

MATE Report for DESSC Meeting

MATE Technical Internship Program

In 2003, the MATE Center placed 23 student interns on research vessels, in laboratories, and with industry. Thirteen of the MATE interns were placed on UNOLS vessels for 1-8 weeks. In addition, four interns worked on research vessels with the Monterey Bay Aquarium Research Institute and the National Marine Fisheries Service, and six students worked in shore-based positions ranging from the Monterey Bay Aquarium to the Monterey Abalone Company and Oceaneering International. Of the thirteen UNOLS interns, five students worked aboard the *R/V Thompson* with the science parties; one with Geoff Wheat and four with WHOI's *Jason II*. The *Alpha Helix* and *New Horizon* hosted interns who also worked with the science parties, including the two students on the *New Horizon* who were blue water divers. Five vessels hosted MATE interns to work directly with marine technicians. These were the *Savannah*, *Weatherbird*, *Endeavor*, *Longhorn*, and *Walton Smith*.

Many of the students said that the cruises were the highlight of the year for them. They gained hands-on experiences that will be invaluable to their future education and career decisions. For example, over 80% of the students indicated an increased interest in marine science and technology and an increased confidence in working on science and technical problems. All of the mentors said that the students gained experiences during their internships that increased their employability, that hosting an intern made their job easier, and that the interns were beneficial to the cruises. In addition, 83% of the hosts said they would hire the intern they hosted as an entry-level employee.

For more information about the program, including how you can get involved as an intern host, visit <http://www.marinetech.org/careers/internships.php> or contact Tami Lunsford at tlunsford@marinetech.org or (831) 646-4011.

MATE ROV Competition

The second annual national student ROV design and building competition, organized by the MATE Center and the Marine Technology Society's (MTS) ROV Committee, took place June 19-21, 2003 at the Massachusetts Institute of Technology (MIT) in Cambridge, Massachusetts. Thirty teams representing high schools, home schools, community colleges, and universities from across the U.S. and Canada participated in the event, "Lost on the *Titanic*: Rusticles or Bust."

James Cameron's 3-D, "IMAX" movie "Ghosts of the Abyss" provided the inspiration for the two missions that made up the 2003 competition—journeys into the wreckage of the *Titanic* to recover a disabled ROV and retrieve valuable scientific data collection equipment. Teams chose to take on one of these tasks by registering to compete in either the *Open* or the *12-25* competition class.

Three regional contests fed into the national competition. The top winners from Southern California Fly-Off (organized by the Birch Aquarium at Scripps Institution of

Oceanography and supported by the MTS-San Diego section), the Texas Regional ROV Contest (organized by Alvin Community College and supported by the MTS-Houston section), and the New England Regional ROV Contest (organized by Cambridge Rindge and Latin School and the University of Rhode Island and supported by the MTS-New England section) moved on to compete in the national event's 12-25 competition class.

In the end, the following teams emerged from the "wreckage" victorious:

Open class

1st place: Lake Superior State University (Sault Ste. Marie, Michigan)

2nd place: Monterey Peninsula College (Monterey, California)

3rd place: Galveston College/Ball High School (Galveston, Texas)

12-25 class

1st place (TIE!): Cambridge Rindge & Latin High School (Cambridge, Massachusetts) & White Rock South Surrey Home Educators (Surrey, British Columbia, Canada)

3rd place: Avalon East School Board/O'Donel High School (St. John's, Newfoundland, Canada)

Plans are already underway for 2004. The MATE Center and the ROV Committee have teamed up with the National Marine Sanctuary Program to challenge students with a mission scenario and tasks based on sanctuary-related science and exploration. "Mystery Reef" is the setting for mission tasks that will include navigation, depth and temperature measurements, biological sampling, location and recovery of scientific equipment, identification of a shipwreck, and exploration of an unknown reef.

A fourth regional contest – the Monterey Bay Regional ROV Contest – will also feed into the 2004 national competition, and plans are in the works for regionals in the Great Lakes and Puget Sounds areas and Hawaii. Working with the National Marine Sanctuary Program and the Marine Technology Society, along with other interested organizations, the goal is to establish regional infrastructures and mentor networks that support – financially, technically, and logistically – regional contests in locations across the country. In this way the competition program will continue to grow, allowing more students to participate in these exciting learning experiences. The national ROV competition will be held at the University of California Santa Barbara June 25-27, 2004.

For more information about the 2004 event, including how you can become involved as a competition sponsor or team mentor, visit

http://www.marinetech.org/rov_competition/index.php or contact Jill Zande at jzande@marinetech.org or (831) 646-3082.