



# UNOLS SPEAKER SERIES


- \* To establish a speaker series to highlight UNOLS ships and oceanographic research and to serve as an outreach activity to non-UNOLS colleges and universities
- \* Particular attention to institutions with under-represented minorities in the marine sciences
- \* Series to run for three years beginning in fall 2012 and evaluated in 2015.
- \* National speaker series with UNOLS institutions





## Approach

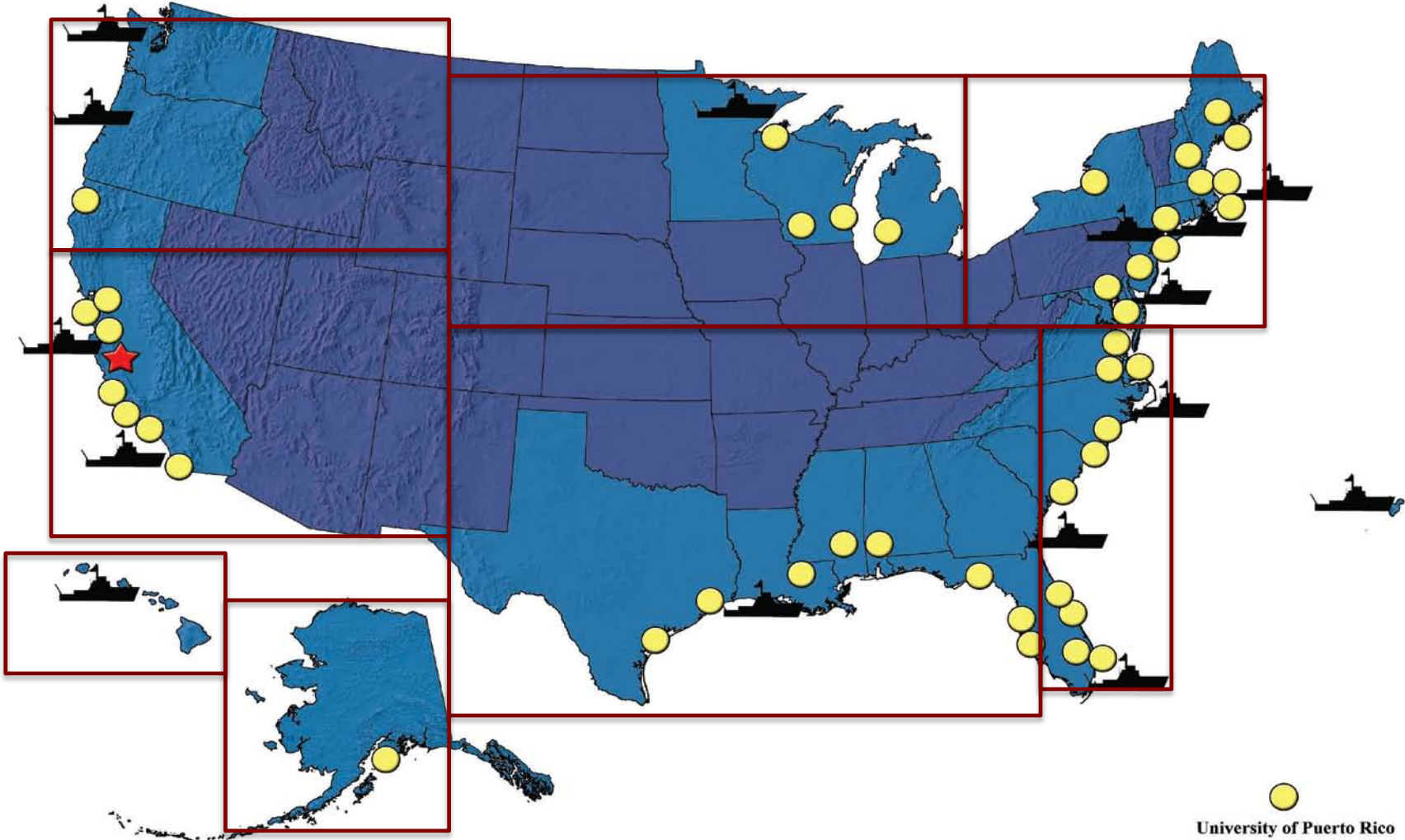
- \* Divide membership into 8 regions
- \* Identify minority undergraduate programs:  
(<http://g.co/maps/wvax5>)
- \* Coordinator in each region to recruit speakers and coordinate speaker series in undergraduate classes
- \* Identify REU experiences available for summer
- \* Funding for regional travel from UNOLS budget

# UNOLS MEMBERSHIP

 **Operator Institution**  
Note: Symbol indicates home port location. Multiple ships may operate from a single location.

 **Non-Operator Institution**

 **National Oceanographic Aircraft Facility Operator**



 Smithsonian Tropical Research Institute - Panama

 University of Puerto Rico



## Regional Coordinators:

Great Lakes: Doug Ricketts (Univ. of Minn.)

