



deepen their knowledge of social equity, pursue careers in social impact, and lead the

Congratulations to our Graduating Seniors!!

(click here)

SEOE

May/Aug 2025 Graduates

Geological

Sciences

Kyla Conyers

Brett Hepler

Laura Doughton

William Holliday

Marine

Science

Stephanie Avendano-

. Wichtendahl

Jacqueline Bald

Abigail Bolard

Environmental

Studios

Raeva Rali

David Ballagh

Denise Beiar

Valerie Birtell

Environmental

Science

Zoe Raker

Lily Bosch

Sydney Brock

Aidan Burke

change. Congratulations Raeva!!

Charlotte Boyd Nina Coli Riley Blanchar Abigail Kight Madison DiMarco Caroline Bulmer Austin Nichols Desmond Boyd Nicholas Fato Andy Penninger Kallena Branham Brandon Couture Grace Crider Spencer Forstot Natalie Truman Ainsley Cain Andrew Fowlkes **Emily Dunn** Sarah Cerone Keisi Giini Jordan Gourville Eliza DeGiacomo Joshua Hardin Isabella Good Leah Eaken Aidan Houlihan Ella Harper Lauren Earley Vivienne Jungslager Zachary Henry Madison Esse Lena Kadau Faith Hess Adrianna Florit Kate Gahlhoff essica Lanier Christopher LaBarron Emily Jensen Domenica George Emma Gladziszewski Gretchen Larson Grace Morgan Kaleigh Milton Congratulations Olivia Hall Marley Nielsen Graduates!! Mia Honeymar Brett Painter Katherine Owens Payton Potter Phillip Perea Joshua Johnson Liam Kellogg Chloe Pottinger Ava Pratt We are so proud Lauren Reed Sophia LeeMaster John Sanders of you!! Tyler Schueller Patrick Rooney Phillip Mims Emily O'Leary Skye Slater Rivers Rucker Emilia Stachl John Sanders Canyon Priddy William Simkins Hildegard Tollefsen Madeline Rich Victoria Ross Donna Ullrich Chloe Sligh Jasper Vasilevskis Idrissa Smith Anna Soykan Thomas Sponseller lsabel Stark Brooke Staples Kelley Strike Morgan Swartz Chloe Stephenson Hanna Weissman Gianna Vancura Julianna Willoughby **Graduating Seniors... You're invited!!** **Graduation Celebration** Friday May, 9th @2pm in JONES 210 Family and Friends are welcome. >>RSVP here << **Graduate Office GOEOE Writing Retreat** Graduate students spent a weekend at the Baruch Marine Field Lab to focus on writing. The Kimball Lodge provided a productive environment to work on writing about their research.

Poster presentations at Discover USC **Ademar Fernandez** Nandana Goswami **Autumn Muhly Christina Gregory** Pamela Lee Ryan Walsh **Lydia Sims SEOE Spring 2025 Award Winners**

> THE STEPHEN F. TABER AWARD FOR OUTSTANDING M.S. RESEARCH IN GEOLOGICAL SCIENCES JOSEPH MARTINA THE STEPHEN F. TABER AWARD FOR OUTSTANDING PH.D. RESEARCH IN GEOLOGICAL SCIENCES THE GOEOE'S GRADUATE DAY CONFERENCE OUTSTANDING POSTER AWARD

> > Congratulations on your success!!

Christina Gregory (Bulusu) successfully completed her MS MSCI Thesis Qualifying Exam on Understanding the Dynamics of the Beaufort Gyre in the Arctic Ocean. Way to

Henry Guy (Pinckney) successfully completed his MS MSCI Thesis Qualifying Exam on

Ethan Cruz (Bulusu) successfully completed his MS MSCI Thesis Qualifying Exam on Mesoscale and Submesoscale Eddy Detection using Satellite Observations. Well Done

Congrats to Quintiantian (Tian) Nong (Peng) on successfully completing her MS MSCI Thesis Qualifying Exam on Estimation of fungal contribution to nitrous oxide production in

Effects of Coastal Urbanization on Estuarine Benthic Microalgae. Nice job Henry!!

Qualifying/Comprehensive Exams:

salt and brackish marsh sediments. Way to go Tian!!

Dylan Blaskey has joined our faculty in the SEOE. Dylan is a hydrologist who integrates remote sensing, mechanistic and machine learning models, field observations, and community based knowledge to address complex hydrological challenges.

interested in joining his Integrated Systems Hydrology Lab.

Check out his website for more information or if you are

go Christina!!

Ethan!!

THE SCHOOL OF THE EARTH OCEAN AND ENVIRONMENT
IS PROUD TO ANNOUNCE THE WINNERS OF THE
SPRING 2025 GRADUATE AWARDS

MEERM OUTSTANDING INTERNSHIP AWARD

OUTSTANDING TEACHING IN MARINE SCIENCE

OUTSTANDING M.S. RESEARCH IN MARINE SCIENCE PAMELA LEE

OUTSTANDING PH.D. RESEARCH IN MARINE SCIENCE LIAM BATCHELDER & ARCHANA VENKATACHARI

THE STEPHEN F. TABER AWARD FOR OUTSTANDING TEACHING IN GEOLOGICAL SCIENCES CRISTIAN ADEMAR FERNANDEZ

We look forward to working with him soon!! Bianca Ross will be joining our department this Fall 2025 semester as an Instructor. We welcome her and look forward to working with her as a new colleague. KUDOS!! **Awards and Grants:**

Publications:

