, situated high amidst the bristlecone pines in the northern White Mountains. Pairs of students conducted independent mapping-based research projects focused on understanding the emplacement mechanisms of a large Jurassic granite and its relationship to deformation and metamorphism in the adjacent country rocks. Professor Gans remarked how impressed he was with this year's class's hard work, level of engagement, and good humor throughout the experience, and is feeling rather wistful that this may well be his last field camp after 44 years of teaching field camps at Stanford and UCSB.

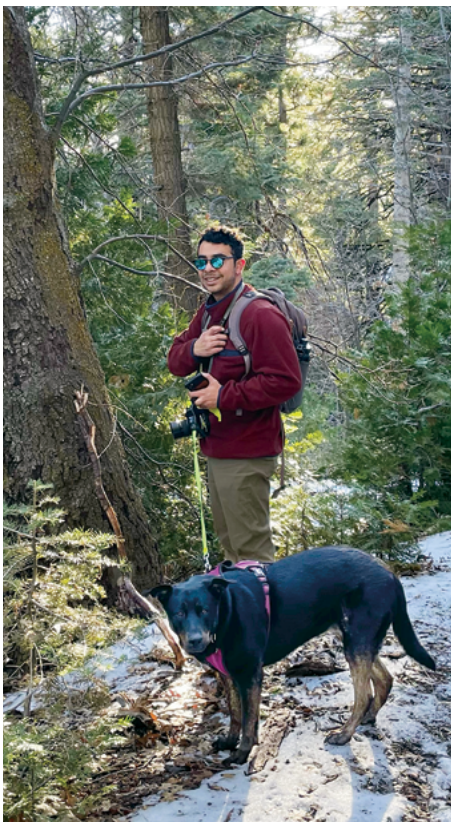
The second half of our summer field program took a deep dive into geology's real-world applications with an unforgettable trip to Limuw (Santa Cruz Island). Under the guidance of Professor John Cottle and TAs Morgan Adamson and Isabella Welch, 13 students journeyed to the island's rugged western edge. Here, they traded lecture halls for a living laboratory, focusing on two distinct projects. The students navigated a challenging landscape marked by a stunning variety of geological features: ancient metamorphic rocks, plutonic exposures, layered volcanic units, as well as active tectonic processes. This immersive experience pushed students to sharpen their foundational field mapping skills and master modern digital mapping techniques. This class gives students the practical experience and confidence they need to succeed after graduation. We are deeply grateful for the generous support from the National Park Service, Brian Guerrero and Lyndal Laughrin at the UC Santa Cruz Island Reserve, and The Nature Conservancy, all of whom played a crucial role in making this enriching experience possible.

Evolution of the Planet Through Bacteria

by Ivan Moreno

Ivan Moreno

Ivan arrived at UCSB's Earth Science department in late 2024 to begin a postdoc position in the Early Life and Microbial Evolution (ELME) lab of Dr. Carolina Martinez Gutierrez. Ivan was born and raised in North Long Beach, CA, and attended CSU Dominguez Hills for his BS in molecular biology. It was during this time that, after a short stint in the lab of Dr. Karin Kram his interests for studying bacteria began to emerge. After learning about environmental microbiology during his senior year of undergraduate studies, he was determined to pursue a career in this field. He is by degree a marine biologist and has a research focus of microbial ecology and physiology. During his PhD at Scripps Institution of Oceanography at UC San Diego (UCSD), Ivan studied various aspects of cyanobacteria—photosynthetic bacteria found ubiquitously throughout the globe mainly in terrestrial and marine water systems. At UCSD, Ivan worked with Dr. Brian Palenik on pigment production of cyanobacteria under niche environments such as microbial mats in hot springs. These thermophilic cyanobacteria gave rise to Ivan's interest in understanding how cyanobacteria evolved over the span of billions of years. Now at UCSB, Ivan plans on expanding on his interests by conducting work that will support notions surrounding the co-occurrent evolution of our planet and of cyanobacteria present on Earth today. Using cutting edge phylogenomic methods, Ivan and the ELME lab use the breadth of publicly available microbial genomes to examine how bacteria evolved specific genotypes during major global events such as the Great Oxidation Event and the Snowball Earth hypothesis. While Ivan's main interests are applications of his work to astrobiology and geobiology, he is just as excited to be involved in undergraduate and graduate student training, public engagement and outreach, and being part of the UCSB community.



