Ocean Sciences Meeting 2014
COSEE – Sessions to Attend

SUNDAY, FEBRUARY 23

Professional Development Workshop for Early Career Scientists
Location: 318AB
8:00 –17:00
The Centers for Ocean Sciences Education Excellence (COSEE) facilitates partnerships between scientists and education professionals (including formal and informal educators, learning scientists, psychologists, and media professionals) to collectively work toward the improvement of public literacy about our ocean. Please join us for a workshop series that will include both face-to-face and online sessions, featuring demonstrations and discussions to address skills that include: deconstructing your science; understanding learning theories concerning how people learn that you can apply to your teaching and science presentations; building effective communication techniques; and broaden the reach of your science.

2YC Oceanography Teaching Resources and Practices
Location: 316C
9:00 –16:30
This workshop will explore successful models for teaching oceanography to non-majors and majors at community colleges. Organizers will focus on validated and effective practices, including but not limited to using on-line data, the role of visualizations and in-class demos, interactive activities, active learning, and engaging students in research. The workshop will also include a discussion of student learning outcomes. Participants will be given an opportunity to share resources.

Monday, February 24

132 Undergraduate Ocean Science Education In the 21st Century: An Exploration of Successful Practices
Location: 304 AB
8:00 – 12:30
Session Organizer: Jan Hodder, University Of Oregon, Jude Apple, Western Washington University, Allison Beauregard, Northwest Florida State College, Annette deCharon, University Of Maine, Janice McDonnell, Rutgers University

08:00 **Teaching Introductory Oceanography: An On The Cutting Edge Workshop Report** Wiese, K.; Mogk, D.; Bruckner, M.; St. John, K.; Trujillo, A.

08:15 **The Community College Undergraduate Research Initiative** Hewlett, J. A.

08:30 **Successes In Learning Outside The Laboratory: An Example From Thomas Nelson Community College, Hampton, VA** Martin, J. M.; Berquist, P.; Lemay, L.

08:45 **Leveraging Ocean Observatories And Web-Based Educational Tools For Sustained Undergraduate Research In Ocean Science** Glenn, S.; Schofield, O.; Kohut, J.

09:00 **Students As Citizen Scientists In An Introductory Oceanography Course: Marine Debris Monitoring And Advocacy** Miller, S. A.

09:15 **Redefining The College Lecture: Facilitating Discussions In Undergraduate Science Courses** Halversen, C.; Tran, L. U.

09:30 **The Semi-Flipped Classroom: Bringing The Application Of Lecture Information To A Community College Through Short, In-Class, Group Activities** Newby, S. G.

09:45 **Jumping Into The Deep-End Of The Ocean: Adventures In Experiential Education Via Project-Based Learning** Woodall, D. W.; Cruz, J.; Truxall, C. W.; Macfie, C.

10:30 **The Use Of Argumentation Driven Inquiry (ADI) Lessons To Engage Students In Introductory Oceanography Classes** Lutz, R. V.; Golden, B. W.; Balinsky, M.

10:45 **Engaging Learners In Thought-Provoking Conversations About Scientific Advancements: A Novel Instructional Design Model** Cifuentes, L.; Sharp, K. H.

11:00 **Innovative And Developmental Programming For Under-Prepared Community College Students With Diverse Backgrounds Majoring In STEM Fields** Frashure, K. M.; Abukhidejeh , K.

11:15 **Power Up! Giving Undergraduates The Tools To Make It In The Ocean Science Workforce** Davidson, E. R.; Ewing, N. R.

11:30 **Integrated Web-Based Exercises For Interactive Learning In Introductory Oceanography** Brassell, S. C.

11:45 **Flippin' Fluid Mechanics – Improved Student Engagement And Learning Via Web-Based Applications** Webster, D. R.; Majerich, D. M.

12:00 **Unlocking The Potential Of Smartphones To Enable Ocean Science Education** Johnson, Z. I.

12:15 **The Rewards Of Interdisciplinary Teaching In Stem Courses: From Student To Institution** Goodwin, D. S.; Schell, J. S.; Siuda, A. N.

