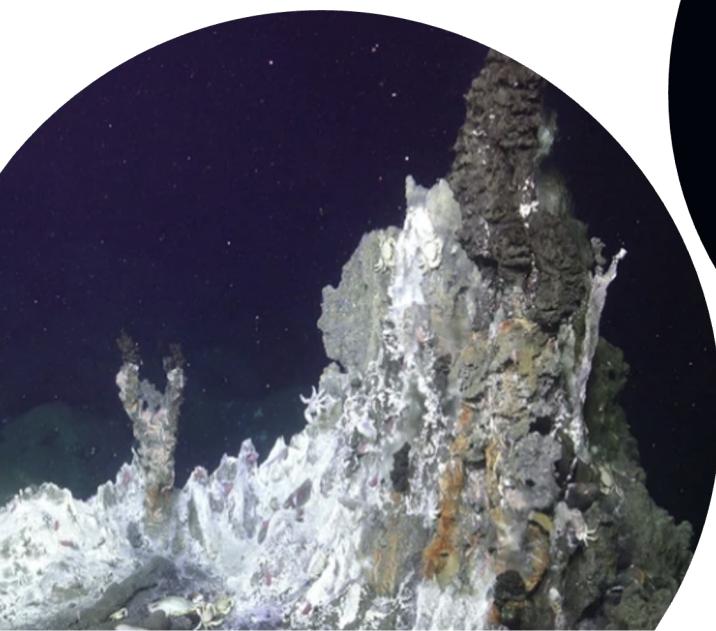


DeSSC NUP Introductions

B-L





Michelle Beck (she/her)

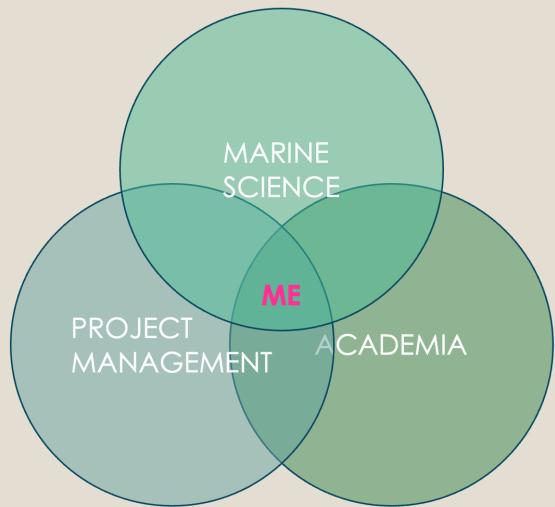
I'm a biological oceanographer & microbiologist passionate about Hydrothermal vent symbioses, marine fungi and science communication. I'm a third year PhD student in the Beinart Lab at The GSO-URI.

Future Goals

1. Establish a faculty career leading a deep-sea research lab
1. Build interdisciplinary collaborations within the deep-sea science community
1. Serve as Chief Scientist on research cruises— and dive in Alvin

ME

- **Tremaine Bowman**
- Trinidad and Tobago
- PhD Marine Sciences, UWI
- Science Educator
- Big Ocean States Advocate
- Deep Sea Enthusiast



MY WORK

- Coastal and Freshwater Ecology
- Fish and BMI Biology and Ecology
- Caribbean Corel Reef Ecology
- Sargassum Management
- mCDR
- Deep Sea Research
- Capacity Development



MY FUTURE WORK

- Caribbean Deep Sea Research
- Capacity Building
- Deep Sea Fish Ecology
- Deep Sea Meiofaunal Ecology
- Post-Doctoral Fellowship
- Tenure-track Lectureship



Penny Demetriades

birth-2019

New Jersey

High school research with
eastern mud snails and their
trematode parasite



where I hope to go! coastal & deep-sea eDNA (gov?)

2019-2022

Lehigh U (B.S. Molecular Bio)

- Microbial contributions to eDNA degradation (*Santiago Herrera's lab*)
- Microplastic prevalence in *Swiftia* in the GoM
- Sailed on R/V Point Sur with ROV Global Explorer



2022-2027

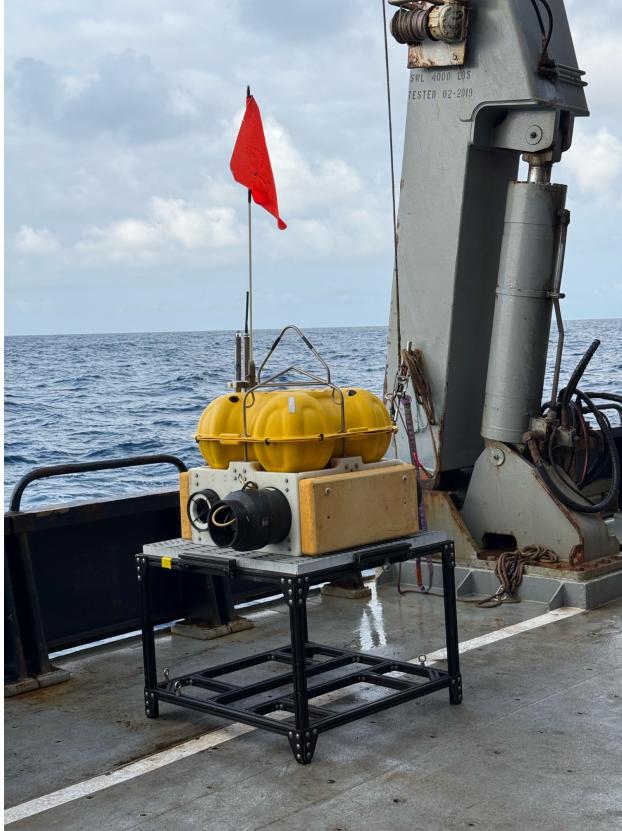
U. South Alabama & Dauphin Island Sea
Lab (PhD Marine Sciences)
DISL-FDA Fellow

