



University-National Oceanographic  
Laboratory System

~UNOLS~

# Deep Submergence Science Committee Meeting

**UNOLS DeSSC Meeting**

**December 14, 2014**

**DeSSC New-Users Program Introductions – Part 2**



# AIDA FAROUGH

- **Looking for a post doc, or a “research scientist” position** and also interdisciplinary collaborations
- Finishing PhD in Geophysics at Virginia Tech in May 2015

Research experience and interests:

- **Serpentinization**

Primary session chair of :

V52A: Friday 10:20am-12:20pm, Mascone South, 310

V53A: Friday 1:40pm-6:00pm, Mascone South, poster hall

- Hydrothermal water-rock interactions
- Fluid flow and heat transfer in seafloor hydrothermal systems



# Taiwan Ocean Research Institute ROV Crew

**Amos (Mu)** – ROV Pilot in training  
 Master degree of mechanical engineering  
*Artificial sensor, Biomimetic AUV(Robot Fish).*  
 Mechatronic Engineer in TORI  
*ROV Pilot Technician Grade II, AUV operation.*

**Daniel (Jang)**– ROV Pilot in training  
 Master degree of mechanical engineering  
*Underwater Positioning, DeepSea Lander Design.*  
 Mechanical Engineer in TORI  
*Ocean Bottom Seismometers, Underwater  
 Camera, Real Time Towcam System.*



## How to

- Set up a ROV team?
- Accomplish a scientific ROV operation successfully?
- Manage a research ROV cruise?

Karen Lloyd, Assist. Prof. at The University of Tennessee (the school with the orange football team)

- **Major research objective:** Observing uncultivated deep branches of microbes “in the wild”
- **Methods:** single cell genomes, meta-various-omes, qPCR, CARD-FISH, lab incubations
- **What keeps me up at night:** ANME archaea appear to be methanogens AND methanotrophs – can single organisms switch back and forth?

# Lillian McCormick

Scripps Institution of Oceanography  
UCSD

- 2<sup>nd</sup>-year PhD student, Biological Oceanography
- NSF Graduate Research Fellow
- NOAA Hollings Scholar

## Research Interests:

- Visual ecology of cephalopods
- Adaptions of eyes in deep-sea organisms
- Effects of oxygen, pH, temperature, pressure on visual systems
- Visual system development

# Molly Redmond



Assistant Professor

University of North Carolina Charlotte

Department of Biological Sciences

Microbial Ecology and Biogeochemistry

Hydrocarbon Oxidizing Bacteria

Seeking graduate students and collaborators

# Michael Reuscher

- Postdoc at Harte Research Institute for Gulf of Mexico Studies (Texas A&M University - Corpus Christi)
- My research includes invertebrate (polychaete) taxonomy and systematics, biodiversity assessments, and benthic ecology
- I am currently looking for a permanent position

# Dr. Estefanía Rodríguez

Assistant Curator of Marine Invertebrates

American Museum of Natural History

SACKLER INSTITUTE FOR  
COMPARATIVE GENOMICS

AMERICAN MUSEUM OF NATURAL HISTORY



Evolution and Diversity  
of Deep-Sea and Polar Sea  
Anemones (Cnidaria,  
Actiniaria)





# Stephanie M. Sharuga

## Education:

B.Sc. Biology and Earth & Ocean Sciences (Environmental Emphasis), University of Victoria

M.S. Environmental Management & Sustainability, Illinois Institute of Technology

Ph.D. Oceanography & Coastal Sciences, Louisiana State University

## Interests:

Benthic ecology, habitat mapping, deep-sea communities, environmental monitoring & management, deep submersible technologies, marine conservation & policy.

## Background:

- AUV/ROV imagery & data analysis, habitat classification, anthropogenic vs. natural environmental influences on megafaunal community characteristics.
- Interested and actively involved in telepresence technology and marine/environmental education and outreach.
- Worked with AUV and/or ROV data from Folger Rocks & Barkley Canyon (NEPTUNE & ROPOS surveys), Northern Gulf of Mexico (Macondo well/Mississippi Canyon area), Blake Ridge & Cape Fear Diapirs (2012 Sentry AUV Telepresence Cruise).

## Future:

Looking for a postdoc or other full-time position.