Lunch Program: Gears: Deconstruct - Deconstructing your Research and Share your Pathway to Science
Location: 318AB
12:30 –13:45

Presenter: Annette deCharon, Carla Companion, and Ryan Cope COSEE Ocean Systems
Deconstruct your science. In this workshop you will learn and apply concept mapping skills to help you: 1) visually represent your science in a "bigger picture" context, 2) simplify your research goals and communicate them to others, and 3) share your pathway to becoming a scientist. Concept mapping will help you in writing collaborative proposals, improving your presentations, and focusing your science on questions of societal significance. Lunch will be provided to the first 50 participants. (http://coseenow.net/blog/2013/12/gears-lunch2014/)

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105 Real-Time Data, Technology, And Engineering For Ocean Science Education And Outreach
Location: Kamehameha Hall Iii
Session Organizer: Melvin Goodwin, Laing Middle School Of Science And Technology, Janice McDonnell, Rutgers University, Jim Yoder, WHOI, Carolyn Scheurle, Laboratoire D Oceanographie De Villefranche, Hervé Claustre, Laboratoire D Oceanographie De Villefranche, Robin Sheek

"Adopt A Float": An Initiative Designed For Middle School Students To Follow The Voyage Of A Bio-Argo Profiling Float And Share Experiences With Oceanographers Uitz, J.; Scheurle, C.; Lavigne, H.; De Fommervault, O.; Sauzede, R.

Voyage Of A Profiling Float: A Scientific Adventure Told To Young People Pasqueron De Fommervault, O.; Sauzède, R.; Scheurle, C.; Claustre, H.; D'ortenzio, F.

The Sailbuoy Experiment Wienders, N.; Hole, L. R.; Ippolito, T.; Field, M.; Peddie, D.

SENSE IT: Student-Created Water Quality Sensors Hotaling, L.

Using Real-Time Data In The Classroom With The Pacific Islands Ocean Observing System (PACIOOS) Voyager Iwamoto, M. M.; Maurer, J.; Brown, D.

A User-Friendly Approach To Visualize Data Relating Science And Outreach Poteau, A.; Claustre, H.; Schmechtig, C.; Scheurle, C.

Low Power Multi-Frequency Sonar For Near Real Time Long-Term Observations Of Volume Backscatter Lemon, D. D.; Dewey, R. K.; Clarke, M. R.

Using Elementary Basic Observation Buoys (EBOBs) And Remotely Operated Vehicles For Elementary Students (Roves) To Spark 3rd – 5th Grade Interests In STEM Bliss, A. C.; Bell, E. V.; Thomas, C.; Spence, L. L.; Hathaway, T. K.

Mon Ocean & Moi – An Outreach Concept Particularly Dedicated To The Youth Scheurle, C.; Claustre, H.; Uitz, J.; Sciandra, A.

Connecting Ocean Science Technology And Engineering Across The Curriculum Goodwin, M. H.; Mccormick, A.; Sheek, R.

A Real-Time Drifter Trajectory Forecast Tool For Education And Outreach Chao, Y.; Zhang, H.; Farrara, J.

The OOI Education And Public Engagement Team: Real-Time Ocean Data Coming Soon To An Undergraduate Classroom Near You Crowley, M. F.; Glenn, S. M.; McDonnell, J.; Lichtenwalner, C. S.; deCharon, A.;

Research And Education In The Antarctic: Scientists Share Their Research Experience In Real-Time With Middle School Teachers And Students Kohut, J. T.; Lichtenwalner, C. S.; Florio, K.; Gardner, K.; Linder, C.

Educational Visualization: Supporting Student Knowledge Development With Online Interactive Ocean Data Tools Lichtenwalner, C. S.; McDonnell, J.; Mills, M.; Crowley, M. F.; Glenn, S. M.

Developing A Range Of Ocean Acidification Learning Tools Schofield, O. M.; Richter, K.; Glenn, S. M.; McDonnell, J.

Ocean Networks Canada: Using Real-Time Data In Educational Resources To Bring Ocean Science To Students Dewey, R.; Davidson, E.; Ewing, N.; Juniper, K.

Analyzing Ocean Tracks: A Model For Student Engagement In Authentic Scientific Practices Using Data Kochevar, R. E.; Krumhansl, R.; Brown, C.; Krumhansl, K.; Block, B. A.

Developing Online Tools To Support The Visualization Of Ocean Data For Educational Applications Mills, M. P.; Lichtenwalner, C. S.; McDonnell, J.; Crowley, M.; Glen, S.

Using Real-Time Data From Project Dynamo To Engage General Education Students And Promote Ocean Science Education At A Two-Year College Hams, J. E.

