



University-National Oceanographic
Laboratory System

~UNOLS~

Deep Submergence Science Committee Meeting

UNOLS DeSSC Meeting

December 14, 2014

DeSSC New-Users Program Introductions



I want to do it again!

Jennifer Biddle
University of Delaware
Assistant Professor

@subsurface_life
jfbiddle@udel.edu



Microbial ecology, geochemistry, methane, sulfur, Beggiatoa, archaea, subsurface life

Bridgit Boulahanis

- Lamont-Doherty Earth
Observatory

Columbia University

- Graduate Student
- Marine Geology and Geophysics
- Fields of interest: Marine Geophysics, Mid-Ocean Ridges, Multi-channel seismics

Dr. Mercer R. Brugler

SACKLER INSTITUTE FOR
COMPARATIVE GENOMICS

AMERICAN MUSEUM OF NATURAL HISTORY



Smithsonian Institution



NEW YORK CITY
COLLEGE OF TECHNOLOGY

*the senior-level college of technology
of The City University of New York*

**Deep-sea black corals
& sea anemones**



Bingran Cheng

University of Southern California

Research Interests:

- Marine biogeochemistry
 - Nitrous oxide production in coastal sediment:
 - who are doing it?
 - What are the controlling factors?
- Microbial ecology in sediment porewater
 - Who live in porewater?
 - Are there viruses? How many?
 - Contributions to biogeochemical cycles?





Marah Dahn

- First-year grad student at Scripps and the Marine Electromagnetic Lab
 - Mapping the crust and upper mantle using conductivity

Can submersibles be used for this?

Nick Deardorff

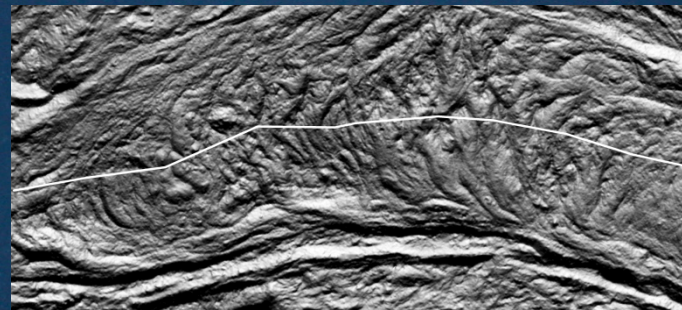
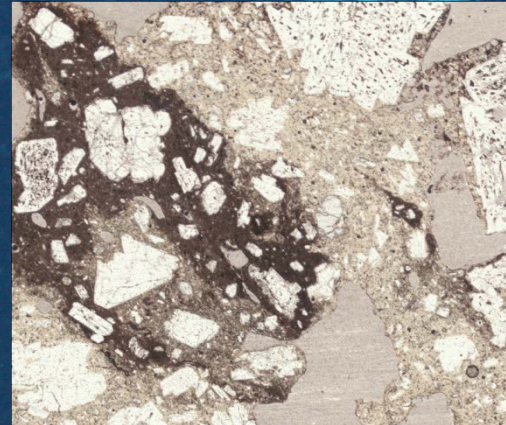
Indiana Univ. of Pennsylvania

Research focus:

Linking volcanic deposits and eruption dynamics

Previous and ongoing research:

- Eruption dynamics and pyroclastic recycling at the submarine volcano NW Rota-1, Mariana arc
 - Determining rates of crystallization
 - Geochemical exchange between magma and seawater/hydrothermal fluids (specifically Cl)
- Using Lidar to quantitatively analyze volcanic terrains (esp. lava flows)



