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  
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My Internship Experience

Elizabeth Ricci
2015 MATE/UNOLS Long-term intern

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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