Using Online Data As A Tool For Building Student-Led Inquiry And Hypothesis Driven Research Into Undergraduate And Graduate Courses Apple, J. K.; Casper, N. J.

Improving The Learning Experience Of Museum Visitors: Examining Different Types Of Experience In The Genome: Unlocking Life's Code Exhibit Gil, L.; Watson

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132 Undergraduate Ocean Science Education in the 21st Century: An Exploration of Successful Practices
Location: Kamehameha Hall Iii
Session Organizer: Jan Hodder, University Of Oregon, Jude Apple, Western Washington University, Allison Beauregard, Northwest Florida State College, Annette deCharon, University Of Maine, Janice McDonnell, Rutgers University

From Experiential Education To Research: Engaging Undergraduate Students In Ongoing Research Projects Amaral-Zettler, L. A.; Yingxin, Y.; Ong, B.; Siuda, A. N.; Zettler, E. R.

Developing Problem Based Learning With Undergraduates Using A Web-Based Lab Lesson Builder Software Tool McDonnell, J. D.; Lichtenwalner, C. S.; Ferraro, C.; Glenn, S.

Teaching Carbonate System For Oceanography Undergraduate Students Leonel, J.; Spera, A. M.; Figueira, R. L.

Stacking The Deck To Teach Biological Oceanography: Engaging Land-Locked Students With An Inquiry-Based Exercise To Introduce Marine Life And Marine Ecosystems Jones, M. H.

NSF OEDG Program At Savannah State University: Model Of Successful Retention Of Undergraduates In The Geosciences Pride, C. J.; Curran, M. C.; Cox, T. M.; Frischer, M. E.

Natural Hazards On The Island Of Hawaii: A Jigsaw Exercise For Introductory Classes Greene, A. R.; Garcia, M. O.; Becker, N.; Poland, M.

Design Your Own Marine Organism: An Exercise For Introductory Oceanography Courses Phillips, M. Q.

Lunar Forces, Edible Sea Vampires And Other Curiosities Of The Sea: Engaging First Year Students In Marine Sciences And Undergraduate Research In The Classroom Cheung, I. S.

The Potential And Problems Of A Foraminifera-Based Introductory Paleontology Exercise Furutani, T. T.; Nesbit, E. A.; Martin, R. A.

Oceanography And The Arts Beauregard, J. L.

How Do We Facilitate Student Learning While Reducing Contact - And Why Would We Want To? Watts, S.

Aquatic Sciences: Inherently Interdisciplinary, Irresistible Lure Leading Reproducibly To Career Continuity Aguilar, C.; Cuhjel, R. L.

Sediment Under Their Feet: Student Analysis Of Sediments From Local Depositional Environments, With Emphasis On A Transect Of A Modern Barrier Island System Steinberg, R. T.

The Use Of A Community-Based Oyster Reef Restoration Project To Support Undergraduate Research At A Liberal Arts Teaching College (Flagler College) Brown, M. T.; McGinley, E. J.; Southwell, M. W.; Veenstra, J.; Flynn, L. M.

Promoting Interest In Ocean Sciences Through Partnerships Between A College, Aquarium, And Nonprofit Organization Anastasia, J. R.; Mcnamara, M. E.

Enhancing Student Understanding Of Estuarine Dynamics Using An Orientation Research Cruise Experience Allen, M. R.; Jones, T. W.; Clark, J.; Moser, F. C.

Field Studies In Natural Systems [Earth Science, Biogeology & Marine Biology Of Belize]: A Portable Way To Promote Higher Order Learning & Critical Thinking Thomas, K.; Yeager, M.

Using Map Exercises As An Integrative Tool In A General Education Oceanography Course Venn, C.

AMS Ocean Studies: Using Real-World Data To Explore The World Ocean Brey, J. A.; Geer, I. W.; Mills, E. W.; Nugnes, K. A.

Baseline Watershed Assessment As A Training Module Jocson, J. M.; Sunga, A. J.

Innovative Ideas For Teaching Ocean Science Topics In Introductory Science Courses Caldwell, M. O.; Bristol, D. L.; Olney, J. L.

Tuesday, February 25

096 Ocean and Climate Change Science: Engaging Scientists in Educating the Public
Location: 318 AB
08:00 – 10:00
Session Organizer: James Yoder, WHOI, Dwight Coleman, University Of Rhode Island, Gail Scowcroft, University Of Rhode Island, Don Boesch, UMCES

08:00 **Communicating Ocean And Climate Change: Role Of And Benefits For Scientists In The Community Of Practice** Chan, K.; Stern, S.; Anderson, J.

