

FROM THE NATIONAL COSEE OFFICE

Greetings from Rhode Island! We hope all of our COSEE colleagues on the east coast made it through this particularly brutal winter unscathed. Looking ahead to warmer weather, the 2015 COSEE Network Meeting will be held June 23-25 in Narragansett, Rhode Island on the campus of the University of Rhode Island Graduate School of Oceanography. We look forward to seeing our COSEE colleagues and our newest Consortium members.

Sincerely,
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WOMEN IN OCEANOGRAPHY

The December 2014 issue of The Oceanography Society's magazine, *Oceanography*, featured a special supplement on women in oceanography. The supplement included feature articles on continuing challenges, mentoring, and the advancement of women in the field. Most notably, the supplement features autobiographies of more than 200 women in oceanography. The full issue can be downloaded [here](#), as well as a [link](#) to the autobiographies. Keep an eye out for some familiar names and faces from the COSEE community, including Claudia Benitez-Nelson. A big congratulations goes to these women who have paved the way for the next generation of ocean scientists, both male and female.

SACNAS 2014

In October 2014, National COSEE Office staff attended the National Society for the Advancement of Chicanos Hispanics and Native Americans in Science (SACNAS) Conference in Los Angeles, CA. Over 3,700 people attended the conference, and the conference featured exhibitors, student presentations, and student poster sessions. COSEE sponsored a session during the conference, "Oceans and Climate Change: A Global and Interdisciplinary STEM Issue." The session chairs were Cory Garza, Assistant Professor, California State University, Monterey Bay; Gail Scowcroft, COSEE Executive Director; and Liesl Hotelling, COSEE Coordinator of Partnerships and Collaborations. A panel of STEM professionals working to address the issue of ocean acidification presented perspectives on higher education and careers, particularly as they pertain to monitoring, and maintaining a healthy ocean within an interdisciplinary team. The three panelists (Joao Teixeira, Deputy Director of the Center for Climate Sciences and Group Supervisor for the AIRS Science Team Leader for NASA's Jet Propulsion Laboratory; Kwasi Connor, a Ford Foundation Postdoctoral Fellow in the Department of Ecology and Evolutionary Biology, at the University of California, Irvine; and Andrew Thompson, Assistant Professor in Environmental Science and Engineering at the California Institute of Technology) participated in a question-and-answer session after their presentations.

The COSEE NCO and Dr. Garza collaborated to facilitate the participation of ocean scientists in the SACNAS *Conversations with Scientists* program. COSEE Network staff and volunteer ocean scientists attended the event to meet with undergraduate and graduate students to share career stories, answer questions about the various ocean science disciplines, and requirements for pursuing studies in the ocean sciences. Approximately 80 students were in attendance.

COSEE hosted a booth in the exhibit hall and engaged with conference attendees, mostly undergraduate and graduate students. Based on the information gathered at prior SACNAS conferences, booth staff provided attendees with information about and contacts to COSEE member institutions located near their homes and give them information on scholarships, internships, and research experiences offered by member institutions, the NSF REU program, and other COSEE partner organizations.

For the third year, COSEE partnered with Dr. Garza and SACNAS to create an Ocean Sciences Row on the Exhibit Hall floor. Together, we successfully recruited several organizations, including Texas A&M University, University of South Florida, and Woods Hole Oceanographic Institution.

The 2015 SACNAS National Conference will be held in Washington, DC, October 29-31, 2015

COSEE CONSORTIUM INDIVIDUAL MEMBERSHIP

Individual membership in COSEE is now available! As a new international Consortium, COSEE will continue to develop and disseminate research, effective practices, and tools that cultivate cooperation among scientists, educators, and the public. COSEE also will support ocean science research as it fosters communities of practice and enhances ocean literacy world-wide.

COSEE Individual Membership Benefits

- Access to consortium dissemination vehicles
- Opportunities to partner with consortium members in activities and proposal development
- Access to COSEE resources, products, and models
- Staying current with advancements and effective practices in ocean sciences education
- Participation in COSEE meetings
- Access to the COSEE email listserv to share ideas, questions, and resources
- Institution's name and website link on the COSEE website
- Access to "members only" section of the COSEE website
- A seat on the Governing Council (or for individual membership, opportunity to run for an "at large" seat on the Governing Council)
- Opportunity to join Consortium working groups
- Opportunity to network with individuals and institutions that share similar goals

Membership is based on a calendar year, January through December, and the cost is \$40 per year for regular membership and \$15 for student membership.