- Molecular (eDNA, qPCR) microbial source tracking (*Brandi Kiel Reese's lab*)
- Sailed on R/V Thomas G Thompson with ROV JASON/MEDEA



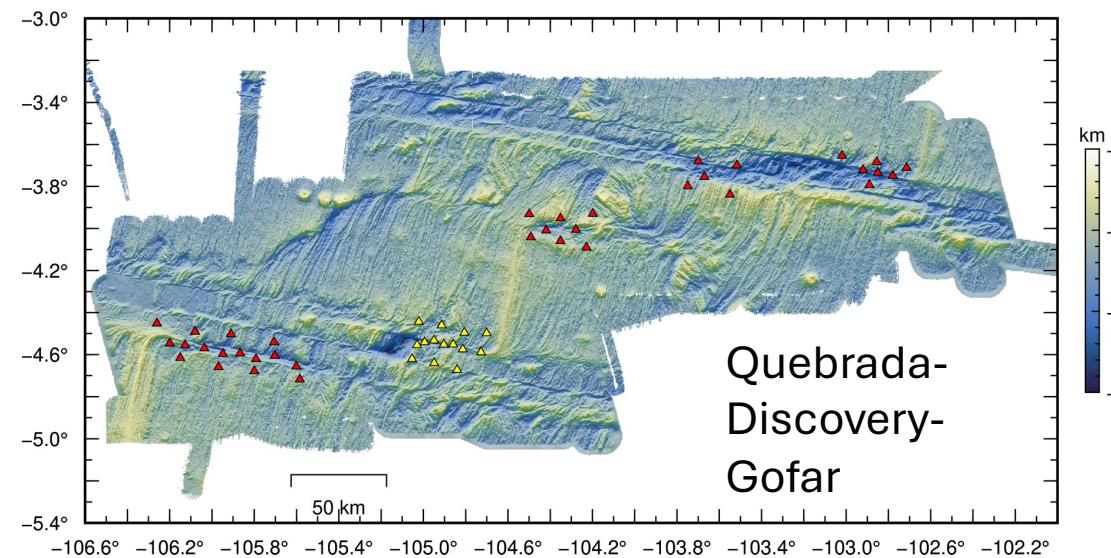


Jianhua Gong
Assistant Professor
Indiana University

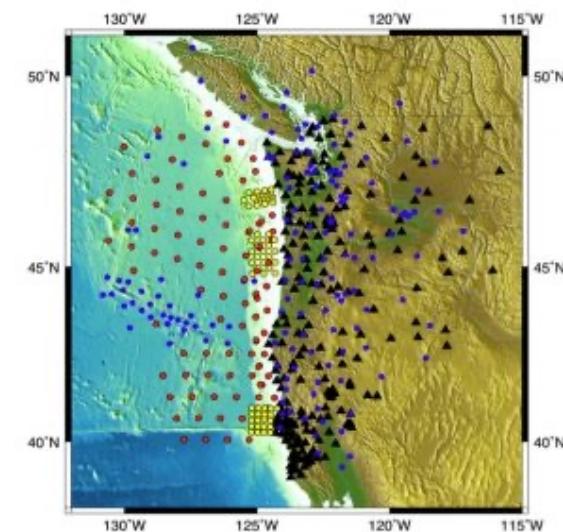


Interests in Sentry:

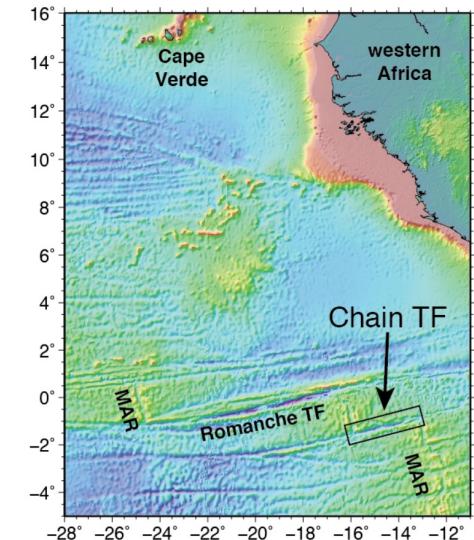
- High-resolution bathymetry
- Sub-bottom profiling
- Magnetic anomaly
- Gravity



Mendocino Triple Junction



Chain Transform fault



Lydia Hayes-Guastella

- Michigan State University
 - B.S. Microbiology (Matthew Schrenk's Geomicrobiology Lab)
 - Cultivation and Ecophysiological testing of bacteria from global terrestrial serpentinizing systems
- Texas A&M University- Corpus Christi
 - M.S. Marine Biology (Lin Zhang's Aquatic Isotope Lab)
 - Coastal Wetland biogeochemistry
 - Stable isotopes
 - Nitrogen mitigation assessment in wetland restoration
- University of South Alabama & Dauphin Island Sea Lab
 - PhD Candidate in Marine Sciences (Brandi Kiel Reese's Geomicrobiology lab)
 - Marine deep subsurface microbial communities
 - Mariana forearc
 - South Atlantic Gyre
 - Metagenomics & metatranscriptomics
 - Culture-dependent work