08:30 **Hurricane Science And Education: Using Online Tools To Engage Scientists, Educators, Students, And The Public** Morin, H. B.; Scowcroft, G. A.; Knowlton, C. W.; Ginis, I.

08:45 **Evaluation Enhances Learning About Effectiveness** Romano, C.; Hayward, J.

09:00 **Climate Change Education On The T: Using Advertising Strategies For Disseminating Scientific Research** Chen, R. F.; Douglas, E.; Lustick, D.; Lohmeier, J.; Rabkin, D.

09:15 **Connecting Scientists And Educators Through Ship-To-Shore Science: An Informal Science Program Bringing The Excitement Of Science And Adventure To The Public** Cooper, S. K.; Kurtz, K.; Collins, J.

09:30 **Feeling The Heat: Successes And Challenges In Translating Climate Science For The Public** Nigella, H. M.; Zmarzly, D.; Peach, C. L.

09:45 **Ocean Scientists And Aquarium Audiences: Increasing Ocean Literacy Through Ocean Exploration** Knowlton, C. W.; Scowcroft, G.; Coleman, D. F.

Lunch Program: GEARS: Deconstructing – Telling Stories about your Science
Location: 318AB
12:30 –13:45

Presenter: Dr. Ari Daniel Shapiro, COSEE NOW
Stories are our currency of communication and memory. In this workshop, you will learn how to frame your science using storytelling techniques. You will learn how to use stories to engage your audience and help them understand your science. You will hear some examples, and get to try it yourself. Ari is a radio broadcaster and freelancer with NPR's Morning Edition, All Things Considered, Radiolab, PRI's The World, and the NY Times. Lunch will be provided to the first 50 participants. (http://coseenow.net/blog/2013/12/gears-lunch2014/)

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096 Ocean and Climate Change Science: Engaging Scientists in Educating the Public
Location: Kamehameha Hall Iii
Session Organizer: James Yoder, WHOI, Dwight Coleman, University Of Rhode Island, Gail Scowcroft, University Of Rhode Island, Don Boesch, UMCES

Design Science Meets Ocean Science: Engaging Challenging Learners With Innovative Projects While Collaborating With An Ocean Scientist Cline, A.; Moore, T. S.

Is Committed Ocean Warming And Acidification A Planetary Emergency? Carter, P.; Villarante-Tonido, K.

Adrift.org.au: An Interactive Website About Ocean Currents And The Pathways Of Marine Plastic Into The Ocean Garbage Patches Van Sebille, E.; England, M. H.

Sharing The Discoveries Of A Submarine Canyon: Creating Passion For Ocean Research Gervais, F.; Davidson, E.; Ewing, N.; Juniper, K. J.

Embedding Ocean And Climate Researchers In An Informal Science Institution Miller, M. K.; Schwartzenberg, S.; Frazier, J.; Garfield, N.; Raleigh, C.

Climate Data Opportunities: Engaging With Corporate Leaders Dr. Brown, O. B.; Dissen, J. P.

Norwegian Research School In Climate Dynamics Breines, R.; Furevik, T.

Plankton Portal: An Online Citizen Science Project For Plankton Classification And Education Cowen, R. K.; Guigand, C.; Luo, J. Y.; Greer, A. T.; Grassian, B.

The Unknown Ocean - Live Interactive Educational Programming Utilizing Ship-To-Shore Telepresence Technology Coleman, D. F.; Scowcroft, G.; Knowlton, C.; Matis, K.; Mcmillan, W.

Engaging The Public (Ages 3-99) In The Marine Nitrogen Biogeochemical Cycle With An Activity At A Local Science Museum Horak, R. E.; Arduini, S.; Vukajlovich, D.

Broadening Our Reach: Providing The Public With Access And Participation In Ocean Exploration And Research Aboard E/V Nautilus Bell, K. C.; Fundis, A.; Smith, L.; Munro, S.

Communicating Oceanography From Research Vessels Harden, B. E.; Murphy, D.; Pickart, R. S.

Weatherblur: Ocean Scientists, Marine Industry, Educators, Students, And Families Collaborate On Citizen Science To Inform Next Generation Observing Systems Deese, H. E.; Kermish-Allen, R.; Arnold, S.; Thompson, R.

