



University-National Oceanographic Laboratory  
System

~UNOLS~

DeSSC New User Participants

Part II

Yang Liao to Kristin Yoshimura



# Yang Liao

[yliao@whoi.edu](mailto:yliao@whoi.edu)

**Department of G&G, Woods Hole Oceanographic Institution**

## **Research Tools**

Fluid dynamics / Material Sciences / Newton's 2nd law / Stability analysis

## **Research Interests**

- Physical Volcanology — chamber & conduit dynamics
- Hydrothermal circulations on & beyond earth
- Geophysical fluid dynamics & simple experiments
- Turbulent flows, .....

## **Looking for —**

- Collaborators and ideas
- Observation and data that could benefit from and/or test analytical models

Emma McCully -MS Student at Boise State University-

I am working with Dr. Dorsey Wanless, looking at along and across-axis chemical variability at the MAR  $\sim 14^{\circ}\text{N}$

I hope to continue utilizing deep submergence facilities in future research



# Nwankwo, Uchenna Chizaram

- Presently a PhD student at USM
  - My current research is offshore GNSS-MR
- Research experiences
  - Land surveying
  - Hydrography
  - Physical Oceanography
- Future research interest
  - Operation of remotely operated vehicles and autonomous underwater vehicle

# Gustavo A. Ramírez

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**Affiliation:** Postdoc at the University of Rhode Island, Graduate School of Oceanography.

**Research:**

1. Life in Subseafloor Habitats: Sediment and Crust.
2. Molecular Ecology: 'Omics
3. Long-term Microbiological and Chemical Monitoring
4. Extracellular DNA in Marine and Terrestrial Habitats

**Next:** Looking for a job.

Thanks!

# Aspen T. Reese

Junior Fellow, Harvard  
areese@fas.harvard.edu

## Research interests

- Ecology of the gut microbiota
- Role of the microbiota in host acclimation and adaptation

## Current projects

- Dynamics of microbiota in diel migrating invertebrates
- Microbiota responses to climate change
- Impacts of domestication on the microbiota







# Jennifer Salerno, Ph.D.

- Assistant Professor, Department of Environmental Science and Policy, George Mason University
- Environmental microbiologist (deep sea inverts, shallow and deep corals, biofilms, soil, sediment, oysters, built environment, maybe bees)
- **Looking for graduate students!!!**
- E-mail: [jsalerno@gmu.edu](mailto:jsalerno@gmu.edu)

# Cherise Spotkaeff

Masters Student at Hawaii Pacific  
University

Advisor: Dr. Olivia Nigro

Email: [cspotkae@my.hpu.edu](mailto:cspotkae@my.hpu.edu)



Research Interests: Marine  
Microbiology

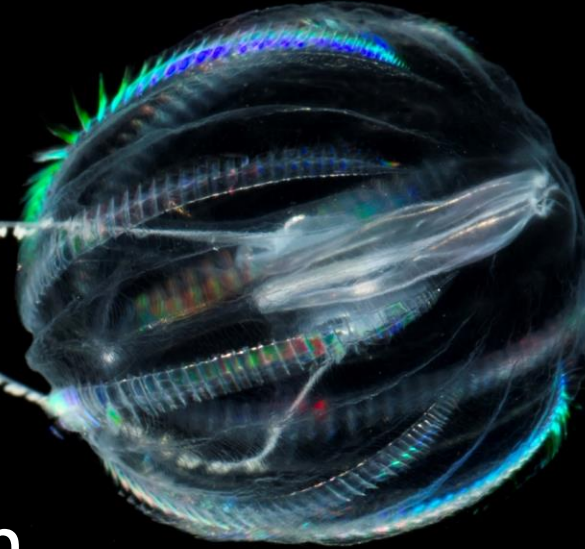
Current Research: Deep subsurface  
Viruses



# James Townsend

## PhD, June '18

*Current: Biophysicist, ctenophorologist, baby taxonomist*  
*Future: Molecular phylogenetics, gut microflora, microplastics*



I'm interested in,

- Postdoc opportunities and collaborations on the above, etc.
- Increasing access to research facilities and opportunities for 1<sup>st</sup> gen/minority students
- Promoting the social relevance of marine exploration and biodiversity

“Science is a force for social justice.”