Future Goals

- Establish a faculty career that allows for continued interdisciplinary research in deep-sea and marine subsurface environments
- Serve as Chief Scientist on a research expedition
- Dive in Alvin
- Spend more time at sea



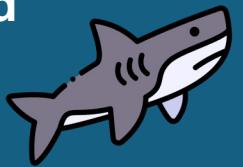
Katie Howe, PhD

Postdoctoral Scholar at the Dauphin Island Sea Lab and University of South Alabama

PhD in Biological Oceanography at Florida State University

MSc in Coastal Zone Management at Nova Southeastern University

Undergrad research
Shark biology



Master's research
Sea surface microlayer
(air/sea interface)

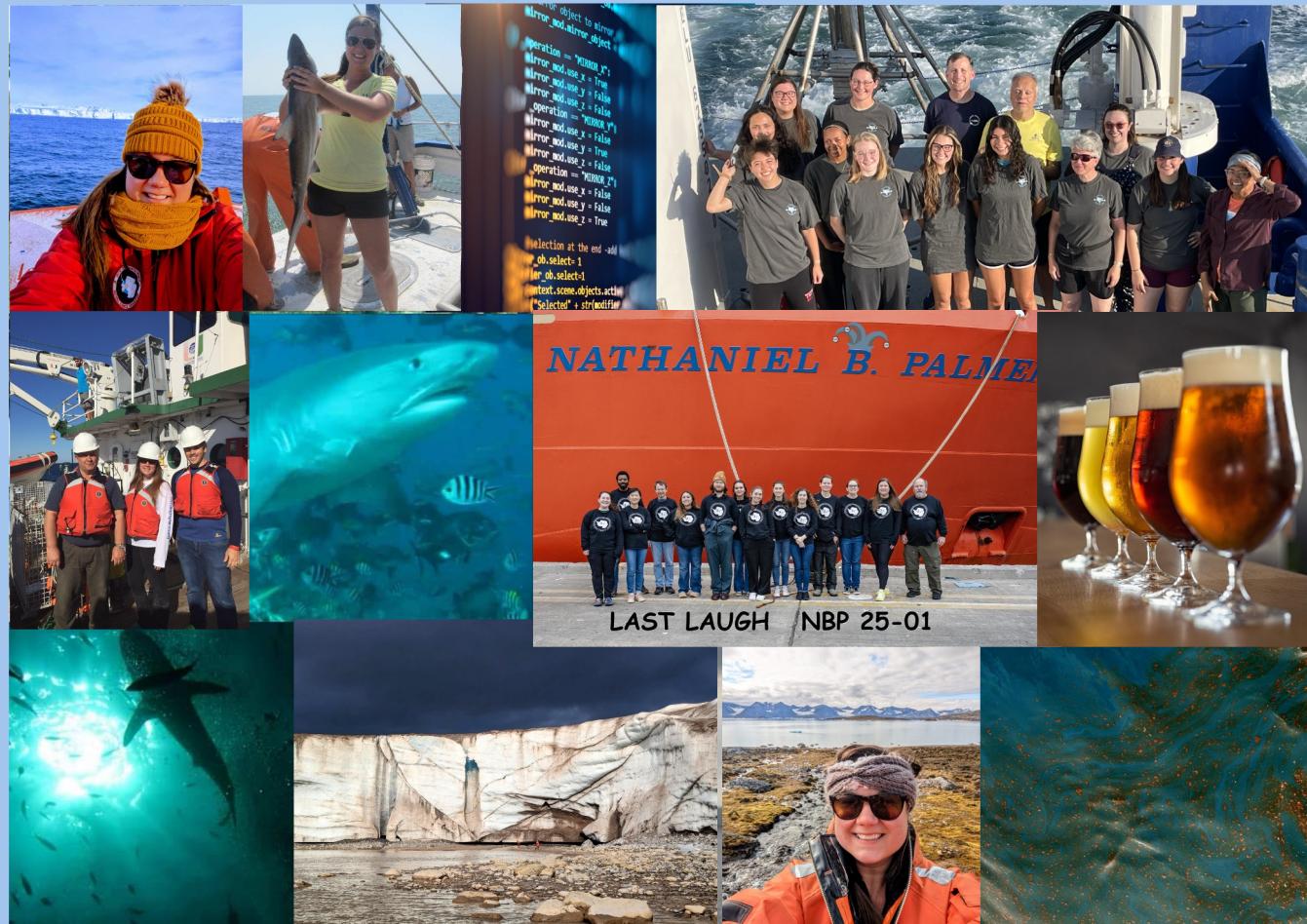


PhD research
Water column



Postdoc research
Sediment/water interface
and subsurface

Microbial ecology



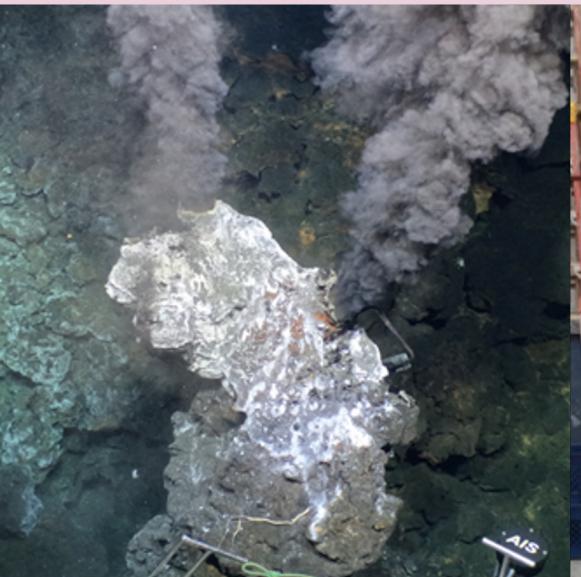
Julia Hubbard

PhD Candidate Geology, RPI (advisor - Dr. Sasha Wanger)

