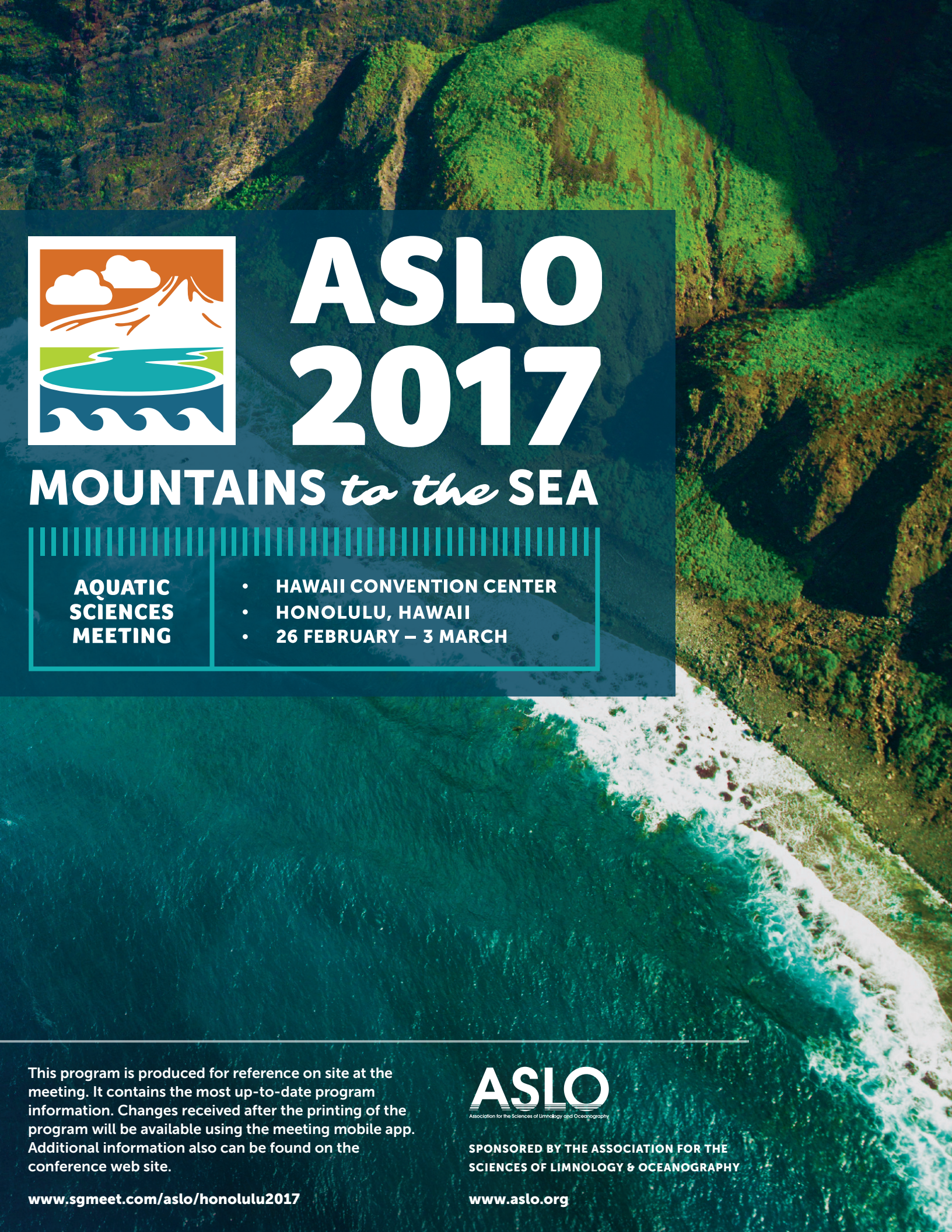

ASLO 2017

MOUNTAINS *to the* SEA

AQUATIC SCIENCES MEETING

- **HAWAII CONVENTION CENTER**
- **HONOLULU, HAWAII**
- **26 FEBRUARY – 3 MARCH**

This program is produced for reference on site at the meeting. It contains the most up-to-date program information. Changes received after the printing of the program will be available using the meeting mobile app. Additional information also can be found on the conference web site.

