

MATE Internship Program Update

RVTEC Meeting, La Jolla, CA, Nov 3, 2016

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Marine Advanced Technology Education (MATE) Center



Internship Program Overview

- **Started with a NSF UNOLS grant in 1999 to fill need for marine technicians; current funding till 2017 (applied for 1 year no-cost extension).**
- **Since 1999, 300+ community college and university students have been placed in research vessels, labs and industry settings (200+ were placed on UNOLS vessels)**
- **Students demographics over the last 17 years**
 - **From ~70 colleges and universities in USA**
 - **45% women and 55% men**

Internship Program Overview

- **NSF Grant for 2014-2017**
 - Host 12-15 interns in 2-16 week internships each summer; support to lengthen internships beyond one research cruise at each site
 - Host 1 six-month intern on 1-2 host vessels each year



Intern selection process

- **Preference (except for six-month internship) given to technical community college students and marine technology undergraduate students**
- **Interns' interests, knowledge, and skills are carefully matched to mentor requirements**
 - **Mentor receives the 3-5 resumes that best match their needs**
 - **Mentor makes final decision on which student(s) they host**

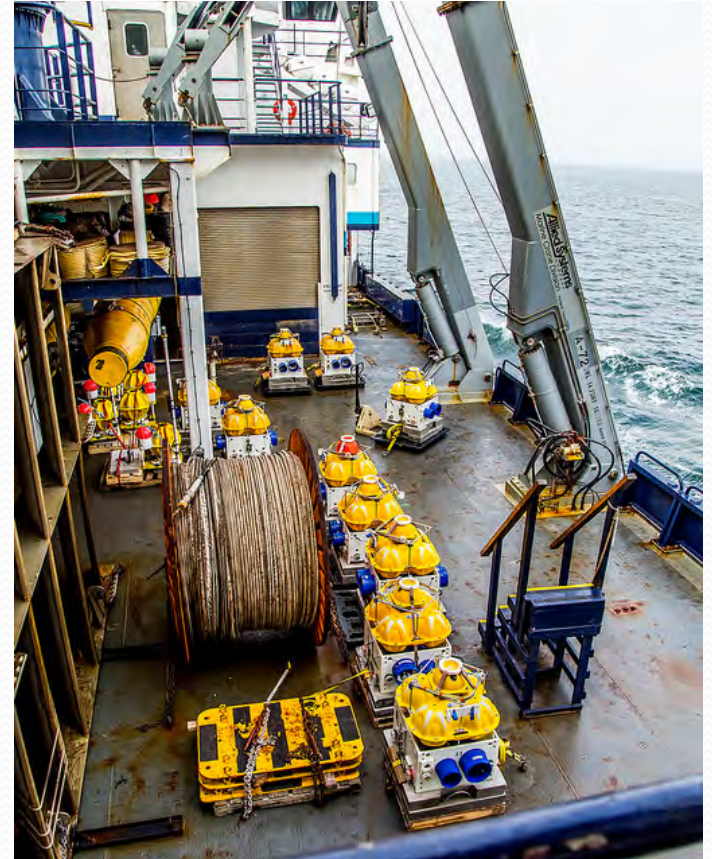
Selection for 6-month interns

- Alice Doyle at UNOLS and Nandita & Tami at MATE review applicants for marine technical qualifications and determine top 10-12 finalists
- Ad-hoc committee of RVTEC members review the finalists and score and rank them
- Top 5 candidates from this review are sent to the host(s) to interview, call references, and select



2016 Internships

- **1 long-term intern:**
 - Elizabeth Ricci with U.Hawaii and BIOS
- **10 other interns were placed on UNOLS/USCG vessels:**
 - *R/V Sharp (1), Sikuliaq (3), Healy (4), Atlantic Explorer (1), Walton Smith (1)*
- **3 women, 8 men**
- **6 from community colleges.**



What the interns gain

- **Job experience essential for employment – often the most important step**
- **Better understand the diversity of ocean careers**
- **Experience with cutting-edge technologies that are not available at their institutions**



Student post-internship survey results

100% of interns said:

- The internship was a valuable learning experience
- They have increased confidence in working on technological problems
- They enjoyed working at sea



90% of interns said:

- The internship prepared them for future jobs in marine technology
- Their mentor served as a professional role model for them– WELL DONE!
- The internship prepared them for jobs in marine technology

Mentor feedback on 2016 interns

- **All mentors said:**
 - **They would mentor another MATE intern in the future**
 - **They were satisfied with the process of hiring an intern and the support received from MATE**
 - **The intern developed skills that increased their chances of employment in the field**
 - **It was beneficial to their institution to have an intern and the intern made their job easier**
 - **They would hire their intern immediately in an entry-level position**

What the mentors/hosts gain

- An extra pair of hands - almost free!
- Direct involvement in training the next generation of marine technicians
- A sneak preview of the best graduates from marine technology programs for hiring!

Students getting hired!

72% interns said job opportunities opened up as a direct result of the internship!

