



National Oceanic and Atmospheric Administration (NOAA)  
**Office of Ocean Exploration and Research**



NOAA Ship *Okeanos Explorer*:  
America's Ship for Ocean Exploration

## How Do We Explore? Online Professional Development

for Educators of All Grade Levels

January 24 - February 11, 2011

in partnership with the College of Exploration



The ROV *Little Hercules* being lowered into the sea. Image credit: NOAA.



Testing the water leak detector on the *Okeanos Explorer*'s ROV camera platform. Image credit: NOAA.

### How Do We Explore?

All life on Earth relies on the ocean—yet, the ocean is 95 percent unexplored, largely unknown and mostly unseen by human eyes...

The NOAA Ship *Okeanos Explorer* is the only U.S. ship assigned to systematically explore our largely unknown ocean for the purpose of discovery and the advancement of knowledge. Join us to learn about the innovative techniques, cutting-edge tools and scientific processes the scientists and crew of *Okeanos Explorer* are using as we begin a new era in ocean exploration!



NOAA scientists on the *Okeanos Explorer* examine live video feed from *Little Hercules*. Image credit: NOAA.

Join NOAA's Office of Ocean Exploration and Research (OER) for the latest professional development opportunity for educators based upon the voyages of NOAA's new ship and America's Ship for Ocean Exploration, the *Okeanos Explorer*. This offering introduces the second volume of the *Okeanos Explorer* Education Materials Collection, ***How Do We Explore?*** Topics include searching for anomalies, selecting sites for exploration, communication tools, telepresence technology, mapping techniques, water column study and operating remotely-operated vehicles. This course contains inquiry-based lessons for all grade-levels, and facilitated online reflective conversations about how we approach the study of our largely unexplored ocean.

Participants will include formal and informal educators, ocean explorers, scientists, and other interested members of the public. There will be opportunities to engage with ocean explorers and other participants. The ***How Do We Explore?*** lessons, a wealth of other supporting resources, and optional graduate extension credit will be provided.

Speakers will include:

- Dr. Steve Hammond, Chief Scientist, NOAA OER
- Lieutenant Nicola VerPlanck, Operations Officer, NOAA Ship *Okeanos Explorer*
- Catalina Martinez, NOAA OER Regional Manager and Expedition Coordinator
- Mashkoor Malik, Physical Scientist, NOAA *Okeanos Explorer* Program, NOAA OER
- Sharon L. Walker, Oceanographer, NOAA Pacific Marine Environmental Laboratory
- Dr. Edward Baker, Supervisory Oceanographer, NOAA Pacific Marine Environmental Laboratory
- Dave Lovalvo: Founder/Owner, Eastern Oceanics; Adjunct Professor, Institute for Exploration; ROV Team Lead, NOAA Ship *Okeanos Explorer*

The workshop is free for all participants and will be available 24 hours a day, 7 days a week. Educators will have the option to receive one graduate extension credit (\$100) or obtain a certificate of completion.

Registration is open at <http://www.coexploration.org/oe>