Applications for both individual and institutional membership, as well as more information on the Consortium are available on the COSEE [website](#).

CENTER UPDATES

COSEE Florida (FL) has been busy continuing their work in training scientists, providing them with opportunities to communicate their research to a broader audience and training pre-service teachers in ocean science content.



They have piloted the [Video Storytelling Boot Camp](#), a collaboration between COSEE FL, Boot Camps for Scientists, the Alan Alda Center for Communicative Science at Stony Brook University, and the staff of the PBS series *Changing Seas* (based in Miami), at Indian River State College on January 15 – 17, 2015. Fifteen ocean scientists and educators participated in the 3-day workshop. Participants received hands-on training in producing videos that engage, motivate, and inspire audiences and were guided by expert instructors through all aspects of video planning and production. The Center is seeking partners to help support and co-sponsor future workshops. The Advanced Presentation Boot Camps are still being scheduled for spring 2015.

Several universities, including the University of Miami Rosenstiel School of Marine and Atmospheric Science; University of South Florida; Florida Atlantic University; and Nova Southeastern University, Oceanographic Center, have institutionalized the Presentation Boot Camp program by offering a regular (annual or semi-annual) basic training workshop through contracts with Boot Camps for Scientists.

The second Ocean 180 Video Challenge winners were announced on Wednesday, March 11, 2015. Over 37,000 middle school students from over 1,600 classrooms in 21 countries, all 50 U.S. states, and the U.S. Virgin Islands judged the videos, voted, and selected the winners:

1st Place (Amateur Category)

Drones at the Beach

Patrick Rynne, University of Miami
Fiona Graham, University of Miami/Waterlust
Ronald Brouwer, Ad Reniers, and Matthieu de Schipper, Delft University
Jamie MacMahan, Naval Postgraduate School
Laura Bracken, University of Miami/CARTHE

1st Place (Professional Category)

Dolphin Research Center Blindfold Limitation Study

Kelly Jaakola, Visual Communication Staff
Emily Guarino, and Mandy Rodriguez, Dolphin Research Center

2nd Place

[How to Treat a Bruised Flipper: Developing Pain Medications for Dolphins](#)
Claire Simeone, The Marine Mammal Center

3rd Place

[Rescuing the Gentle Giants](#)
Charles Waters, University of Auckland, Institute of Marine Science
Scott Ewing
Richard Story, Cook Islands Ministry of Marine Resources
Mark J. Costello, University of Aucklandand

The Student-Scientist Summit will be held on Thursday March 26th from 12:00 pm – 1:00 pm EST. To register for a spot to view this event, click [here](#).

The 2015 [Research Experience for Pre-service Teachers \(REPT\)](#) program will kick-off on Monday, May 11, 2015.

The COSEE FL partnership with Broward College and Florida SouthWestern State College will continue this year with students participating in the program from each school. They are thrilled to have their mentor institutions participate again, including the Florida Oceanographic Society; Florida Atlantic University, Harbor Branch Oceanographic Institute; the Smithsonian Conservation Foundation; and the Nova Southeastern University Oceanographic Center. The interns will present their scientific posters at the COSEE FL Science Symposium on Wednesday, July 1, 2015 at Indian River State College.



COSEE Florida hosts a Science Cafe on invasive species of the Indian River Lagoon.

COSEE FL has launched the *Water as Habitat* video series, featuring ocean science research being conducted in Florida. The [videos](#) are on the COSEE FL website and highlight topics, such as, sex determination in sea turtles and hurricane and storm surge prediction, with upcoming topics focusing on seahorse genetic diversity and invasive lionfish in the Atlantic and Caribbean. They are also continuing to offer many *Water as Habitat* science cafes throughout Florida with a new branch of events, COSEEMIA, occurring on a regular basis in Miami. Check the COSEE FL [website](#) for upcoming events.

SAVE THE DATE!