- Expected Defense - Fall 2027

B.S. Geology RPI '23

Future Goals: Expand cruise/deep ocean fieldwork experience to include a variety of hydrothermal sites



Dissertation Research: formation, transport, and storage of condensed aromatic carbon/graphite within black smoker hydrothermal vent systems at 9°N EPR

- Fieldwork: Spring 2025, AT50-36 (RV Atlantis)

Alexis M. Janosik

Professor & Graduate Program Coordinator
University of West Florida

- **Ph.D. Molecular Marine Ecology from Auburn University**
 - Marine biologist specializing in biodiversity, conservation, and molecular ecology
 - Passionate educator committed to student research and experiential learning
- **Research Focus:**
 - Utilize **environmental DNA (eDNA)**, **metabarcoding**, and **population genomics** integrated with **spatiotemporal modeling** to investigate biodiversity patterns
 - Conduct **species distribution monitoring** across diverse ecosystems, from the Gulf of Mexico to Antarctic regions
 - Study **phylogeography**, **microplastic impacts on marine organisms**, and **telomere dynamics** as biomarkers of physiological stress and longevity
 - Expanding research into **deep-sea taxa** as potential *refugia for biodiversity conservation* under climate and anthropogenic pressures



Department of Biology
UNIVERSITY of WEST FLORIDA



Preston Cosslett Kemeny



LACIE LEVY

Oceanography, PhD Student

Metabolomics + Hydrothermal Vents + Community Ecology

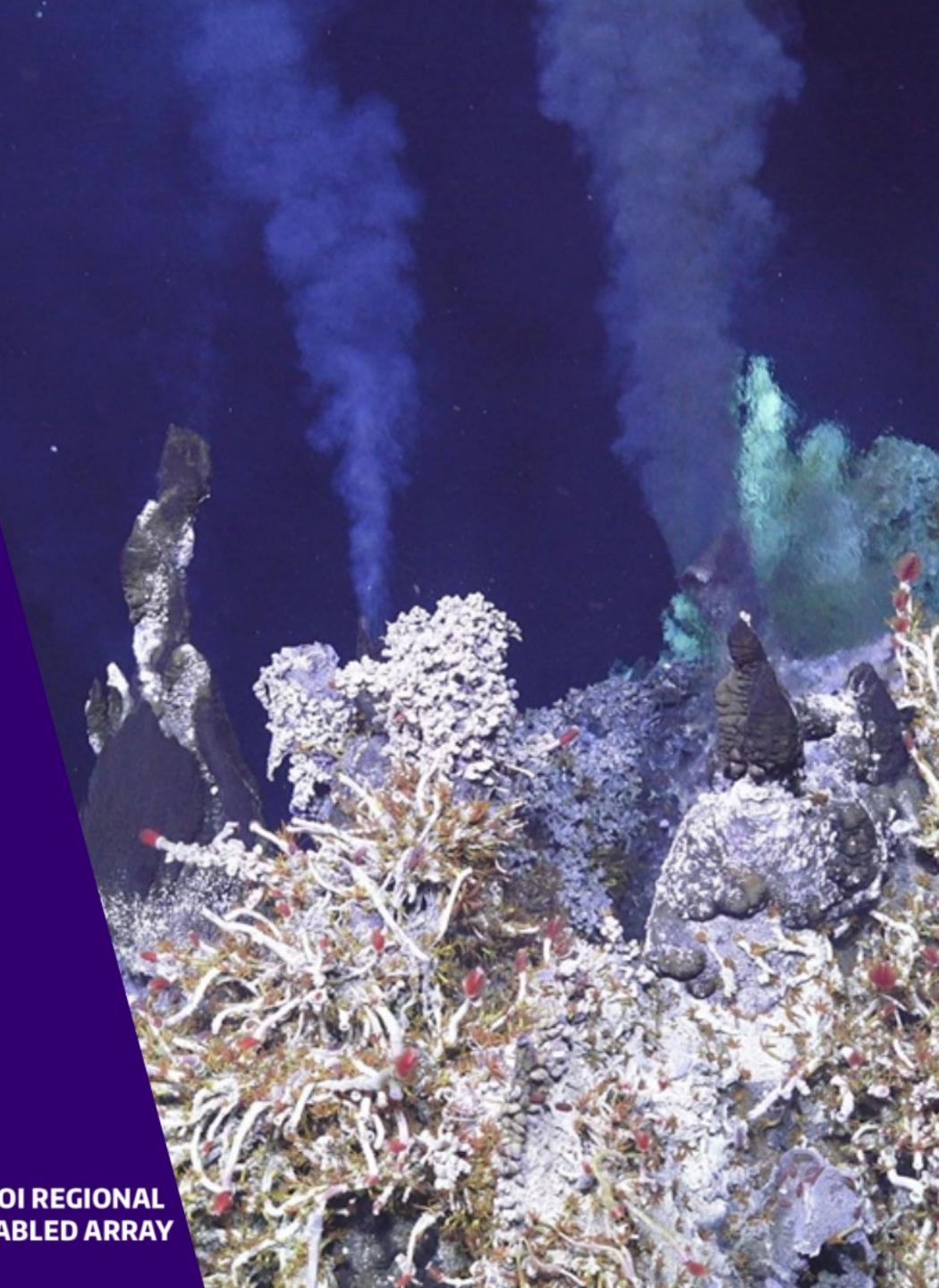
lalevy@uw.edu

W UNIVERSITY of WASHINGTON



School of Oceanography
COLLEGE of the ENVIRONMENT

OOI REGIONAL
CABLED ARRAY





Ethan Lopes

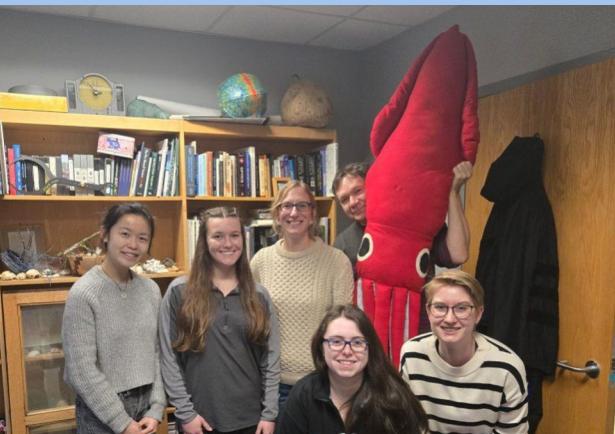
Hometown: Carson City, NV

- Williams College '20
- Astrophysics & Geosciences

- 5th year PhD Student at Stanford University
 - Advisor: Sonia Tikoo
- *Rock Magnetism + Paleomagnetism*
- Fluid-rock interactions → serpentinization
- **IODP Expedition 399 scientist**
 - Can SrP. lead to magnetic anomalies?
 - How do oceanic core complexes move?

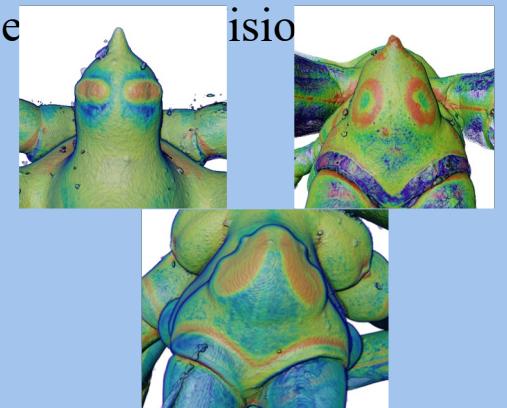
Future Goals: **ALVIN!** + Science 4 Life

Fun Fact: Rubber Duck Collection (400+) 



Alyvia Martinez Zoroya

- 2nd year Biology Ph.D. Student, Duke University, Sönke Johnsen's Lab
- B.A. Biology and Mathematics, Albion College, 2024