Mason Schettig
BIOS

Elizabeth Ricci
UNOLS Tech pool

John La Cross - LUMCON

Justin Miyano - NOAA



2016 UNOLS mentors/community said:

- Well Done - I am consistently impressed with the **increasing quality of recruits** as it pertains to this specific career.
- Excellent program. A **great opportunity** for a future tech and for the ship who hosts the intern.
- Great program **exposing students to actual applications** of being on a live action research vessel. Keep it up. Great screening of students. I have sailed with MATE students before on the Marcus Langseth. All very intelligent and capable students willing to learn. Great program. Well done.

What is happening in 2017?

- Preparing for 2017 LT internship – please contact Nandita Sarkar (MATE) or Alice Doyle (UNOLS) if you would like to host an intern for 2-3 months in Spring 2017.
- Looking for hosts for summer internships, especially May-September.
- Surveying past interns on the effect of the internship on their career paths.
- Last year of funding cycle, with possible 1-year extension.
- Going back to NSF for new funding cycle.



Same requests as every year!

1. Please commit to providing internship opportunities as soon as possible and consider longer multi-cruise internships.
 2. Use the internship to promote marine technical careers– you are great mentors and role models.
- THANK YOU!**





**For more information visit:
www.marinetech.org/internships**

**Or contact:
Nandita Sarkar
MATE Internship Coordinator
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My Internship Experience

Elizabeth Ricci

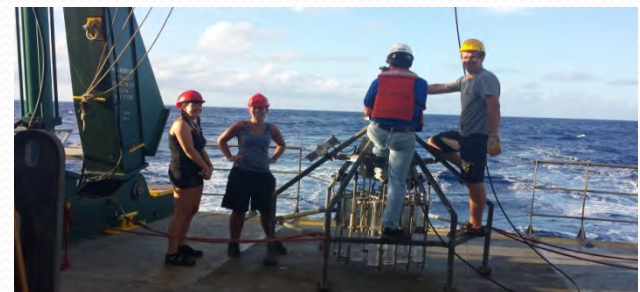
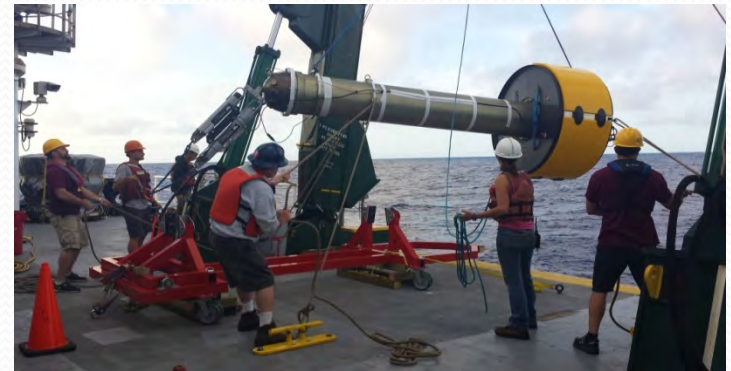
2015 MATE/UNOLS Long-term intern

RVTEC Meeting, La Jolla, Nov 3rd 2016

My internship experience

University of Hawaii and the R/V Kilo Moana

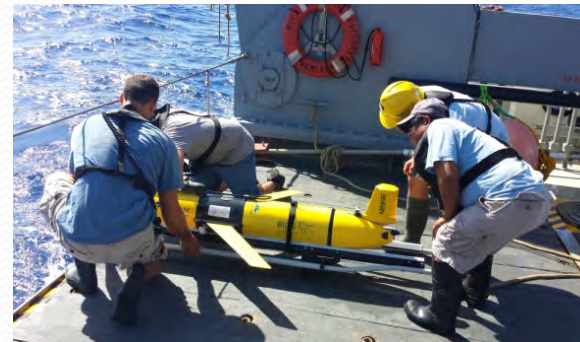
- Physical oceanography and geology
 - CTD
 - Multibeam
 - Dredge
 - Multi-corer
 - Box corer
- Basic marine operations
- Standard seamanship skills
- Introduction to systems and networks
- Introduction to soldering and circuitry



My internship experience

Bermuda Institute of Ocean Science (BIOS) and the R/V Atlantic Explorer

- Physical oceanography
 - CTD
 - Phytoplankton nets
 - Free falling optical profiler
 - Production arrays
 - Gliders
- Terminations
- Troubleshooting
- Splicing and wiring
- CTD operation



My internship experience

- Had the opportunity to work and live on two very different but amazing vessels
- All of the crew members treated me with kindness, patience, and wonderful support
- Worked with a huge variety of different oceanographic equipment
- Learned valuable tools for troubleshooting, maintenance, and repair
- Was exposed to electronics, wiring, circuitry, mechanics, engineering, hydraulics, and everything in between
- Directly participated in deck work and the deployment/recovery of equipment
- Had an amazing 6 month journey filled with adventure!

UNOLS Tech Pool



Photo by Dave Forcucci