Northwest: Bob Collier (OSU)

Southwest: Bruce Applegate (SIO)

Northeast: Mary Jane Perry (Univ. of Maine)

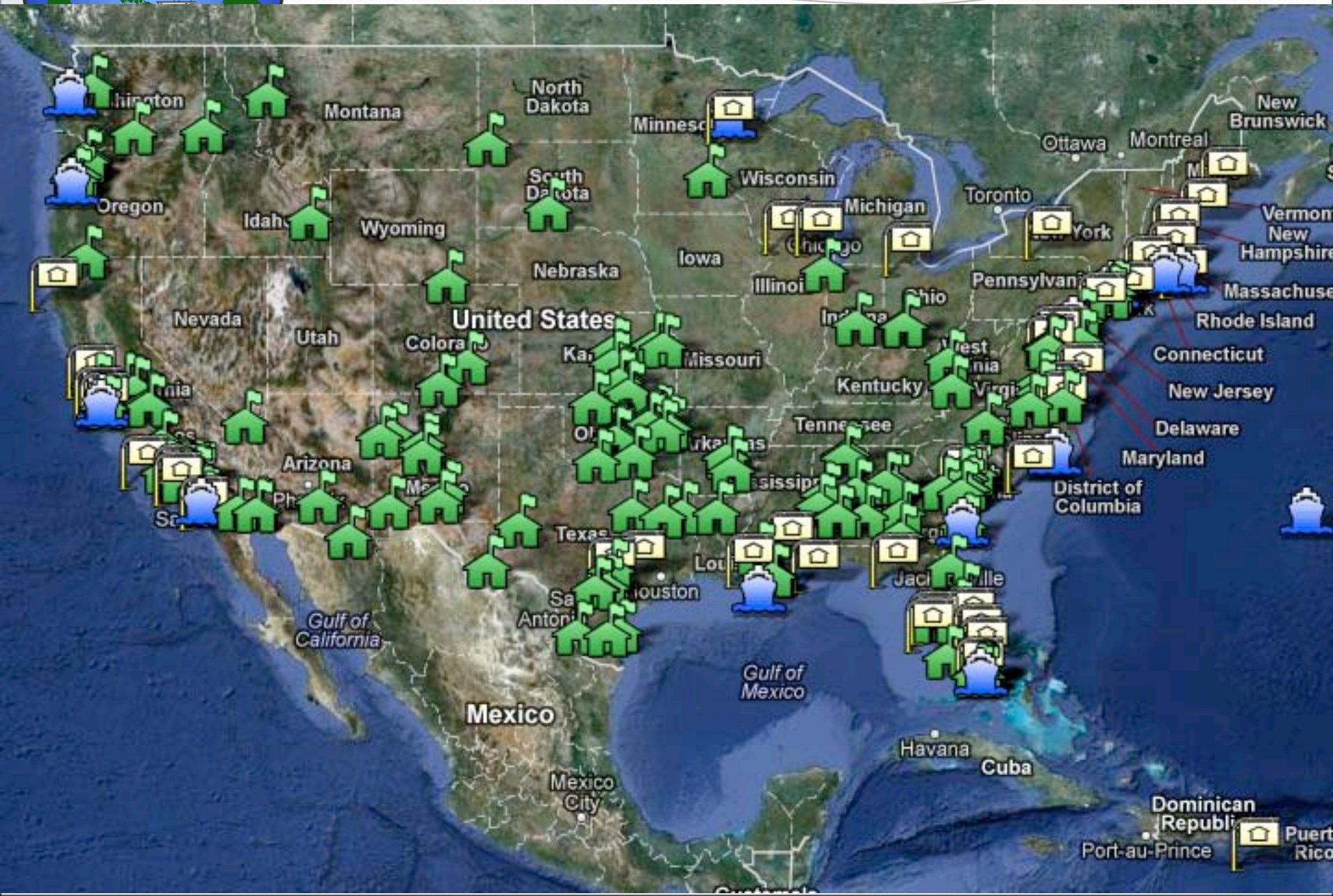
Southeast: Peter Ortner (RSMAS)

Gulf Coast: Vernon Asper (Univ. of Southern Miss.)