Courtesy of Ivan Moreno

Justice, Equity, Diversity and Inclusion (JEDI)

by Zach Eilon, JEDI Faculty Committee Chair

The Department's JEDI committee continues to promote policies that expand the equal opportunity and accessibility of our academic program at all levels. Our student-led GEMSS mentoring group continues to build on its successes. Their outreach to nearby CSU campuses is mirrored by new faculty-level connections, research collaborations, and the flow of talented graduate students in both directions.

Tobias Fischer

by Tobias Fischer

Professor Tobias Fischer

Tobias Fischer joined UCSB as faculty in the Earth Science Department and as the director of the Earth Research Institute (ERI) this fall. Tobias is an internationally known volcanologist with expertise in active magmatic and hydrothermal systems. His research focuses on how volatiles act as drivers and indicators of volcanic processes. Working with students and collaborators, he addresses various aspects of volatile emissions from active volcanoes and tectonic regions all over the world, and utilizes volcanic gases to study processes leading to eruptions. The analytical tools in the Volatiles Lab will enable the chemical and isotopic characterization of gases collected from volcanic vents, plumes, and diffuse degassing sites. Besides using direct sampling and remote sensing equipment, his group also develops novel approaches for sampling and sensing gases by UAVs (Unmanned Aerial Vehicles—drones) during eruptions. These capabilities allowed researchers to make critical measurements during the recent Icelandic eruptions that inform models to better forecast when hazardous volcanic activity will end. Such data also provide CO2 emission rates during eruptions which remain quite poorly constrained. Besides the focus on volcanic systems, one of his current projects investigates the formation, storage, and release of helium from ancient cratonic regions in East Africa. Results from this work will give insights into the formation of reservoirs of this limited and societally important resource.

As ERI director, Tobias is excited to lead one of the largest Organized Research Units on campus and work with faculty, researchers, and staff to support interdisciplinary and collaborative research and education related to Earth Science in the broadest sense. He aims to build on ERI's interdisciplinary approaches and contribute to UCSB's reputation as one of the most collaborative research universities in the world.

Before coming to UCSB, Tobias was Distinguished Professor in Earth and Planetary Sciences at the University of New Mexico and a program director (rotator) at the National Science Foundation. He was born in southern Germany and studied geology at the University of Freiburg. After receiving his M.Sc. and Ph.D. from Arizona State University, he did a post-doc at Lawrence Berkeley Lab working on noble gases applied to geothermal exploration. He is looking forward to returning to California and contributing to UC's research and education mission.

The 2021 Eruption of Tajogaite Volcano on La Palma Island, Spain. Photo: Tobias Fisher

Ph.D. student Karim Mtili is measuring the emission rate of CO2 on the Tanzania Craton. Photo: Tobias Fisher

Undergraduate Research

Kavi Gollamudi

Kavi Gollamudi works with Dr. Anant Hariharan and Prof. Zach Eilon using seismic anisotropy to understand the complex forces that drive (tectonic) deformation in central Turkey around the North Anatolian Fault. They use surface wave data from two dense seismograph networks to make models of radial anisotropy in the region.

Madeline (Maddie) Mohler

Madeline (Maddie) Mohler works with Prof. Roberta Rudnick studying age and trace element composition of zircons from metasomatised mantle xenoliths from central Montana to determine their origin and petrogenesis.

Serina Wang

Serina Wang worked with Prof. Robin Matoza on a project, including a senior thesis, exploring the use of machine-learning based automated earthquake picking for volcanic seismicity. Serina evaluated the approach using several months of continuous broadband seismic waveform data from Mount St. Helens. Serina is now an MS student in seismo-acoustics at the University of Alaska Fairbanks.

Marslina McCahey

Marslina McCahey worked with Prof. Robin Matoza on a project, including a senior thesis, exploring infrasound and seismic signals from breaking waves (surf). For this project, Marslina operated a Raspberry Pi seismometer at the Coal Oil Point reserve near UC Santa Barbara campus and analyzed additional data from seismometers across California.

Joe Martin

Joe Martin works with Prof. Matt Jackson to research late-stage rejuvenated volcanism in Samoa. He recently sailed on the Kilo Moana to help recover ocean bottom seismometers and dredge lava flows from the deep submarine flanks seamounts and islands. The lavas obtained during the cruise will augment Joe's research project, as he continues his undergraduate studies as a 5th year Master's project.