Wednesday, February 26

066 Collaborations and Partnerships in Ocean Research and Education
Location: 318 AB
8:00 – 12:30
Session Organizer: Barbara Bruno, University Of Hawaii, Heather Reader, Lund University, Rachel Luther, University Of Southern Mississippi Gulf Coast, Judy Lemus, University Of Hawaii, Florence Thomas, University Of Hawaii, Vanessa Green, C-MOP

08:00 **Integrating Traditional Ways Of Knowing With Western Science, Through Collaborative Opportunities Fostered By The Network Of NSF Science And Technology Centers** Baptista, A. M.; Green, V.; Bueno Watt, N.

08:15 **Student Research On People, Oceans And Climate Change: Weaving Traditional Alaska Native Knowledge And Western Science Together At Science Fairs** Dublin, R. A.; Barnhardt, R. J.; Morrow, L. S.; Anderson, A.; Sigman, M.

08:30 **Incorporating Traditional Knowledge Into Geoscience Education: A Look At Watersheds In Southeast Alaska**

Smythe, W. F.; Mcallister, S. M.; Remple, K. L.; Young, B.; Baptista, A.

08:45 **American Indian Student-Driven Research At The Salish Sea Research Center** Hatch, M. B.

09:00 **Integrating Traditional Ways Of Knowing And Western Science In The Global Watershed** Waterhouse, J.

09:15 **Community Based Participatory Research Links Academic Disciplines, Community, And Management** Thomas, F. I.; Aikau, H.; Dulaiova, H.; Yoshioka, J. R.; Lemus, J.

09:30 **Traditional Knowledge And Western Marine Science In Hawai'i: Successes And Challenges In Youth And Public Education** Foley, J. M.; Thompson, A. N.

09:45 **Maile Mentoring Bridge: Bringing Native Hawaiians Into Science** Choy, C. A.; Noa, K.; Bruno, B. C.; Soest

10:30 **Ms PhD's: Using Virtual Community Platforms To Integrate Diversity, Collaborative Strategies And Effective Partnerships In Ocean Science Research And Education** Scott, O.; Johnson, A.; Williamson Whitney, V.; Ricciardi, L.; Siegfried, D.

10:45 **Scientific Community Educational Partnerships Provide Middle Students With Opportunities, Tools, And Strategies To Explore Marine Ecology** LaChance, R. S.

11:00 **Midwest To Mid-Ocean; Making Connections Between Scientists And High School Students** Lodes, K. M

11:15 **Research Experiences In Marine Science (REMS) Summer High School Program At The Hawai'i Institute Of Marine Biology (HIMB)** Rivera, M. A.; Manning, M. M.; Gorospe, K. D.;

11:30 **Engaging Teachers And Scientists In The Transition To Next Generation Science And Engineering Standards** Peach, C. L.; Villenueva, M.; Trecha, C.

11:45 **Developing Student-Scientist Partnerships To Enrich Undergraduate Science Education, Cultivate Sustainable Thinking, And Foster Ocean Stewardship** Luther, R. A.; Reader, H. E.

12:00 **Collaborative Efforts Through The Ka'Anapali Makai Watch Program In Support Of A Unique Protected Area On Maui** Foote, E. A.; Diamond, J.

12:15 **How Do We Fund Young, Risky, Blue-Sky Research? New Collaborative Funding Opportunities In A Digital Age** Ben McNeil

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Lunch Program: GEARS: Learn – What's the relationship between understanding the science of climate change and making conservation-based decisions?
Location: 319AB
12:30 –13:45

Presenter: Catherine Halversen and Lynn Tran, COSEE California
How deeply do people need to understand the science of climate change before they are activated to do something about it? We address this question by discussing how people learn and how we make decisions, and considering how

a deeper understanding of the human mind is helpful for communicating science. This interactive workshop will explore the relationship between understanding and conservation-based decision-making, around climate change. Lunch is provided to the first 50 participants. (http://coseenow.net/blog/2013/12/gears-lunch2014/)

Lunch Program: Positive Factors that Impact Success in STEM
Location: 313C
12:45 – 13:45

Explore the positive factors that reduce barriers to participation and enable individuals to succeed and persist in STEM fields and careers. Learn how to implement strategies and practices that broaden participation and support diversity in your programs or work, personal, and/or academic environments. Food for this luncheon workshop will be provided to the first 50 participants. Co-sponsored by the Institute for Broadening Participation (IBP) and the COSEE - Ocean Systems.