Around the Department

<u>USCToday.</u> Congratulations Jessica!! A truly wonderful honor!! • (100 club!!) Michael Bizimis joins the club (with 100 peer-reviewed publications) as a co-author on a recent publication in AGU Advances on Variations in Hawaiian plume flux controlled by ancient mantle depletion. What drives intraplate volcanism in Hawaii? Rising mantle plumes! While previous models suggest that excess heat (perhaps from the core-mantle boundary) drives plume upwelling,

this research shows that compositional boyancy in the form of ancient depleted mantle within the plume may be a major driving force of mantle convection. This research initiated during a sabbatical by Michael Bizimis at the University of Munster, Germany, and a SPARC award to Paul Beguelin

Northwest Hawaiian Ridge

Groups in bold contain new Ce isotope data

Older islands/seamounts

A North Arch (rejuv. –like)

Northwest Hawaiian Ridge

Pd NPP agglomerate

Suspension phase (collected during wash

steps) → SP-ICP-MS

Agglomerates consisting of ~160 Pd NPPs each

Cell phase (reconstituted cell pellet) → SC-ICP-MS

1-2 Pd NPP agglomerates consisting of ~300 Pd NPPs each

Kaua'i (shield) ▲ Kaua'i (rejuvena

Ni'ihau (shield)

Extreme LOA

Kahoʻolawe
Lanai
West Molokaʻi

Koʻolau (Makapuʻu)

 Tammi Richardson is a co-author on a new paper in Environmental Chemistry focusing on Quantification of palladium-labelled nanoplastics algal uptake by single cell and single particle

10-nm Pd

Pd

Shannon Powers is a co-author on a recent paper in Marine Ecology Progress Series on Using

multiple-stable isotopes (δ13C, δ15N, and δ34S) to assess past and present Adelie penguin foraging

To right of line = syllabi that over-report use of reform teaching practices

vary within

populations?

25

15

Syllabus Score

adaptive polymorphism controlling butterfly silver iridescence. A video of the paper is linked below

How does butterfly silver iridescence

• Carol Boggs is a co-author on a recent publication in Current Biology on Genetic basis of an

(click the image) or you can read about it here: https://doi.org/10.1016/j.cub.2025.03.028

Cryptomonas

grounds in the Ross Sea region, Antarctica. https://doi.org/10.3354/meps14794

Cell cultures exposed to individual Pd core shell nanoplastic particles (Pd NPPs) for 72 h

Jessica Barnes has been named a Fellow of the John Simon Guggenheim

Memorial Foundation. This fellowship is accompanied by an

(SEOE alum). https://doi.org/10.1029/2024AV001434

400 km 47 Ma b

Volcanic centers key

LOA

▼ Mauna Loa ▲ Hualālai

● Māhukona **◇ Koʻolau** ▶ West Ka'ena ■ Penguin Bank

inductively coupled plasma mass spectrometry. https://doi.org/10.1071/EN24011

KEA

Mauna Kea (high CaO)

Kohala
Haleakalā

West Mau

award of \$65,000. Jessie will join the 100th class of Guggenheim Fellows at a reception in New York City on June 2nd. Read more about Jessie and this prestigious award in an article featured in

 Katherine Ryker is a co-author in a recent publication in Journal of Geoscience Education on Do course syllabi reflect observed teaching practices in undergraduate geoscience courses? This study examines the alignment between syllabi and in-class instruction. It describes the development of a syllabus rubric and a comparison between those scores and 155 classroom observations from 2012 to 2019. This work suggests that syllabi do not strongly predict the teaching practices used in geosciences classrooms. We recommend that faculty use syllabi as an opportunity to reflect on and document their teaching practices so that syllabi are more descriptive of the instruction that students can expect in their courses. https://doi.org/10.1080/10899995.2025.2489922 100 Above line = syllabi that under-report use of reform teaching practices 80

60

40

SC

Tran

5

RTOP Score

Presentations: • Robert Dunn, Liam Batchelder and Josh Stone were featured as the April 15th webinar in NOAA's NERR Collaborative Science for Estuaries Webinar Series. They presented their research on Understanding Changing Estuaries, Shrimp, and their Fishery in the Lowcountry. *Great job y'all!!* • Earlier this year, Matt Kimball and Robert Dunn presented the January 28th webinar featuring their research on Examining Oyster Reef Fauna Using Non-invasive Sampling Techniques. Watch their webinar <u>here</u>. In the News • Xuefeng (Nick) Peng was interviewed by Dr. Helen Czerski from the Cosmic Shambles Network at the 2024 Ocean Sciences Meeting in New Orleans, LA. His discussion about his research on marine fungi has now been incorporated into Episode Two ("Passengers") of "The State of Our Blue Machine". Nick's portion starts at 10:11:

• Dan Frost was in the news offering his insight to the recent 2.3 magnitude earthquake near Elgin last week. Read about it in the FOX Carolina article Seismologist provides update on years-long Midlands earthquake swarm following overnight tremors Let the department know about the wonderful things you and the people around you are doing!! Is there something/someone you are proud of? Let us know Kudos Form. **KEY DATES:** May 1st - Emily Contract MS MSCI Qualifying Exam @ 10:45 in EWS 604 May 9th - SEOE Graduation Celebration @ 2pm in JONES 210 May 9th - Madeline Thompson's PhD Comprehensive Exam @2pm in EWS 210 May 10th - CAS Commencement May 14th - Geology Field Camp departs for California May 15th - Ekaterina Rojas Kolomiets Dissertation Defense @10am in EWS 210

Follow us on Social Media