We Wish For

Preston Cloud Memorial Fund, which supports student attendance to annual, national meetings of their professional organizations.

Unrestricted funds, which support revitalization of department space; field equipment, essential to our field classes; and microscopes, essential to our lab classes.

Your Ideas Welcome

We truly welcome your thoughts. What lessons did you take away from your time at UCSB? What would benefit the most from improvements? We solicit your input, and greatly value your perspective.

Your Donation Dollars at Work

Photo: Todd Penniman

We are deeply grateful to our many alums, colleagues, and friends of the department who have helped us financially this past year!
This help allows us to continue to have our amazing field camp set up seen in these two pictures.

Photo: Todd Penniman

With Appreciation

The Department of Earth Science would like to express its sincere appreciation to the following entities for their philanthropic support. Your gifts make it possible for the department to continue to advance excellence in our academic program, which continues to be one of the best in the world.

Dr. Leslie Ames '95
Dr. Ralph Archuleta
Dr. Ronald '75,'87 and Kristine Blom
Patrick '81 and Kathy Boales
Susan and Shane Brenner
Dr. David Buesch '92
Mary Bussi
Robert '72 and Catherine Butler
Todd '76,'78 and Sherry Butler
Craig L. Carlisle '74,'82
James '85 and Carolyn '85 Carter
Dr. David '70 and Andrea Clague
Dr. Robert '79,'89 and Kathryn Crippen
David W. Cromwell '69
Claudia Culling
Jim Dixon '84 and Barbara Day
William Drake '93
Steve Dubyk '73
John Duggan, Jr. and Barbara Jo Duggan
Leslie A. Edgerton '72,'75
Dr. Lloyd '71 and Mary S. '66 Edwards
John W. Erickson '72
Dr. Lydia Fox '89
Dr. Phillip and Elizabeth '94 Gans
William T. Gibbs '72
Dr. Emery D. Goodman '89
Julie Gordon
Mark '79,'82 and Valerie Grivetti
Michael '66 and Mary '64 Harding
Dr. Ruth Harris '94 and Phillip Dawson
Dr. Rachel M. Haymon and
Dr. Kenneth C. MacDonald
Dr. James Hickey '86 and Karen Sanzo '82
Dr. Tessa Hill '04 and Brian Gaylord
Dr. William H. Hirt '89
Christopher S. Hitchcock '90
David F. Hoexter '73
Dr. Eric '86 and Debra James
Jordan L. Kear '94
Dr. James Kennett
Dr. Martin '81 and Cynthia '80 Kleinrock
James P. Krohn '65
Dr. Andrew Kylander Clark '08
Dennis '85 and Laurie Laduzinsky
James D. Leavitt '76
Dr. Qiming Liu '13 and Yali Yang
Dr. Bruce P. Luyendyk
Dr. Chris G. Mattinson '00
Dr. Charles M. Meertens '77
William E. Mero '60
Richard '66 and Eleanor '64 Migues
Scott A. Minor '79
Mark '80 and Karen Molinari
Kevin P. Molloy '83
Donald '84 and Kathleen Moore
Lauren N. Mosley '12
Sharon M. Mottola '79
Gretchen Mullendore '98
Barbara R. Nida '61
Dr. Deborah L. Patterson '74,'78,'84
Stephen D. Piatt '70
Michael '66 and Elisabeth '67 Ploessel
Michael '79 and Carrie Raub
Melissa Morse Reish '96,'99 and Nathaniel Reish
Andre Rost and Rachel Kirby-Rost
Brett Rubi '91 and Elizabeth Santos-Rubi '97
Dr. Roberta Rudnick
Loreen '82 and Roger '82 Ruegg
Dr. Michael '93,'00 and Shayne '95 Santos
Marc Sarosi '83
Dr. Guangfu Shao '12 and Nanlan Zhang '13
Dr. Alex Simms
Dr. John Sinton '69
Thomas W. Sisson '82
Scott D. Sitzman '93
Amanda L. Spencer '84
Middleton '63 and Carol '64,'69 Squier
Allyson L. Steines '85
Dr. Neil Suneson '80
Dr. Toshiro and Hiroko Tanimoto
Dr. Bruce H. Tiffney and Robin Gowen Tiffney
Steven M. Tippets '79
Lindy Torres '04
Cameron D. Toyne '83
Deborah Underwood '93 and Larry Hengl, Jr. '92
Raj Venkatesan
Dr. Chester Wallace '72
Drs. Lee '63 and June Webb
Louise Webb
Peggie '66 and John Wormington
Linda Zhu and Frank Li