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016 Using Evaluation in Ocean Sciences Education and Workforce Development: What Does the Evidence Show?
Location: 318 AB
14:00 – 16:00
Session Organizer: Elizabeth L. Rom, NSF, Patricia Kwon, Viewpoint Consulting, Andrea Anderson, Soundview Evaluation, Allison Miller, Ocean Leadership, Inc.

14:00 **Community-Based Mentoring** Clem, S.; Lozier, M. S.; Mpowir

14:15 **What Is The Nature Of The Impacts Of COSEE Involvement On Scientists' Professional Roles?** Anderson, A. V.; Kwon, P. S.; Dorph, R.; Plude, D. E.

14:30 **COSEE-TEK Ocean Science And Technology Challenge (OSTC): An Evaluation Of Collaboration With A Louis Stokes Alliance For Minority Participation (LSAMP) Program** Payne, D. L.; Babb, I. G.; Erickson, J.

14:45 **Demographics Of Ocean Science Graduate Programs** McDuff, R. E.

15:00 **Using The COSEE Scientist Survey Factors To Assess The Impact Of Ocean Inquiry Project Activities On Scientist-Volunteers' Professional Practices** Anderson, A.; Stahr, F. R.

15:15 **Fostering Leadership And Appreciation For Broader Impacts Among Early Career Scientists: Development And Assessment Of A Professional Development Course** Guannel, M. L.; Bruno, B. C.; Grand, M. M.; Lee, N.; Day-Miller, E. A.;

15:30 **An Evaluation Of The Role Of Professional Development Institutes For Faculty: Improving The Teaching Of Ocean Science At Community Colleges** Hodder, J.; Apple, J.; Gehrke, C.; Hadfield, M.; Manset, G.

15:45 **Geoscience Student Pathways From The Undergraduate Degree Through The First Few Years As An Early Career Geoscientist** Wilson, C. E.; Keane, C. M.; Houlton, H. R.

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016 Using Evaluation in Ocean Sciences Education and Workforce Development: What Does the Evidence Show?
Location: Kamehameha Hall Iii
Session Organizer: Elizabeth L. Rom, NSF, Patricia Kwon, Viewpoint Consulting, Andrea Anderson, Soundview Evaluation, Allison Miller, Ocean Leadership, Inc.

The Smart Science Initiative Maharaj, A. M.; Sherwood, S.; Pitman, A.; Abramowitz, G.; Sen Gupta, A.

The ASLO Multicultural Program: An Evaluation Of Its Effectiveness And Outcomes Cuker, B. E.; Haxton, C.; Martínez, C.; Berger, A.

Benefits Of Scientists Engaging In Education And Outreach: Scientist Perspectives Day-Miller, E. A.

Researcher Educator Exchange Forum (Reef): A Results-Driven Model For Improving The Broader Impact Of Ocean Sciences Research Thomas, C. J.; Van Dyk, P.; Bliss, A. C.; Bell, E. V.; Kirby-Hathaway, T.

Designing For Success: Positive Factors That Support Success And Retention In STEM Fauver, A.; Siegfried, D.; Detrick, L.; Johnson, A.

Evaluation Systems For Evidence-Based Reporting Siegfried, D. T.; Johnson, A.; Fauver, A.; Ricciardi, L.; Detrick, L.

Workforce Development: Broadening Participation In STEM Fauver, A.; Johnson, A.; Ricciardi, L.; Detrick, L.; Siegfried, D.

Exploring Public Attitudes And Information Needs For Marine Conservation Outreach In Hawaii Wiener, C. S.; Lemus, J. D.; Manset, G.

Mapping Out Your Message: Workshop And Webinar Models That Support Collaborative Critical Thinking deCharon, A. V.; Companion, C. J.; Repa, J. T.

The Pacific Internship Programs For Exploring Science: Changing The Face Of Conservation In Hawaii Puniwai, N.; Ziegler-Chong, S.; Ching, M.

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066 Collaborations and Partnerships in Ocean Research and Education
Location: Kamehameha Hall Iii
Session Organizer: Barbara Bruno, University Of Hawaii, Heather Reader, Lund University, Rachel Luther, University Of Southern Mississippi Gulf Coast, Judy Lemus, University Of Hawaii, Florence Thomas, University Of Hawaii, Vanessa Green, C-MOP

Collaboration Between Scientists, Teachers And Students To Develop Educational Tools And Share Experiences Sauzède, R.; Pasqueron De Fommervault, O.; Scheurle, C.; Claustre, H.