Tuesday
June 23-25, 2015
COSEE Network Meeting
Narragansett, RI

Friday
June 26-27, 2015
Global Ocean Science Education Workshop
Narragansett, RI

Contribute to CNN! Send news, announcements, and photos to Romy Pizziconi, romy@uri.edu.

GLOBAL OCEAN SCIENCE EDUCATION WORKSHOP

[Registration](#) for the Global Ocean Science Education Workshop (GOSE) is now open! The workshop will be held June 26 and 27 at the University of Rhode Island Graduate School of Oceanography. Workshop goals include identifying opportunities and setting a course for international collaborations and establishing a foundation for an international ocean science education network.

Panelists and plenary speakers from over 15 nations will address international and national ocean science research and education priorities. Other workshop topics include leveraging ocean research and advanced communication technologies for ocean science education. The focus is on the ocean science education pipeline from elementary and secondary education, through undergraduate and graduate education, to public education.

Information on lodging, registration, and the preliminary agenda can be found on the workshop [website](#).

CENTER UPDATES CONTINUED

COSEE Island Earth (IE) welcomed Jen Metz Kane on board as their new project manager in July of 2014. She comes to the group after working for over eight years for NOAA Fisheries, Pacific Islands Region as their Education and Outreach Specialist, and is thrilled to be a part of COSEE! You can still catch former COSEE IE program manager, Carlie Weiner, as the "marine science gal" hosting the "All Things Marine" radio show sponsored by COSEE IE. The monthly podcasts (over 30 of them now) can be found on the COSEE IE [website](#).

The COSEE IE Executive Committee members gathered together on the island of Oahu at Hawaii Institute for Marine Biology Coconut Island facility for their final Center retreat in August. Besides reviewing the previous year's projects and accomplishments, the group focused a lot of their conversations on how to sustain COSEE IE's programs without NSF funding, which will be ending in August of 2015. Committee members came up with great ideas, including soliciting the help of graduate marketing students from the University of Hawaii, Shidler School of Business to build up the member base and visibility of the [seaHarmony website](#). Even though seaHarmony is not a business, COSEE IE had no problem finding a team of students to work on developing a seaHarmony marketing plan. Look for updates about the implementation of their marketing plan in future COSEE newsletters, but in the meantime please help COSEE IE broaden the seaHarmony network by following seaHarmony on Twitter at [@iseaharmony](#) (and tell your friends and colleagues to do so, too!).

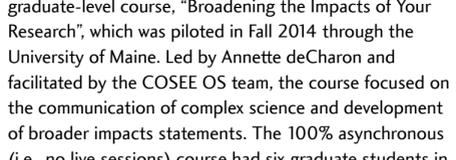
COSEE IE interns were very busy this fall. Besides helping out with outreach events, volunteering at marine debris and invasive algae clean-ups, and assisting with a marine mammal research cruise off of the Kona coast, they also developed some great science and conservation videos. Check it out this piece about "[ReefTeach](#)" from their visit to the Kahala'u Bay Education Center on the island of Hawaii. To view all the intern videos, visit their YouTube channel: "[COSEE Island Earth Interns.](#)"



Dr. Judy Lemus and graduate student, Hayley Dosses with a CTD instrument on the R/V Falkor. (Photo credit: Gabi Pilo)

COSEE IE is very excited for their PI, Dr. Judy Lemus, and her recent accomplishment as the Education Specialist for the Schmidt Ocean Institute's "Tracking the Tasman Sea's Hidden Tide" cruise that took place January 17th – February 13th, 2015. Throughout the cruise, Dr. Lemus lived aboard the R/V Falkor, and communicated to the world about deep ocean internal tides through her daily logs and social media posts. She also connected remotely with classrooms and answered their questions about the science of internal tides and what it was like to live aboard a research vessel. "I wished that the weather were better, but it was exciting to be a part of this research and learning from the wonderful science team conducting the work. I hope that our outreach will make more people aware and interested in how the ocean influences their lives in ways they may not have realized." You can read her daily logs from the trip on the expedition [website](#).