Organizations

Amgen Foundation
Environmental Risk Solutions, Inc.
GSI Water Solutions, Inc.
Intel Corporation
National Park Services

Gifts reflected above were made between July 1, 2024 and June 30, 2025. If you would like to update how your name is reflected on this list or wish to make an additional gift, please contact Erin Kozaki at erinkozaki@ucsb.edu.

Thank you

It means so much to me that my research and work is worthy of your recognition.

I am deeply appreciative of this opportunity and am committed to making the most of it.

I am very grateful for your support that allows me to continue to follow my dream of studying volcanoes.

Thank you so much for generously funding this award. I am so grateful to have this support for my research.

Thank you for your support in making awards possible for students like me and those to come.

This award gives me the confidence to challenge myself intellectually, ask ambitious questions and grow within a field I love.

Phoenix Cook

I am a fourth-year undergraduate at UCSB, double-majoring in Earth Science, with an emphasis in Geology and Hydrologic Science.

Growing up with parents who worked in the natural resources field, I garnered an early appreciation for the Earth's systems and processes that give us land, water, and life. Previously, I have worked on projects focusing on categorizing and characterizing emerging contaminants (PFAS and microplastics) in municipal groundwater aquifers. I am especially fascinated by how these systems respond to changes and external pressures over time.

The importance of the underlying geology to the growth and development of these systems and our natural resources continues to be emphasized in all of my Earth Science classes, as well as my previous research experience. Through starting my senior thesis project with Dr. Iris Holzer, looking at rock-derived nitrogen in the Monterey Formation, I can explore this idea further. Currently, my future lies in the environmental consulting field, working to obtain my Professional Geologist license.

Phoenix Cook

Grad Trip to Santa Cruz Island

Graduate student fall field trip to Limuw (Santa Cruz Island). Photos: Pengyuan Han

Molly Crotteau

I am a fifth year Ph.D. student in Professor Morgan Raven's lab. Before starting my PhD at UCSB, I earned a BS in Geochemistry from Caltech.

My research focuses on organic matter preservation and sulfur cycling in low-oxygen marine environments. My primary project investigates the role of sinking marine particles in organic matter export and preservation, with field sites in fjords on Vancouver Island, Canada, and the Eastern Tropical North Pacific Oxygen Deficient Zone.

I also study dissolved organic sulfur in the ocean, with particular interest in its biologic sources in the surface ocean and its more recalcitrant, abiotic sources from sediments.

To answer these questions, I combine fieldwork with a range of analytical techniques. I have participated in several research cruises, including to the Orca Basin—a hypersaline, anoxic basin off the coast of Louisiana—and to fjords on Vancouver Island. In the lab, I use chemical extractions to isolate pools of organic sulfur and use methods such as isotope ratio mass spectrometry and x-ray absorption spectroscopy to better understand sulfur cycling and carbon preservation in the marine environment.

Molly on the R/V Rachel Carson in Canada

Gwyn Hernandez

There's a general tendency to imagine bacteria as tiny, intrinsically simple organisms that represent life at its most rudimentary. But bacterial giants found across distantly related branches of the prokaryotic tree certainly defy that expectation (some are actually large enough to be seen with just the naked eye!). And their peculiarity doesn't end with their size: ongoing discoveries have revealed them to be surprisingly widespread, phylogenetically diverse, and morphologically complex. For my master's research with Professor Susannah Porter, I am investigating how these giant bacteria, which challenge traditional distinctions between prokaryotes and eukaryotes, might be identified (or perhaps misidentified) in the Precambrian fossil record.

I first became interested in paleobiology through a UC Riverside outreach program in geoscience at my high school. Later, while earning my BS in geology at UC Santa Cruz, I returned to UCR as a summer intern in Dr. Mary Droser's paleoecology lab, where I was introduced to Precambrian paleontology.

At UC Santa Barbara I'm now collaborating with Dr. Jean-Marie Volland and ExFAB to document the morphological complexity, diversity, and preservation potential of about 14 species of modern giant bacteria. We are creating a resource using these data to guide how these bacteria might be used as analogues for microbial fossils.

