UNOLS Early Career Investigator Chief Scientist Training Program

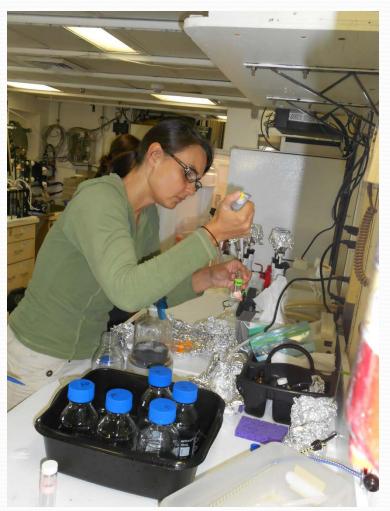


Clare Reimers Report to FIC October 22, 2012

Program development

- Started in 2011 as a response to declining ship utilization
- Two initial training cruises with pre-cruise workshops funded by NSF on *R/V Wecoma* in July and September 2011

Penny Vlahos co-chief July 2011



Program Goals

- teach early career marine scientists how to effectively plan for, acquire, utilize and report on time at sea for multi-disciplinary research and education
- demystify the process of ship operations and fulfill the intent of UNOLS to improve access to existing and future facilities
- offer new investigators opportunities to test compelling research ideas, work collaboratively and acquire samples critical for developing future oceanographic field programs

Secondary Benefits

- Review of UNOLS cruise support procedures and information sources of operators
- RV Tech exchanges
- Encouraged DeSSC Student/Early Career Scientist
 Workshop
- UNOLS-wide Chief Scientist Handbook (?)

-see new SIO website

SIO Res Tech Meghan Donohue on *Wecoma*



Current Agency Support

<u>Grant</u>: EAGER-Training Chief Scientists for the Ocean Research of Tomorrow

Duration: March 1, 2012 – February 28, 2014

Project support: \$151,626

2012 and 2013 ship time (ONR and NSF supported)

2012 Program

Applications closed June 1, 2012

39 applications received from 24 institutions

November 8-17, 2012 SIO Marine Operation Facilities & *R/V New Horizon*



2012 Participants

Institutions Gender UCSB 9 female 5 male URI Positions **SDSU** 1 Professor WHOI 1 Assoc. Sci. UW 4 Assist. Prof./Sci. OSU 1 Res. Assoc. La Sierra U. **5** Post-docs 3 Graduate Students USC Disciplines NRL. Chemical Oceanography Mar Techs **Biological Oceanography** Atmospheric Chemistry Geomicrobiology Mentors Physical Oceanography **Ocean Engineering**

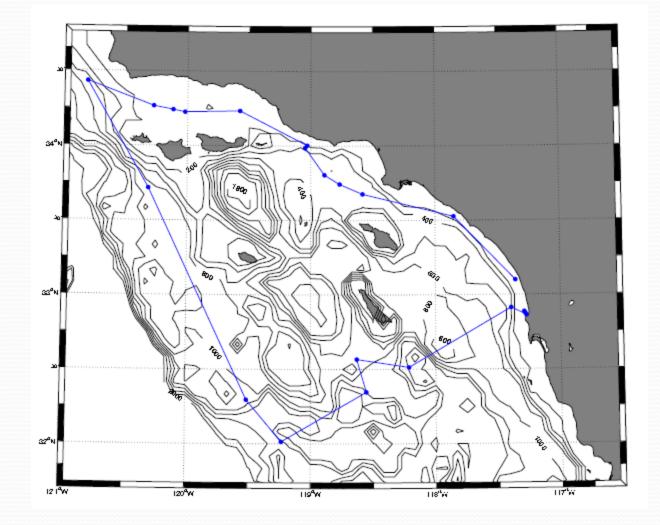
U Minn-Twin Cities U Wisconsin-Milwaukee Meghan Donohue and Robb Hagg