Engaging Students In Marine Debris Efforts Utilizing An Integrated Science, Technology, Engineering, Arts, Mathematics, And Social Studies Curriculum Crews, T. D.; Mcdonald, R.; Carlin-Morgan, K.; Goodwin, C.; Rowe, S.

Living Liquid: Partnering With Ocean Scientists To Create Museum Exhibits Frazier, J. A.; Ma, J.; Liao, I.; Dutkiewicz, S.

See More Seas With C-MORE: Merits Of The 2013 Summer Course Balmonte, J. P.; Foster, S. Q.; Rouco-Molina, M.; James, A.; Bramucci, A.

I Paa Ke Kahua: Using Hawaiian Language Resources For Science Curriculum Ellinwood, J. K.; Stone, J. K.; Nogelmeier, M. P.; Chinn, P. W.

US-Australia Virtual Environmental Partnership: Engaging "Digital Native" High School Students In Water Issues O'Neil, J. M.; Costanzo, S. D.; Campbell, C. A.; Heil, C. A.; Dennison, W. C.

What Does A Geoscientist Really Do? Wren, J. L.; Bruno, B. C.; So

Bridging The Gap: Using Place- And Culture-Based Curriculum To Create Interest In Earth Science Education Spencer, L.; Stone, J.; Ellinwood, J.; Rowland, S. K.; Chinn, P.

Scripps Community Outreach Program For Education (SCOPE) Wilson, S. J.; Page, H. N.; Patin, N. V.

Red Water Bloom: A Collaborative Biomathematics Workshop With The Center For Coastal Margin Observation And Prediction And Pacific University Green, V. L.; Besse, I.; Bueno Watts, N.; Baptista, A. M.

Ocean Exploration 2020 - A National Forum: What's Trending Among Ocean Exploration Experts And The Ocean Science Education Community In The U.S And Abroad? Keener, P.; Tuddenham, P.

Researcher-Educator Exchange Forum: Engaging Early-Career Scientists With Classroom Teachers, Informal Educators, And Informal Science Education Facilities Hathaway, T. K.; Thomas, C. J.; Bell, E. V.; Bliss, A. C.; Spence, L.

Mentoring Success In Marine Science: Examples From Savannah State University Curran, M. C.; Cox, T. M.; Pride, C. J.

Geoscience Alliance: Building Partnerships To Advance Ocean Research And Education For Native American Students Bueno Watts, N.; Dalbotten, D.; Green, V.

Outreach Between Researchers And Managers In The Northwestern Hawaiian Islands And Youth Audiences Mayer, B.; Duhr-Schultz, M.; Lopez, J.; Becker, B.; Collins, A.

Scientists' And Teachers' Perspectives About Collaboration Munson, B. H.; Martz, M. A.; Shimek, S. H.

Increasing Public Awareness Of Importance Of Hawaiian Plants To Healthy Terrestrial And Coastal Ecosystems: Project Budburst-University Of Hawaii Collaboration Newman, S. J.; Chinn, P.; Henderson, S.; Bornhorst, H.; Adams, R.

Building Toward A Sustainable, Integrated, And Operational Glider Network In The Gulf Of Mexico Mullins-Perry, R. L.; Jochens, A. E.; Howard, M. K.; Howden, S.

Engaging Ocean Scientists In Educational Outreach: COSEE Florida's Model For Mutually Beneficial Partnerships Diederick, L. K.; Paul, V. J.; Bourexis, P.

The 2013 Launch Of A Research Alliance On Atlantic Ocean Cooperation Marked A Crucial Step. Now, Why Must Researchers Think Beyond The Horizon? Van Fleit, L.

Sharing SOEST Underway Data: A New Approach Chandler, M. T.; Miller, J.; Ferguson, J. S.; Taylor, B.; Wessel, P.

Ho`Omaka Hou ~ To Make A New Beginning Mitchell, J. K.

The C-MORE Summer Course: Training The Next Generation Of Microbial Oceanographers The C-MORE Summer Course Collective

Cooperative Fisheries Research In New England: Participant Perceptions Jekielek, P. E.; Johnson, T. R.