- Dissertation Research: Sea spider morphology
 - Morphology
 - Optical modeling
 - Behavior
- Scientific Diver
- Fieldwork:
 - 2025 - R/V Neil Armstrong with ROV Jason
 - 2026 plans - R/V Atlantis with HOV Alvin
- Future Goals: Apply research to bio-inspired design applications in ocean technology (industry or gov)





Alanna Mnich

Postdoctoral Researcher - University of Massachusetts Dartmouth School for Marine Science and Technology

Undergraduate and NOAA Research

- Zooplankton and larval fish ecology
- Cephalopod paralarvae identification in USVI



Doctoral Research

- Isotopes in larval fish (Atlantic bluefin tuna) to discern natal origin
- Oxygen deficient zone biogeochemistry



Postdoctoral Research

- Chemical tracers as indicators of life history (fish, scallops)
- Oxygen deficient zone biogeochemistry (cont.)



DeSSC Interests

- Comparative studies of growth of organisms (ex. cephalopod paralarvae) in extreme environments
- Zooplankton of deep sea or extreme environments
- Deep sea biogeochemistry

Caitlin Plowman, PhD

Instructor & Researcher

Oregon Institute of Marine Biology,
University of Oregon

Research Areas:

- Reproductive patterns & drivers
- Larval development & dispersal
- Biodiversity & community composition

Habitats of Interest:

- Shallow subtidal
- Methane seeps
- Hydrothermal vents
- Hadal trenches



Future Goals:

- Land a deep-sea research post-doc!
- Continue at-sea research with NDSF vehicles
- Broaden my network
 - Write collaborative grant proposals
 - Write better grant proposals

DANIEL PRICE

Education

B.S. in Geology 2022. West Virginia University
1st Year M.S. Geology student. University of Tennessee, Knoxville (Advisor: Dr. Anna Szynkiewicz)

Thesis Research: GIS focused studies of circumpolar dunes on Mars, assessing the paleo wind direction from HiRISE images.



- Future Goals/Interests:
 - Seafloor Mapping/Bathymetry
 - Hydrothermal Vents: geochemistry, astrobiology, Icy Moon Analogs
- Expeditions: NA149 2023 – E/V Nautilus with ROV Hercules and Atalanta
- Skills: Science Communication, NAUI Open Water Diver with Nitrox

Dallas Sherman

TEXAS Geosciences
The University of Texas at Austin
Jackson School of Geosciences

UTIG INSTITUTE FOR GEOPHYSICS

I'm basically a tech with PI privileges at UT. Scripps alum (PhD in 2018).