COSEE Ocean Systems (OS) has piloted a new online graduate-level course, "Broadening the Impacts of Your Research", which was piloted in Fall 2014 through the University of Maine. Led by Annette deCharon and facilitated by the COSEE OS team, the course focused on the communication of complex science and development of broader impacts statements. The 100% asynchronous (i.e., no live sessions) course had six graduate students in marine, biological, and medical sciences, who interacted as a community of practice, providing regular peer feedback over 14 weeks. They examined the language used to convey their research, collaborated on concept maps, created media products (i.e., brochures, podcasts), and wrote NSF-style broader impacts statements. The course employed effective techniques from earlier COSEE workshops, as well as online resources, such as, COSEE Networked Ocean World's [Broader Impact Wizard](#) and the [seaHarmony website](#).



Participating student's video report.

The [Institute for Broadening Participation \(IBP\)](#) continues to partner with COSEE OS to host webinars focusing on practical advice and resources for students at different points along their career pathways. In 2014, IBP and COSEE OS hosted [webinars](#) about applying for summer research positions, finding funding to attend graduate school, and making the most of a post-doc position. Each event included guest panelists, including deans, program administrators, and alumni of featured programs. In addition, IBP recently initiated a new webinar series for faculty that provides a tour of their resources on the Pathways to Science website. Since 2011, these collaborative webinars have reached nearly 1,000 live participants. Thousands more have accessed archived webinar materials on the [IBP website](#) and on COSEE OS

COSEE COSEE Technology and Engineering for Knowledge (TEK) has been very busy coordinating its third and final Ocean Science and Technology Challenge (OSTC) with the Northeast Alliance of the LSAMP program. A one-day orientation was held on January 31, 2015 with 38 attendees, including underrepresented undergraduate students from each of the five Northeast Alliance universities (UConn, UMass, URI, Northeastern University and Worcester Polytechnic Institution), LSAMP coordinators and COSEE TEK staff. The teams from each school were matched up with a COSEE TEK staff member to serve as the "Technology Mentor," providing guidance, motivation, and a role model for each team. The teams have been meeting regularly and are well into the design phase of the OSTC that features the theme of habitat mapping. Each year the OSTC selects a theme that requires a range of technologies that have been developed to address societal relevance. Habitat mapping was chosen for 2015 to coincide with a major mapping effort being led by the University of Connecticut's Long Island Sound Mapping and Research Collaborative with team partners from Lamont-Doherty's Earth Observatory and NOAA.



COSEE TEK has been meeting with faculty from the American School for the Deaf (ASD) in West Hartford, CT to develop a presentation that will be integrated into a webinar featuring acoustics and discussions and demonstration of how to build a simple, affordable hydrophone. As part of this effort, COSEE TEK developed a detailed instructional video featuring the Center's Technical Director, Kevin Joy. The video covers all of the parts, tools, and steps necessary to build the hydrophone. The video is now available on the COSEE TEK [website](#).

COSEE West (CW) The spirit and intent of COSEE West collaborations and programs continue in a new way through former CW educators and partners. A collaborative project involving California State University Channel Islands, Channel Islands National Marine Sanctuary, NOAA, and others working with three middle schools in Oxnard, California, is focusing on place-based and project-based education to bring STEM education to middle school students and teachers. Last fall, former West teacher leaders met with some of these partners and Oxnard school teachers to support for and offer guidance to the collaboration and help teachers develop place-based/project driven curriculum. Former West teachers agreed to serve as a support for this new network. Students in the participating schools will also be engaged in King Tides Monitoring in the winter of this year.



Former COSEE West teachers, partners, and staff guiding a new collaborative project to foster ocean and aquatic literacy in Oxnard district schools in Ventura, California.

Debby West, a COSEE West teacher and science education leader is guiding the project. She was also a former *West Edison Challenge* and *QuikScience Challenge* teacher participant. Inspired by those student-centered environmental challenges, which foster stewardship and have served as a great model for project and place-based learning, Debby created a local competition. With her leadership, this project has supported a small environmental challenge, engaging high school and college student mentors to work with the middle school students.

The partnership group is moving forward with education on monitoring currents by constructing and launching buoys. They are working to deploy a series of data-collecting buoys to monitor the watershed within their communities and local ocean waters. This place-based learning brings relevance to STEM learning. It also harnesses the expertise and energy of a network of diverse partners to form the observatory. Students will monitor the data collected by the buoys in addition to other variables such as weather events, fishery population, migrations, and land-based factors including agricultural and urban water management practices. This would be the first elementary school district to lead the way in the development of a working observatory.