Gwyn Hernandez

LinkedIn

Seeking to strengthen and enliven our department network, we encourage you to follow our new "UCSB Department of Earth Science" page on LinkedIn. Former students, please follow instructions on the page that will identify you as a department alum. https://lnkd.in/gt3VTTrk

DISTINGUISHED ALUMNI 2025

Annually, the Department honors two of its alumni—one from academia, and one from elsewhere—celebrating their accomplishments and providing our current students exemplary role models.

Bill Chadwick

Bill entered UCSB's Geology doctoral program in 1983, fresh off working for two years as a field assistant for the USGS at Mount St. Helens right out of college, an experience that convinced him that working at active volcanoes was about as exciting as it gets! At UCSB, Bill's graduate work focused on mechanical modeling of the deformation data that he helped collect at Mount St. Helens, under the guidance of PhD advisor Ralph Archuleta. After UCSB, Bill had an NRC postdoc with the USGS in Menlo Park, CA, where he mapped and modeled the distinctive pattern of eruptive fissures on the volcanoes of the Galapagos islands.

Following that, Bill started a job at Oregon State University in 1989, working with a NOAA research program studying submarine volcanoes and hydrothermal vents at OSU's Hatfield Marine Science Center in Newport, OR. That involved going out on ships for weeks at a time and using an array of tools to map, observe, and monitor active submarine volcanoes. Highlights of that work have included documenting the first historical eruption on the global mid-ocean ridge system, making the first visual observations of an active deep-sea eruption at a subduction zone seamount,

Bill Chadwick

and monitoring seafloor deformation at Axial Seamount in the NE Pacific, establishing a pattern that has been used to forecast its eruptive activity.

Erik Bartsch

Erik once thought he'd be a lawyer—until a geology gen-ed course completely changed his life. He fell in love with Earth science—especially structural geology—and its role in energy. As a UCSB undergrad, he worked with Bruce Luyendyk and others on the Goleta oil seeps. He explored how shallow structures relate to seep density, leading to a poster at AGU. That research—and some persistence plus decent grades—helped him land a spot in grad school at the University of Colorado.

Erik went on to build a global career in the oil and gas industry, working as a geoscientist across 26 basins worldwide. At Shell, he advanced through a range of technical and leadership roles, eventually becoming a senior executive and leading the Gulf of Mexico exploration business, amongst other assignments. Along the way, he discovered that the same passion for solving 4-D geologic puzzles extended to 4-D business challenges and leading people to do great things.

In 2020, Erik moved back to California as CEO of Aera Energy, leading the company to top-tier performance while advancing carbon capture and decarbonization efforts.

Erik Bartsch

Today, he runs Meliora and Associates, a firm focused on investments at the intersection of traditional energy and decarbonization solutions.

Mike Fuller

by Bruce Luyendyk

I was the only geophysicist in the department when Mike Fuller arrived from the University of Pittsburgh in 1974. Luckily for me, he brought with him a group of top graduate students and technicians to set up a world-class paleomag and rock magnetism laboratory. This lab featured a then-new cryogenic magnetometer housed within a magnetically shielded room that he had built in the Woodhouse Lab. He was working on the remanent and rock magnetism of Apollo lunar samples, which he kept locked up in a safe in his office. My students and I began work on Southern California tectonics, and Mike and his students, along with technician Bob Dunn, provided much of our support.

Along with his generosity, I remember Mike's unusual, good cheer. I rarely saw him lose his temper over the years here. That self-control and decent nature made him a great department chair, a job he thoroughly enjoyed, as he made it a people-oriented role. That's what I appreciated the most about this fine man.

Remembrances from his geomagnetic colleagues pointed out his seminal work on lunar magnetism. He also did groundbreaking research on the details of geomagnetic field reversals. With colleagues at Caltech, he branched into biomagnetism research for clues to animal navigation. The AGU awarded Mike the John Adam Fleming Medal in 2012.

Mike Fuller Battery Acid Test. Photo: Bryan Richter

He was also fun. We remember his devotion to tennis, playing with department colleagues and students. He was a pilot, trekking across the southwest to meet friends and work. This interest stemmed from his early stint as a navigator in the RAF flying off carriers.