Stephanie Farrington

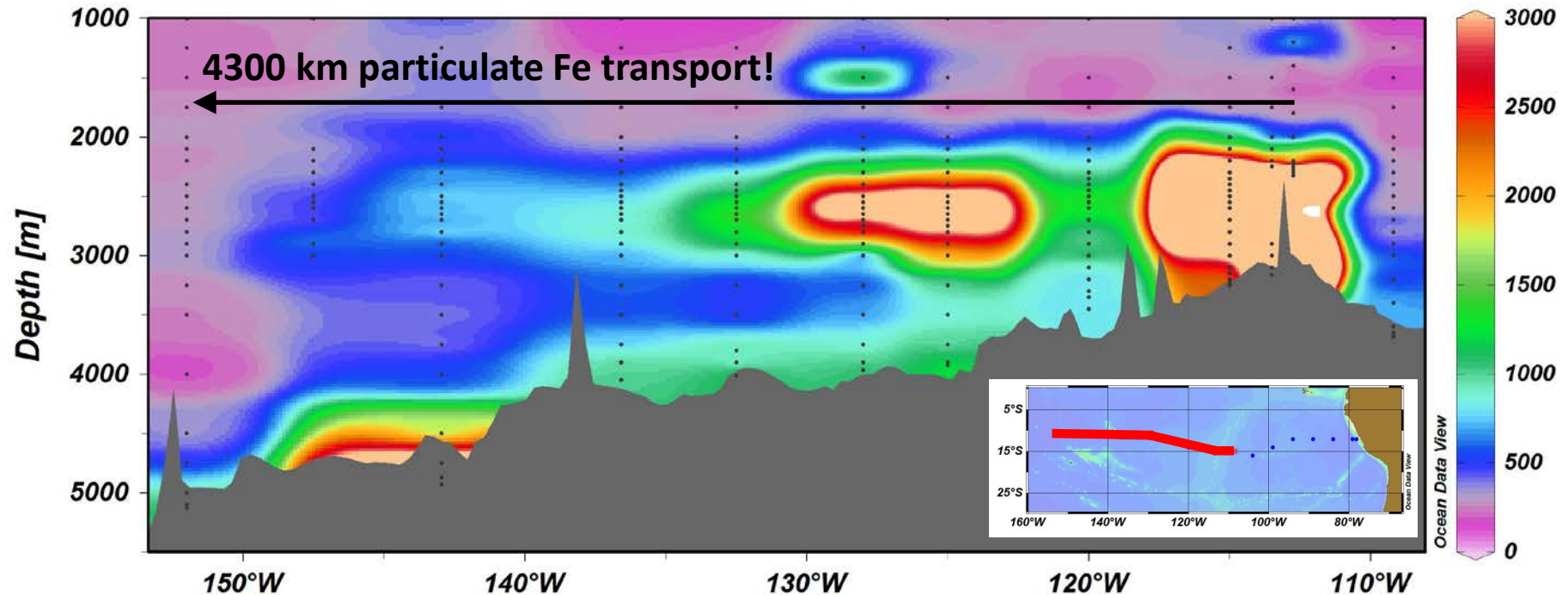
- Deep-sea Coral Reef Biologist & Data Manager
 - Harbor Branch Oceanographic Institution at Florida Atlantic University (HBOI-FAU)
 - Cooperative Institute of Ocean Exploration, Research & Technology (CIOERT)
 - Robertson's Coral Reef Fund
- Biological Science Co-Lead
 - Okeanos Explorer: Exploration of the Gulf of Mexico 2014
- Current Work
 - Benthic analysis and biogeography of Pulley Ridge, South Atlantic MPAs, & West Florida Shelf Lophelia Reefs.
- Future Goals
 - Looking to enroll in a PhD program within the next 3 years

Jessica Fitzsimmons - jessfitz@marine.rutgers.edu

Assistant Professor, Texas A&M University (June 2015)

Postdoc, Rutgers University (current)

>0.45 μm Particulate Fe (pM)



- **Research focus:** how hydrothermal vents influence global inventories of trace metals and subsequent biogeochemical response

See: Fitzsimmons et al. (2014) **PNAS** (16654-16661) Distal transport of hydrothermal Fe

- **Looking for:** collaborators interested in vent-ocean interfaces over multiple spatial scales

