

# MATE Center Marine Technical Internship Program

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Marine Advanced Technology Education (MATE) Center



# Internship Program Overview

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- **Started with a NSF UNOLS grant in 1999 to fill need for marine technicians**
- **Since 1999, 194 community college and university students have been placed in research vessels, labs and industry settings (107 supported UNOLS vessels)**
- **Students demographics**
  - 58% women
  - 42% men
  - 28% ethnic minorities
- **Longitudinal data on 74% of interns:**
  - 40% are continuing education in a related field
  - 43% are working in marine science and technology fields
    - 63% are in academic science or technology based careers
    - 37% are in industry



# UNOLS intern selection process

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- **Students from 22 MATE partner colleges and universities across the country have participated**
- **Preference 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**



# Mentor feedback on interns

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- **97% of mentors said:**
  - Intern made their job easier and was beneficial to the organization
  - Internship would increase intern's chances of obtaining a job
- **99% would host another intern**
- **80% were impressed or very impressed with their intern's knowledge and skills**
- **78% would hire the intern immediately in a starting position without further training**

# UNOLS mentors have said:

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- Dennis Ilias and Aubri Steele of the R/V Walton Smith-  
*“We were very impressed with Devlin [their MATE intern]... he is a bright young man and we would strongly consider him on our team.”*
- Doug Ricketts, from the R/V Blue Heron, *“I would hire Bill Logan in a heartbeat. He was fantastic. He helped the crew immensely, always a pleasure to be around, was always looking for work to do, and took to the marine tasks immediately. I feel that I could sit him down with a new piece of equipment and he could quickly become knowledgeable about the equipment and soon after would be the resident expert on board the vessel with the equipment.”*

# Knowledge, skills and experience interns gain

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

# Student post-internship survey results

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- 98% feel the internship prepared them for future jobs in marine technology
- 94% said internship was a valuable learning experience
- 89% have increased confidence in working on technical problems
- 78% have increased confidence in working on scientific problems
- 84% would recommend internship program to other students
- 76% enjoyed working at sea

# UNOLS interns have said:

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- *“This is definitely the greatest learning experience I have ever had!”*
- *“It made me realize I like the sea life and could be a technician.”*
- *“My internship was an exceptional experience...I learned a great deal about marine technology...definitely increased my interest in pursuing a career in marine technology...and the knowledge needed to pursue that career.”*



# Drew Cole

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**THEN:** Honolulu Community College student, MATE/UNOLS intern in 2006



**NOW:** *Marine Technician at Scripps Institution of Oceanography*

# Deborah Smith

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**THEN:** Maine Maritime Academy student,  
MATE/UNOLS Intern in 2001



**NOW:**  
*Hydrographer &  
Marine Scientist at  
Marine at Science  
Applications  
International  
Corporation (SAIC)*



# Chad Waluk

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**THEN:** Monterey Peninsula College student,  
MATE/UNOLS intern in 2002



**NOW:** *Faculty  
Research Assistant  
with Oregon State  
University's  
Autonomous  
Underwater Vehicle  
group*

# Concerns expressed by UNOLS staff

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The Center informally surveyed mentors to determine ways to improve the program and the following concerns have arisen:

1. Few MATE interns apply for positions on UNOLS vessels after their internships
2. Some student interns are more interested in working in science or with ROVs than working as marine technicians
3. Many student interns do not understand the nature of marine technician work before they participate in the internship
4. Students need a better understanding of equipment before they sail on the vessels



# Potential solutions proposed by the MATE Center

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1. Recruit more heavily at MATE partner colleges with strong marine technical programs
2. Focus recruitment on students near graduation and recent graduates
3. Enhance student screening by revising the internship application to include career goals and quiz on common equipment and marine technician job duties
4. Advise MATE partner faculty in best practices for supporting their students
5. Revise internship recruitment materials and the web site to reflect technology and the emphasis on technician positions



# Improve quality of information potential interns receive from MATE

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1. MATE will provide more detailed information about marine technician careers on MATE's web site, for example:
  1. Examples of past internship tasks and host expectations including video interviews with students and mentors
  2. Provide information on the equipment and vessels for students to study prior to boarding vessels
2. Demonstrate the career-building potential of internship by highlighting former interns now working in the field

# Primary challenge for the MATE Center

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- Securing vessel space far enough in advance so the “best” students aren’t lost

# How UNOLS can help

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1. Mentors phone interview top 2 student applicants
2. Mentors provide more detailed information concerning the internship tasks and related technology applications
3. Commit to hosting interns earlier in the year so MATE can advertise each internship individually
4. Encourage marine technicians to use the internship experience to promote marine technician careers
5. Create a brochure for marine technician careers within the UNOLS fleet
6. Assist MATE partner colleges in updating their curriculum so it is better aligned with UNOLS workforce needs/skill sets





The background is a collage of four images related to marine technology. Top-left: Two people in blue hard hats and orange life jackets on a boat deck, handling a large, complex piece of equipment. Top-right: A group of people in a small inflatable boat on the water. Bottom-left: A woman in a lab setting holding up a large framed map or data visualization. Bottom-right: A person in a red and orange wetsuit on a boat deck, working with a large cylindrical piece of equipment.

**For more information visit:**  
**<http://www.marinetech.org/careers/internships.php>**

**Or contact:**  
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