Contact – [ssharuga@att.net](mailto:ssharuga@att.net) (224) 688-0519

# Rishi Sugla

- PhD student at Scripps Institution of Oceanography
- Undergraduate: University of Maryland
- Paleoclimate Research Interests:
  - Origin and evolution of Earth and biosphere
  - Oxygenation of atmosphere and oceans in Phanerozoic
  - Changes in carbon cycle over deep time
  - Adaptations of deep-sea fauna to low O<sub>2</sub> and low temperatures

Lora Van Uffelen  
University of Hawaii at Manoa  
Assistant Researcher in Ocean & Resources Engineering  
[loravu@hawaii.edu](mailto:loravu@hawaii.edu)  
Ph.D., Scripps Institution of Oceanography

## RESEARCH INTERESTS

- Ocean acoustics
  - Long-range acoustic propagation
  - Deep ocean moorings
- Ocean technology
  - Gliders/AUVs
  - Instrumentation
- Bioacoustics
  - Towed hydrophone array
  - Glider-based sensing

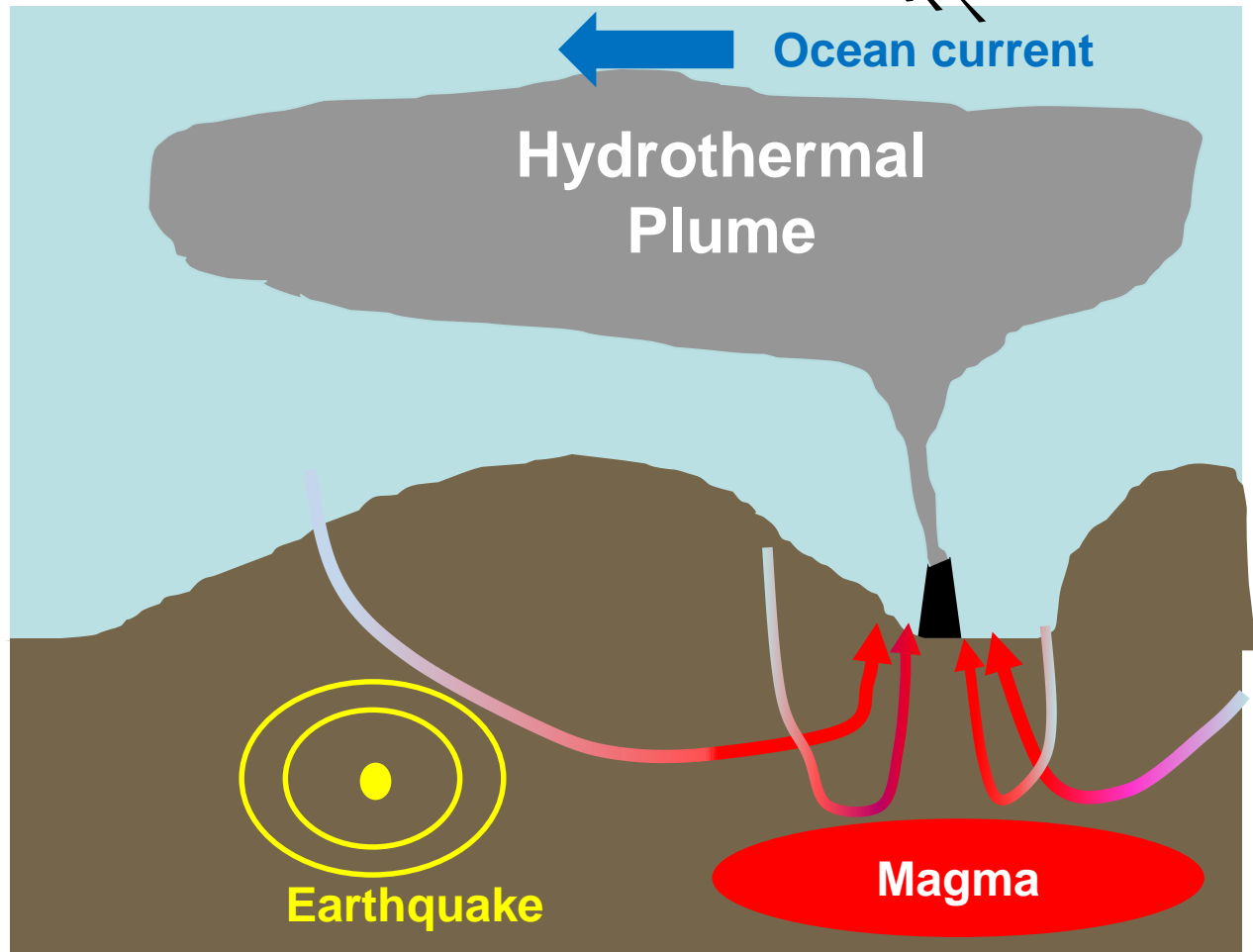
## EXPERIENCE

- Johnson Sealink
- AUV Sentry
- Seaglider pilot
- 300+ days at sea from 20+ cruises
- Taught graduate course in observational methods



# Guangyu Xu

Ph.D. Candidate, Rutgers University  
Currently Looking for a Postdoc Position



# Georgianna Zelenak

First year PhD student

Scripps Institution of Oceanography

Marine EM Lab

- Measuring electric and magnetic fields to determine changes in conductivity in the subsurface
- Could submersibles be used to deploy our instruments?
  - Knowing precise orientation of electrode arms on the seafloor is crucial for processing