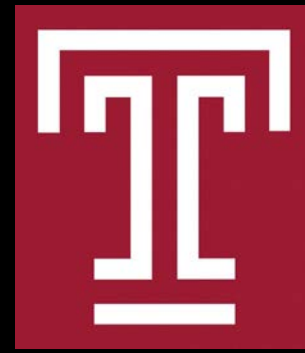
Samuel E. Georgian

PhD Candidate

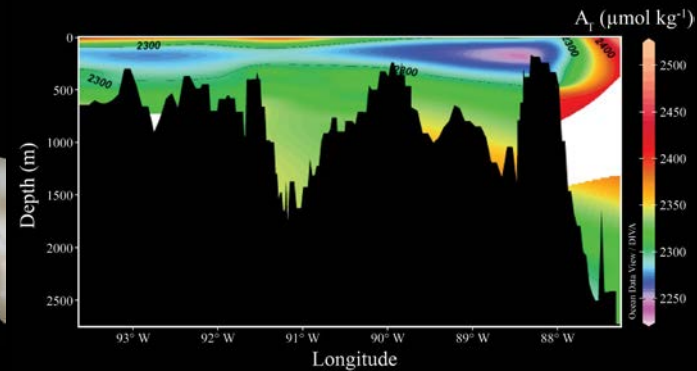
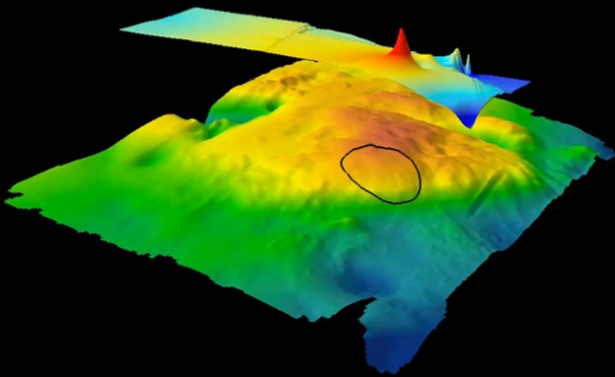
Temple University

Center for Biodiversity • Cordes Lab

samuelgeorgian.weebly.com



- Ecological niche modelling
- Metabolic response to ocean acidification
- Carbonate chemistry of the deep Gulf of Mexico

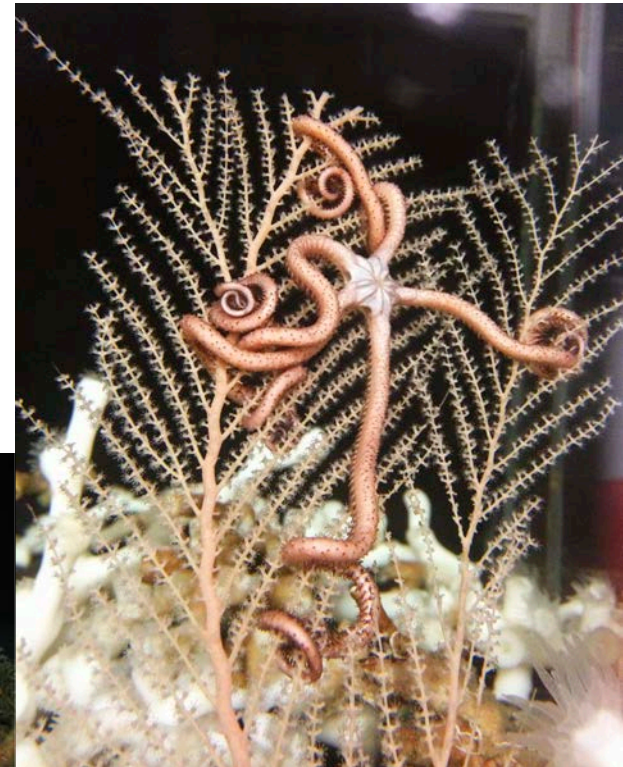


Carlos E. Gómez

* I am PhD student at Temple University interested in the study of the anthropogenic impacts in coral reef ecosystems

* My research is focused in understanding the effects of ocean acidification in octocoral communities from both shallow and deep sea environments.

* Dee sea coral reef resilience



Kalina C. Grabb

- Undergraduate at Harvard University
- Researches with David Johnston at Harvard and Scott Wankel at WHOI
- Presenting research at AGU on anaerobic nitrite reduction coupled with abiotic Fe(II) oxidation
- Interested in attending graduate school in Fall 2016

Alex Hangsterfer

Geological Collections Manager
Scripps Institution of Oceanography



- Past: Methane hydrate and seafloor research
- Current: ~XRF and X-ray technician
~Collaborator on biogeochemical oceanography and paleoceanography projects
- Future: ~Develop deep-sea curriculum with high school teachers and undergraduate projects
~Expand current analytical facility

Coral from Line Islands

Santa Barbara Basin