# Benjamin Tully

Postdoc at the **Center for Dark Energy Biosphere Investigations**

Currently looking for: Faculty position

Interests:

- Microbial ecology and genomics in marine environments spanning from the surface ocean to subseafloor crustal environments
  - Future endeavors to examine microbial ecology of particle attached organisms through the deep water column and sediments
- Application of large-scale “omic” techniques – metagenomics and metatranscriptomics

Experience:

- Oligotrophic sediments – South Pacific Gyre & subseafloor crustal environments – North Pond



# Alexis M. Weinnig

PhD Candidate, Temple University

✉ aweinnig@temple.edu

🐦 @AMWeinnig

Shipboard Operations and Collections

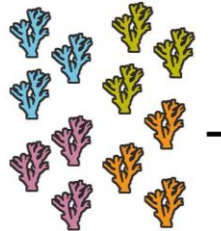


GoMRI  
NSF  
SOI  
BOEM

## Live Cold-Water Coral Experiments

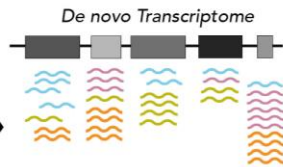
## Molecular Analysis

Step 1: Extract and Sequence RNA



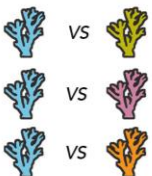
Sequenced RNA

Step 2: Align and Quantify

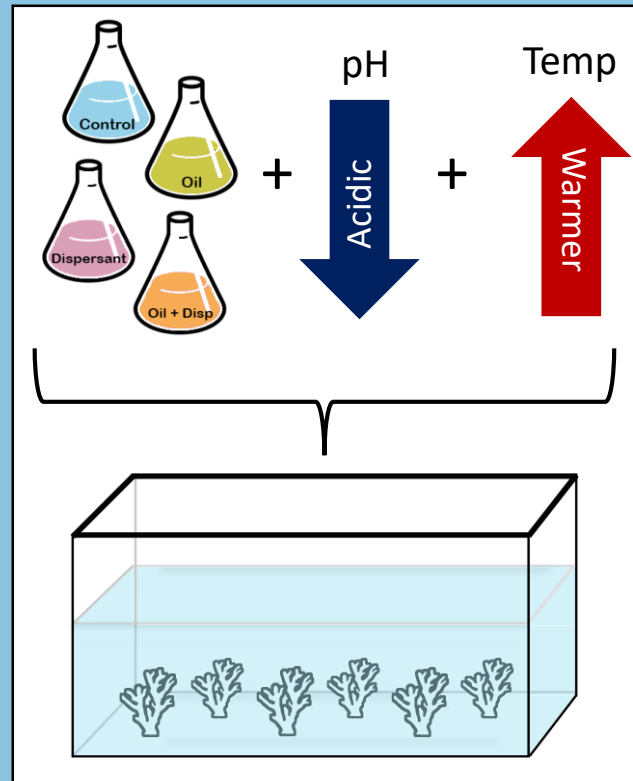
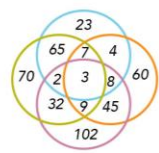


Step 3: Analyze Differential Gene Expression Across Treatments

Pairwise Comparisons  
between Treatments



Genes Shared  
Across Treatments



Postdoc Summer/Fall 2020

Cold-water coral microbiome

Influence of surrounding  
environment/conditions  
on coral persistence

# Subbarao Yelisetti, Assistant Professor

## What I work on

- Marine gas hydrates
- Submarine landslides
- Seismic crustal structure of the continental margins
  - earthquakes, oil and gas

## What tools I use

- Seismic reflection and refraction
  - Travel time and full waveform inversion
- Bathymetry, magnetics, gravity
- Physical properties of sediments

- Interested in plate tectonics and geophysical structure
- **Looking for collaborators**





# Kristin M. Yoshimura

kristiny@udel.edu

@kmyoshimura

**Education:** PhD candidate @ UD with Dr. Jennifer Biddle

**Expertise:** Microbial ecology and metagenomics

**Dissertation focus:** Particle-associated microbes from estuaries to deep sea and development of sediment communities

**Interested in:** Genomics and activity of microbes in deep sea and sediment environments & implications on geochemical cycling

**Experience:** DSV Alvin, ROV Jason

**Graduating:** Feb 2019- *looking for post doc!*