Hawaii: Marcie Grabowski (Univ. of Hawaii)

Alaska: Terry Whitledge (Univ. of Alaska)







## PROGRESS REPORT

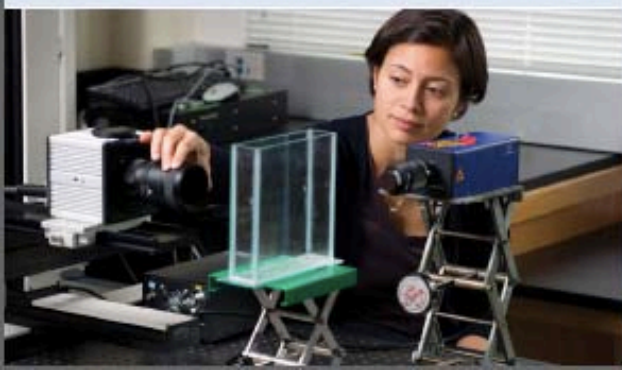
1. Speaker series funded through UNOLS office for travel
2. Speakers and institutions are being identified and scheduled with first speakers this fall.
3. UNOLS Office prepared PowerPoint presentation for overview of fleet and infrastructure.
4. Ocean Sciences Diversity Workshop: Ocean Opportunities flyer: Jim Yoder (WHOI)

*Scientists, engineers, and policy makers apply the tools of their fields to the ocean environment often using an interdisciplinary approach.*

### Undergraduate Preparation

Ocean science graduate programs admit students from a wide range of different backgrounds including the natural sciences (such as biology, chemistry, physics or geology) and mathematics. Programs in ocean engineering look for applicants who majored in mechanical, electrical or civil engineering. Ocean policy students may have an undergraduate degree in environmental science, natural science, or economics.

Missing a required course? Don't give up! Some programs will accept new graduate students and then provide the opportunity to complete one or more courses to fill gaps in their education. Participating in a summer research experience such as the Research Experience for Undergraduates (REU) program is a great way to learn about ocean research and to meet faculty and graduate students involved in ocean science, policy and engineering graduate programs. REU programs provide stipends to cover expenses, and often students are able to save some of their summer stipend money.



Join faculty and administrators at institutions across the U.S. in a coordinated effort to increase diversity in ocean science.

For additional information about OceanOpportunities and its partnerships:

[info@oceanopportunities.org](mailto:info@oceanopportunities.org)

or visit

[www.oceanopportunities.org](http://www.oceanopportunities.org)



Working to increase diversity  
in ocean higher education

# Oceans DIVE IN!

BIOLOGY | CHEMISTRY | PHYSICS  
ENGINEERING | GEOLOGY | MATHEMATICS  
CROSS-DISCIPLINES



Working to increase diversity  
in ocean higher education



*There are many ways to participate and many ways to contribute:*



**Understand the ocean**  
including its role in the Earth's climate and how climate change will affect the ocean and its ecosystems.



**Protect the ocean**  
by better managing ecosystems and fisheries.



**Find cures from the ocean**  
for cancer and other diseases by studying chemical compounds made by marine life.



**Energize the world**  
by developing the means to capture the energy in ocean waves, winds, tides and in other ways.

# Choose ocean science or engineering.



The ocean is one of the most magnificent features on our planet and offers a wealth of opportunities for exploration and discovery. As an ocean scientist you might make new discoveries about how ocean waters move, how the ocean and atmosphere work together to control climate, or you may discover new species, biochemical processes or geological features. As an ocean engineer you might design, build, and operate robotic vehicles to support science, national defense, or the offshore oil and gas industry. Scientists and engineers work together with economists, managers, and others to implement

policy to mitigate the effects of human activities on the ocean and to preserve its living resources.

## Ocean (of) Opportunities

is a partnership dedicated to promoting the development and training of a diverse and thriving workforce in the ocean sciences. The partnership involves science, math, and engineering faculty at minority-serving institutions in partnership with graduate program administrators that are recruiting students in ocean science and engineering graduate programs.

## Careers and Graduate Programs

There are many career options for those obtaining an MS or PhD in ocean science or ocean engineering. In addition to university teaching and research, other graduates work for state and federal agencies, marine-related industries, research laboratories, conservation

organizations, and consulting firms. The fast-growing field of robotics is attracting those with either MS or PhD degrees in ocean engineering. Another hot field is biotechnology, which attracts graduates in ocean chemistry or microbiology. The offshore oil and gas industry hires

ocean geologists who study sea floor features and ocean physicists who study ocean currents.

Most graduate students in ocean science and engineering receive a stipend that covers living expenses and have their graduate tuition paid, and

thus attain their graduate degree without incurring additional education debt.

Virtually every coastal state has at least one ocean science graduate program and larger states have many. Talk to your faculty adviser about your interests, and find more information on the web.

## Learn more

Visit our website at

[www.oceanopportunities.org](http://www.oceanopportunities.org)

or email:

[info@oceanopportunities.org](mailto:info@oceanopportunities.org)