Primary tools:

- Controlled Source Electromagnetic methods
- Active source seismic

Interests:

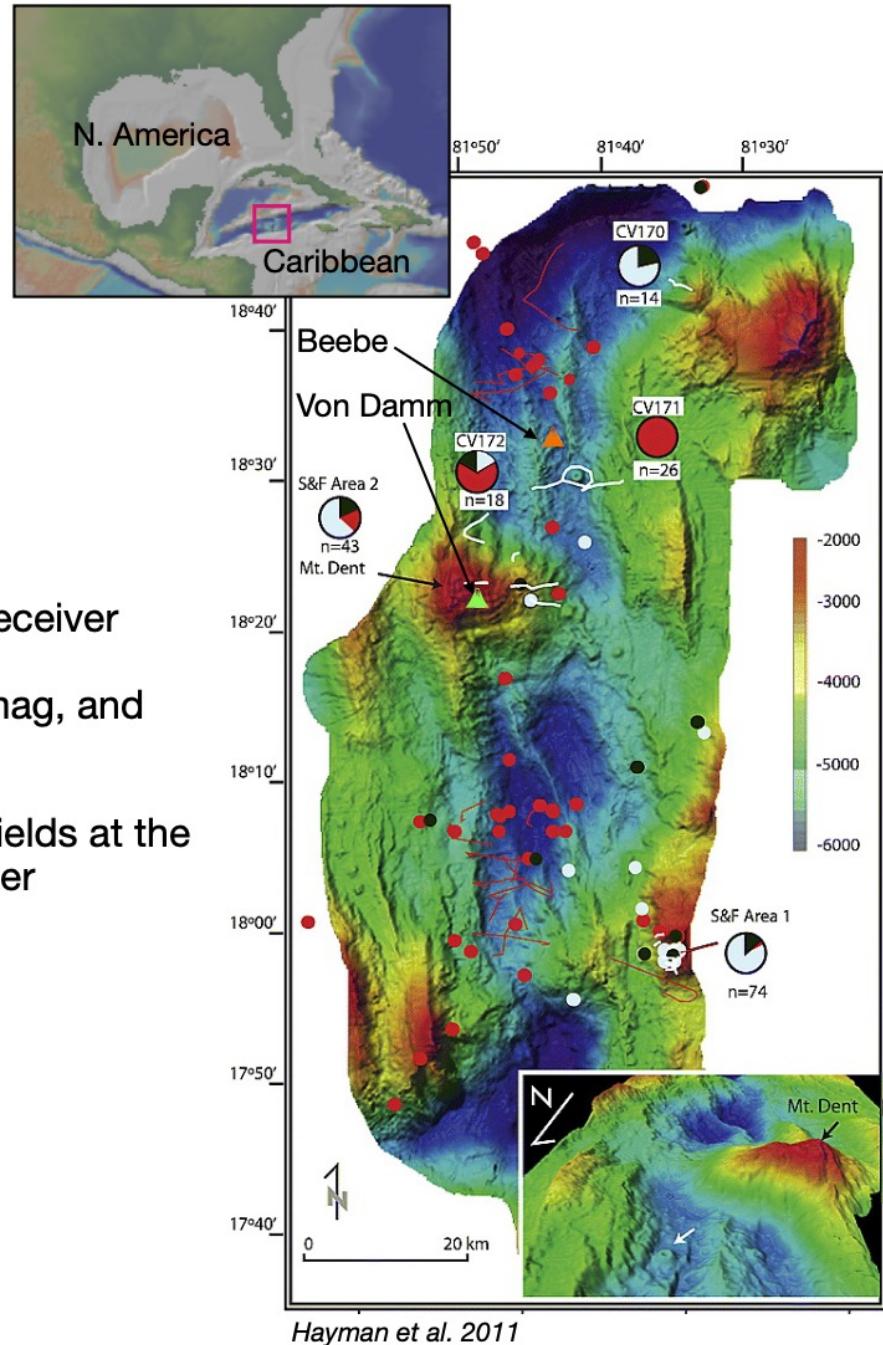
- subsea permafrost, slow spreading centers, SGD



Constable et al. 2018

NDSF interest:

- Use Sentry as a mobile EM receiver
- Simultaneously collect EM, mag, and (hopefully soon) gravity
- Von Damm and Beebe vent fields at the Mid Cayman Spreading Center



Russell Shomberg, PhD

Robotics engineer interested in developing technology cutting edge technologies in support of oceanographic and polar research. Interested in optical, acoustic, & multi-modal sensors. Focussed on operational field work.