Rachel Haymon sums up Mike's legacy: "Mike Fuller was truly a scholar and a gentleman, and we loved him. We are deeply grateful for his kind and wise leadership of the department when he was the chair."

Alumni News

Aaron Howard (2011) published a coffee table book, titled Isla Vista Season: Ocean, Land, and Light, showcases his 15-yr photography portfolio of Isla Vista and UCSB's natural framework, from shorebreak and landscapes to sunsets, wildlife, and more.

Allison Greaney (2018) was seconded to the Department of Energy as a program officer in 2024. She works at Oak Ridge National Laboratory where she is a radiochemist working on nuclear non-proliferation.

Khalil Droubi (2020) is in the PhD program at the University of Wisconsin and is working with Chloë Bonamici.

Kelly Tingle (2021) is finishing up the last year of her PhD at Vanderbilt.

Francisco Apen (2022) has started a position as an Assistant Professor at Northern Arizona University, Flagstaff, AZ.

Tina Woltz (2022) is an 1851 Research Fellow at Imperial College in London.

Ruben Underwood-Aguilar (2024) is pursuing a Masters in Structural Geology at University of Nevada, Reno. He has also been the cook for our Summer field Geology courses in the summer of 2024 and 2025.

Rosanna Chapman (2024) works for Andean Precious Metals Corp as an exploration geologist at the Soledad Mountain Mine.

EARTH SCIENCE NEWS

Tightly folded neoproterozoic state being examined by group of students. Photo: Phil Gans

Department of Earth Science
University of California, Santa Barbara
1006 Webb Hall
Santa Barbara, CA 93106-9630

UC **SANTA BARBARA**

Department of Earth Science

Thank you for your generous gift!

_____

_____

_____

Place
Stamp
Here

Department of Earth Science
1006 Webb Hall
UC Santa Barbara
Santa Barbara, CA 93106-9630

Appeal 26D04

Yes! I want to support The Department of Earth Science with a gift of $ _____

Make Check Payable to UC REGENTS

▶ I would like to direct my gift to:

- ❑ **WHERE THE NEED IS GREATEST**
- ❑ Graduate Program Fund
- ❑ Arthur G. Sylvester Summer Field Fund
- ❑ Robert W. Webb Fund
- ❑ Outstanding Senior Award
- ❑ Robert Norris Brunton Award
- ❑ Richard V. Fisher Scholarship in Volcanology
- ❑ Geophysics Award
- ❑ Douglas Woodhouse Award
- ❑ George Tunell Memorial Fellowship
- ❑ Wendell Woodring Memorial Fellowship

Make Check Payable to UCSB FOUNDATION

▶ I would like to direct my gift to:

- ❑ Distinguished Lecturer Fund
- ❑ Field Instruction Fund
- ❑ Global Field Travel Fund*
- ❑ William Bushnell Scholarship
- ❑ Preston Cloud Memorial Fund
- ❑ G.K. Gilbert Award
- ❑ Harry Glicken Memorial Fellowship
- ❑ Graduate Student Opportunity Fund*
- ❑ Alex Johnson Memorial Fund
- ❑ Tanya Atwater Endowed Scholarship
- ❑ Hopson/Wise Grad Field Research Fund
- ❑ The Lloyd and Mary Edwards Field Studies Fellowship Endowed Fund
- ❑ Peggie Dearth Wormington Field Award

For more information or to make a credit card gift online go to **www.geol.ucsb.edu** or contact Development at (805) 893-GIVE

It is the policy of the University of California, Santa Barbara and the UC Santa Barbara Foundation that a modest portion of gifts and/or the income from gifts may be used to defray the costs of raising, administering, and expending funds, currently 6%.

* Funds matched by original donor!

▶ DONOR INFORMATION

Name(s) for Acknowledgment _____

Address _____

City _____ State _____ Zip _____

Home phone _____ Cell phone _____

Email _____

Employer _____

Business Address _____

City _____ State _____ Zip _____

Business Phone _____ Email _____

Preferred Mailing Address ❑ Home ❑ Office

▶ PLEASE PROVIDE MORE INFORMATION ABOUT

❑ Making a gift using securities

❑ Including Earth Science at UCSB in my will or living trust

▶ MATCHING GIFTS

I (or my spouse) work for a company that will match my gift.

Company name _____

❑ Form Enclosed ❑ Form Forthcoming

❑ I wish to remain Anonymous

Thank you for your generous gift!