www.sgmeet.com/aslo/honolulu2017

ASLO
Association for the Sciences of Limnology and Oceanography

SPONSORED BY THE ASSOCIATION FOR THE SCIENCES OF LIMNOLOGY & OCEANOGRAPHY

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CONTENTS

ASLO 2017 AQUATIC SCIENCES MEETING

For this 2017 meeting, ASLO has returned to one of its most popular locations – Honolulu, Hawai'i. This is an important meeting to address water issues and promote scientific exchange across the freshwater to marine continuum. The meeting will also embrace the Hawaiian cultural perspective linking land, water, and peoples. ASLO invites you to participate in this biennial meeting and to take part in the dialogue among limnologists and oceanographers from around the world. The conference theme, "From the Mountains to the Sea" emphasizes the connectivity of our planet's aquatic systems, and underscores the urgent need to share knowledge, insights, discoveries, and different world views about the lakes, rivers, streams, aquifers, wetlands, and oceans that comprise our Earth's hydrosphere. For over a thousand years, Native Hawaiian lifestyle exemplified a model relationship between people and landscape. The successful integration of culture and resource management along natural watershed boundaries, ahupua'a, that run from the mountains (mauka) to the sea (makai), was, and continues to be paramount.

Thus, the theme is particularly fitting for the venue, as those who participate recognize and examine the interconnectedness of aquatic systems.

As part of the ASLO meeting experience, specially planned field trips provide an opportunity to experience the physical beauty and cultural uniqueness of Hawai'i.

ASSOCIATION FOR THE SCIENCES OF LIMNOLOGY AND OCEANOGRAPHY

The purpose of ASLO is to foster a diverse, international scientific community that creates, integrates and communicates knowledge across the full spectrum of aquatic sciences, advances public awareness and education about aquatic resources and research, and promotes scientific stewardship of aquatic resources for the public interest. Its products and activities are directed toward these ends.

For more than 50 years, ASLO has been the leading professional organization for researchers and educators in the field of aquatic science. ASLO traces its roots to the Limnological Society of America (LSA), which was established in 1936 to further interest and research in limnological science. While the LSA had members working in both freshwater and marine systems, the name did not reflect this diversity until 1948 when the Oceanographic Society of the Pacific merged with the LSA to become the American Society of Limnology and Oceanography. ASLO is incorporated as a non-stock (non-profit) corporation in the State of Wisconsin. Membership in the society is presently more than 3,800 members. Members are drawn from 58 countries including the United States, and more than a quarter of the members reside outside the U.S. In 2011, ASLO members voted to change its name to the Association for the Sciences of Limnology and Oceanography, reflecting the increasingly international nature of the society.

2017 ASLO AQUATIC SCIENCES MEETING COMMITTEE

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Conference Management for the 2017 ASLO Aquatic Sciences Meeting is provided by sg Meeting and Marketing Services, Waco, Texas

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QUESTIONS OR COMMENTS?

Have a question about ASLO or the meeting? Members of the organizing committee along with the ASLO board members will be wearing ribbons to help you identify them as such. Please feel free to ask if you have a question.

OVERVIEW OF THE SCIENTIFIC PROGRAM SCHEDULE

The meeting will start on Sunday evening at 18:00 with a welcome presentation, ASLO presidential address, and opening speaker. Each day of the week (Monday through Friday) will begin with the plenary session at 09:00 in the Kalakaua Ballroom on the 4th floor of the Hawaii Convention Center. Concurrent sessions immediately will follow the plenary with a 10-minute transition to allow attendees time to move from the plenary session on the 4th floor to the concurrent sessions on the 3rd floor. There will be two hour-long concurrent sessions in the morning and two in the afternoon. One-hour poster sessions are scheduled in between the concurrent sessions each day allowing for two poster sessions each day. This schedule maximizes the time for poster presentations. Award talk sessions are planned in the afternoon following the last concurrent sessions.

INCLUDED IN THIS PROGRAM

The scientific program within is current through 2 February 2017.

Changes after that date will be noted at the meeting. Additional and up-to-date information can be found on the conference web site and can be accessed through the mobile app.

MOBILE APP & SOCIAL MEDIA

We encourage you to use the meeting web site and mobile app for all current information and to navigate the meeting. Check the inside front cover for instructions.