Clare Reimers and Dave Checkley

Pre-cruise agenda

| Date/Time | GENDA For UNOLS TRAINING CRUISE | Lead | Location |
|-----------|---|---|--|
| 7-Nov | Participants Arrive and stay on New Horizon | | Nimitz Marine Facility |
| | | | 297 Rosecrans Street, San Diego CA 92106-3505 |
| | | | 858-534-1644 |
| 8-Nov | | | |
| 8:30 AM | Coffee and Pastries | | MARFAC Conference Room |
| 9:00 | Welcome and Introductions | Clare Reimers (OSU) | MARFAC Conference Room |
| 9:15 | History, Purpose and Structure of UNOLS and the UNOLS Fleet | Jon Alberts (UNOLS Executive Secretary) | MARFAC Conference Room |
| 9:45 | Shiptime requests and Scheduling (including discussion of different agency requirements) | Jon Alberts | MARFAC Conference Room |
| 10:15 | Planning International Cruises and for cruises using Deep-Submergence Assets | TBD | MARFAC Conference Room |
| 10:45 | Blue Water Diving Off UNOLS Ships | Chrisitian McDonaldSIO Dive Safety Officer | MARFAC Conference Room |
| 11:00 | Break | | MARFAC Conference Room |
| 11:15 | Tour of SIO Ship Operations and Dock Support Facilities | Meghan Donohue (SIO) | |
| 12:00 | Lunch and introductions to ship's captain and crew | | New Horizon |
| 13:00 | Bridge to transducer well tour of New Horizon- emphasizing ship's science equipment | | |
| 15:30 | Group review of deck and lab space utilization | | |
| 16:00 | Pre-cruise planning: Hazmat and Radioisotope Usage, Chemistry Services, Shared Use Equipment | Susan Becker ODF | |
| 17:30 | dinner | | New Horizon |
| 19:00 | Introduction to the Oceanography of the Southern Califirnia Current | David Checkley | |
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| 19:45 | From Proposal to Post-cruise: Responsibilities of a PI/Chief Scientist | Clare Reimers | |

Cruise Track-7 days at sea



Science support and science equipment to be utilized

CTD/Rosette Bongo nets Multi-corer Cold and lab vans Surface flow through system and surface pumping Meteorological -atmospheric sensors ADCP MOCNESS

ADV Quantum Cascade Laser



STRS tracking of 2011 participants

- Number STRS members: 9 (of 28)
- New Ship Time Requests as PI or co-PI:
 - C. Hintz, Savannah State, 10 requests funded-REU program
 - ≻ K. Null, UCSC, 2 requests pending
 - K. Osborn, Smithsonian, 2 requests pending
 - > A. Santoro, UMCES, 2 requests declined
 - > D. Thornton, Texas A&M, 6 requests pending
 - P. Vlahos, U. Conn., 4 requests declined

UNOLS Outreach- AGU Poster Dec 7, 2012

Training Chief Scientists for the Ocean Research of Tomorrow Clare Reimers and Jon Alberts

The UNOLS Early Career Chief Scientist Training Program is designed to instruct participants in all of the "cradle to grave" phases of expeditionary oceanography, from the initial proposal, to science and cruise logistics planning, to cruise execution and post-cruise reporting. During the past 2-years, with support from NSF, the program has sponsored three participant-led multi-disciplinary cruises on UNOLS vessels together with pre-cruise informational short courses. Two Senior Scientists and two Marine Technicians work with 14 participants per cruise to accomplish well-scrutinized science plans led by two participant co-chief scientists. Participants are chosen from a pool of applicants based on their passion for oceanography, their desire to take on cruise leadership, the quality and feasibility of a research project they bring to the cruise, and long-term research aims. To date the participants have come from 28 different academic institutions and have included graduate students, post-docs, research scientists, teaching faculty and a center director. Hallmarks of the program lauded by the participants include insight into cruise leadership and ship operations not provided by any other means; new appreciation for other marine science disciplines and sampling techniques; the establishment of collaborations and newly inspired science questions based on shared data; and understanding of what UNOLS is and how UNOLS staff and marine technicians can assist with future seagoing projects.

Come see the poster and hear about November cruise!