Broader Impacts Group: Student-Led Efforts To Bring Science Communication Into The Graduate Education Process Alpert, A.; Rosengard, S.

Building A Statewide Ocean Science Learning Network Through Collaborations Between Researchers And Informal Science Education Centers Paul, V. J.; Diederick, L. K.

Oceanography Summer Research Collaboration Between A Community College And NOAA Researcher McFadden, M. A.; Manning, J. P.; Troubetaris, J.; Sage, C.

Developing A Community Reporting Network As A First Tier In State Rapid Response Contingency Plan For Coral Diseases And Marine Invasive Outbreaks Preskitt, L. B.

Emerging Data From Citizen Science: Using Native Knowledge To Understand Hawai'i's Climate Lance, K.; Businger, S.; Stone, J.; Ellinwood, J.; Chinn, P.

Jellywatch.org — Citizen Science On A Global Scale Haddock, S. H.; Elliott, K. E.

Systematic Approach To Transform Our Knowledge Of The US Atlantic Submarine Canyons Potter, J.; Lobecker, E.; Russell, C.; McDonough, J.; Cantwell, K.

Partners In Discovery: Building Scientist-Teacher Collaborations To Support Student Learning And Inquiry Skills In Aquatic Science Rollwagen-Bollens, G.; Nelson, T.; Kennedy, A.; Graves, M.; Bollens, S.

THURSDAY, FEBRUARY 27

Lunch Program: GEARS: Build and Broaden – The Broader Impact Wizard: Step-by-step instructions on how to write Criterion II
Location: 318AB
12:30 –13:45

Presenter: Janice McDonnell and Dr. Carrie Ferraro, COSEE NOW

Scientists are increasingly being asked to communicate the "broader impacts" of their work. We will explore a suite of new online resources for scientists aimed at helping you develop a BI statement that will satisfy NSF Criterion II and fulfill your interest in communicating your science. Learn about the important points to include in your BI statement and tips on selecting potential audiences, identifying appropriate collaborators, and developing activities that achieve broader impacts. (http://coseenow.net/blog/2013/12/gears-lunch2014/)

Town Hall: The Future of Ocean Science Education hosted by COSEE
Location: Convention Center
18:30 –20:30

This Town Hall will introduce the evolution of COSEE from the NSF-Funded National Centers of Ocean Science Education Excellence to the independent Consortium for Ocean Science Exploration and Engagement (COSEE). A panel of ocean science and education professionals will begin the discussion which will focus on future opportunities and directions for national and international ocean science education. Consortium representatives will describe the new organization and its mission and objectives.

Traditional Ecological Knowledge in Marine Resource Management: A Hawaiian Islands Science Café
Location: 313A
18:30 – 20-:30

The objectives of the proposed supplemental activity are (1) to bring scientists, managers, cultural practitioners and community members together to explore the role of traditional ecological knowledge in marine resource management, and (2) to communicate current ocean science findings to a broader audience of non-scientists. The resurgence of traditional marine resource management (TMRM) practices in the Pacific highlights a new model for sustainable harvest in which traditional ecological knowledge is being adapted by local communities to fit contemporary circumstances.

This event will be open to the general community, and will bring together a diverse panel of academics, resource managers, fishers, and cultural practitioners in the spirit of *a'o aku, a'o mai* (to teach and be taught). Hosted by Hawaiian Islands Science, a University of Hawai'i at Mānoa (UHM) Native Hawaiian graduate student initiative targeted at promoting awareness and interaction between Native Hawaiians, the UHM student body, the broader community of the Hawaiian Islands, and members of the scientific community. The format will be consistent with previous Cafés, where a panel of leaders in the areas of research, management, business, government, activism, etc. is assembled in order to share their knowledge with one another, as well as with our diverse audience. The program follows a culturally appropriate agenda: The first part is for *launa 'ana* (coming together), where panelists and participants meet and greet over *pupu* (food) and *'awa* (kava). Afterwards, the *kūkākūkā* (forum) is opened, and our panelists present briefly on their respective areas of expertise. For researchers, we emphasize the delivery of recent findings through concise and jargon-free visuals. These presentations serve as formal introductions to our audience, after which the open discussions will proceed via facilitated group conversations. The *kūkākūkā* is then closed, and all participants are invited to continue their conversations over *'awa*. This event is sponsored by NSF's Centers for Ocean Sciences Education Excellence – Island Earth.