Current Work:

University of Rhode Island, Marine Research Associate

Associations:

Crustal Ocean Biosphere Research Accelerator (COBRA)
International Arctic Buoy Programme (IABP)

Previously:

University of Maryland (postdoc)
University of Rhode Island (MS/PhD Ocean Engineering)
Boston University (BS Mechanical Engineering)

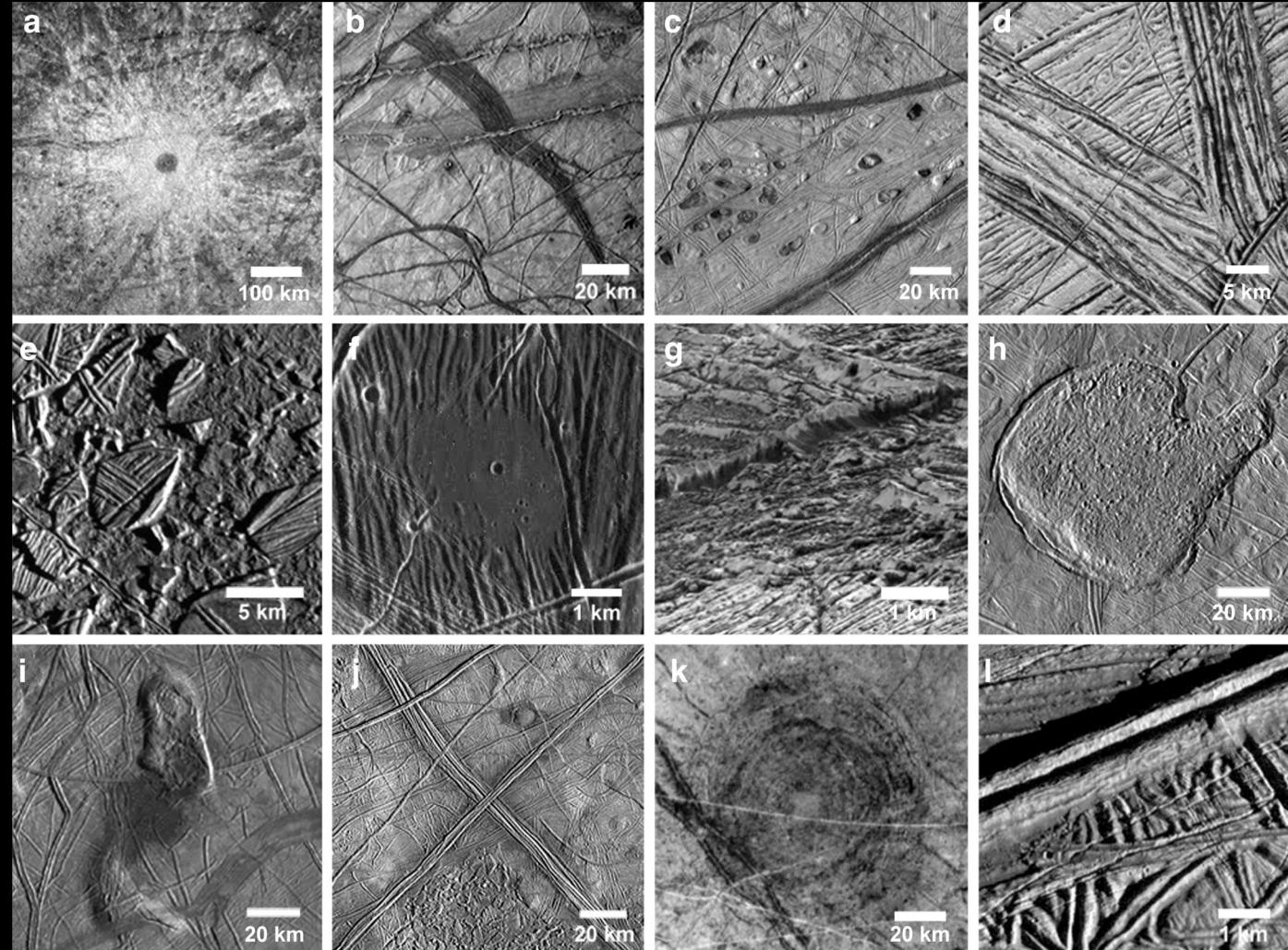
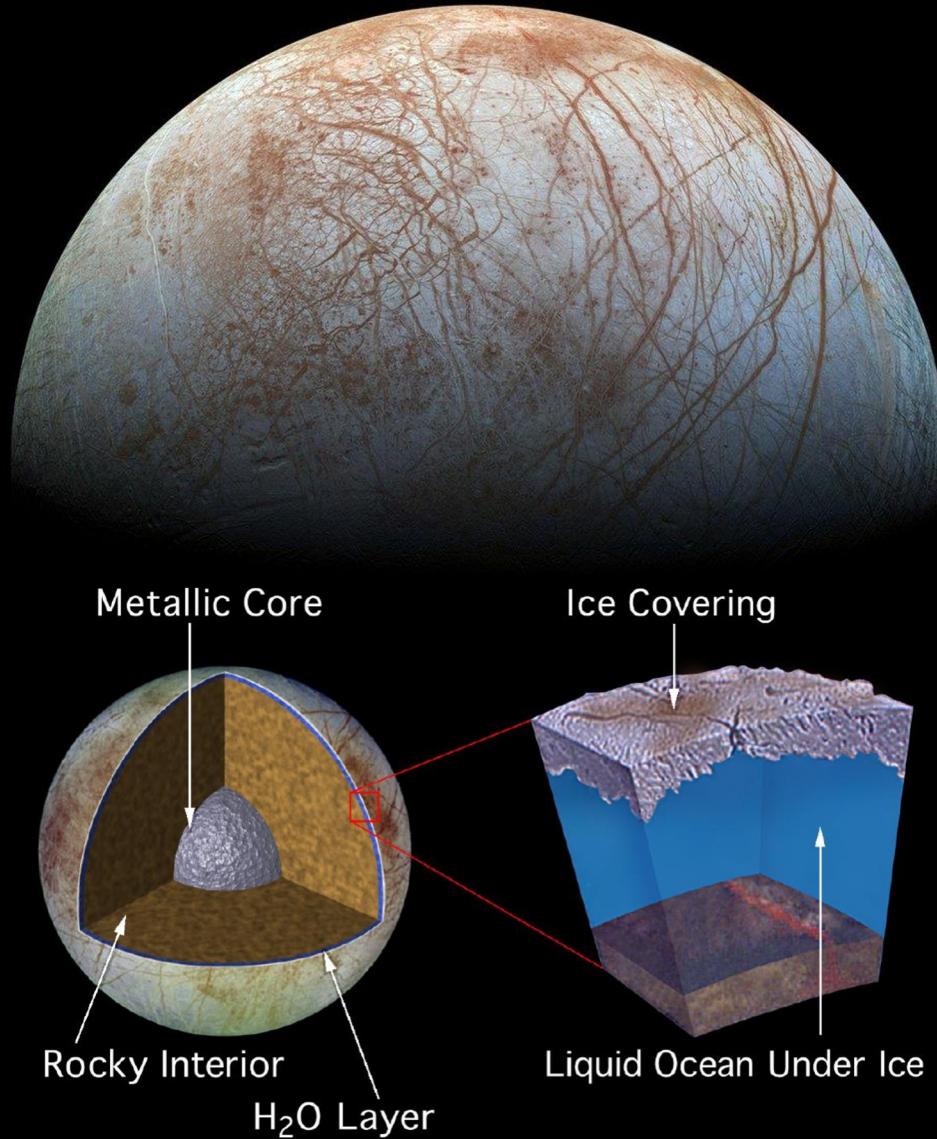


About Me – Elizabeth M. Spiers

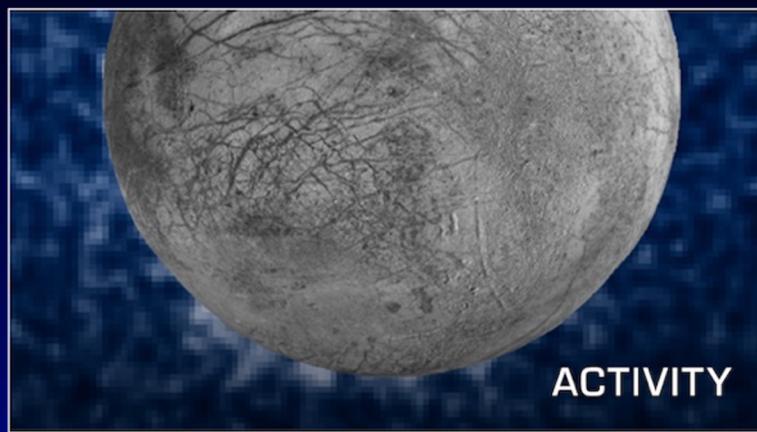
- Research Associate at the **University of Texas Institute for Geophysics (UTIG)**
- **Planetary Scientist** studying habitability of oceans beyond Earth; part geophysicist, part “*astrobiologist*”
- I’m a member of **NASA’s Europa Clipper Mission** Science Team
- Postdoc Scholar at WHOI 2024-2025
- PhD at Georgia Tech, BS at Purdue

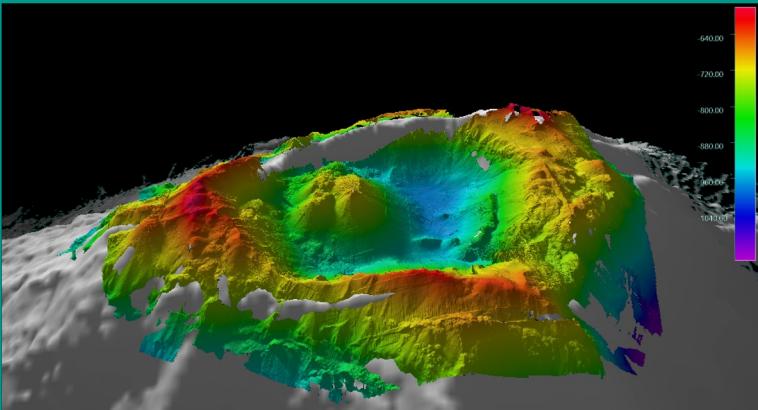


Europa is dynamic and geologically diverse



GOAL: TO EXPLORE EUROPA AND INVESTIGATE ITS HABITABILITY





THE
UNIVERSITY
OF RHODE ISLAND
GRADUATE SCHOOL
OF OCEANOGRAPHY



Future Goals:

1. Write impactful proposals that enable me to charter vessels and deep-sea vehicles.
2. Become a research faculty in the field I'm interested in.
3. To mentor graduate and undergraduate students to complete successful research projects.

Jacob Tomer (he/him)

PhD Student in Adam Soule's Lab at URI-GSO

I'm a Geological Oceanographer who is interested in the morphology, chemistry, and distribution of submarine eruptions. I primarily work with bathymetry, major/trace element data, and sub bottom data to understand the different aspects of deep-sea eruptions.

Jessica Zhong



- Born and raised in Raleigh, North Carolina
- Undergraduate at UChicago
 - Marine Biological Laboratory
 - Field Museum of Natural History
- Hopkins Marine Station of Stanford University
- Marine Biology PhD student and GRFP fellow at UCSD SIO in the Fish Evolution lab
 - Marine Vertebrate Collection

eDNA! Genomics!



Collections!

Functional morphology!



Stanford
University



THE UNIVERSITY OF CHICAGO
MARINE BIOLOGICAL
LABORATORY

UC San Diego