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ASLO RECORDING POLICY

Please! No recording of individual talks or sessions. This applies to both poster and oral presentations.
Audio taping, videotaping, or photographing presentations is not allowed at the meeting. Thank you for your cooperation!

PLENARY SESSIONS

OPENING PLENARY SESSION: WELCOME PRESENTATION, ASLO PRESIDENTIAL ADDRESS, AND OPENING SPEAKER

Sunday, 26 February 2017, 18:00 – 19:30
Kalakaua Ballroom – Hawaii Convention Center

Welcome by Meeting Co-chair, Kathleen Ruttenberg, University of Hawai'i at Manoa, Honolulu, HI

Welcome Presentation and 'oli by Kūʻula Students

Kū'ula students will welcome participants to the ASLO 2017 Aquatic Sciences Meeting in Honolulu. The Kū'ula students integrate western and Native Hawaiian scientific knowledge and research methodologies to understand the environment of Hawai'i. Their research has enabled them to establish personal and meaningful connections to the places they study, which have included Midway Atoll and Ha'ena, Kaua'i. Most Kū'ula graduates have gone on to graduate schools or to jobs in natural resource management and education.

ASLO Presidential Address: Aquatic Science Matters

ASLO President Linda E. Duguay, Director, University of Southern California Sea Grant Program, Director of Research, USC Wrigley Institute, Los Angeles, California, USA

Presentation Description: These are unusual times for the global science community. Many of us are unsure if our voices and the important work that we all do will be heard and respected. In this talk I hope to make the case why our aquatic science matters and how we can better communicate that to the general public, policy makers, and our elected officials. This presentation was stimulated by our public policy committees – message of January 20th on "in politics, facts don't always matter."

Biographical Information: Linda Duguay is the Director of the University of Southern California's Sea Grant Program, Director of Research for USC's Wrigley Institute of Environmental Studies and a Research Associate Professor of Biological Sciences in the Marine and Environmental Biology Section. She holds and AB degree in Biology from the University of Rhode Island and an MS and PhD from the University

of Miami in Biological Oceanography. She previously held faculty positions at Stony Brook University, Southampton College, and University of Maryland and served as an NSF Program Manager in Biological Oceanography and Polar Programs. Duguay has been active with the ASLO outreach and education committee for the last 10 years and now serves as ASLO's President (the 5th female to do so).

Opening Plenary Presentation: E iho ana o luna, e piū ana o lalo: That which is above will be brought down, that which is below shall be lifted

Kalani Quiocho, Native Hawaiian Program Specialist, NOAA Papahānaumokuākea Marine National Monument, Honolulu, Hawaii, USA

Presentation Description: From mountains to the sea and from the sea to mountains, we experience and interact with water in different ways, yet we all share the most basic needs for our relationship with water and the environment. For Hawaiians, the existence of hundreds, perhaps thousands, of rain and wind names is evidence that our kūpuna, our ancestors, understood the value of these forces and developed intimate relationships with their universe. Traditional Hawaiian land- and ocean- tenure systems are examples of this applied understanding as well as the constructs of language and the numerous oral traditions that contain cultural principles. In these changing times, we have much to gain from reviewing the foundational understandings and relationships that indigenous peoples have with all parts of the earth, as part of our collective pursuit for adaptive management frameworks, an essential step in developing a healthy relationship with our Island Earth. As the Hawaiian proverb says, "I ka wā ma mua, i ka wā ma hope; The future lies within the past."

Biographical Information: Kalani Quiocho belongs to Hilo, Hawai'i, and was raised in part by his great-grandparents who were traditional medicinal healers. He pursued an academic career in Hawaiian Studies and Marine Science from the University of Hawai'i. He has worked for several education institutions and organizations that serve Hawaiian children, and has also worked with other indigenous peoples and communities of the Americas, Asia and the Pacific. Examples include his diplomatic work alongside social-religious activists in India in 2010, and the government of Japan following the Ehime Maru tragedy in 2001. As a longline fishery observer with the NOAA National Marine Fisheries Service, he has accumulated more than 300 sea days aboard commercial fishing vessels. This at-sea experience compelled him to focus knowledge gained from his social justice work to elevate the profile of traditional knowledge systems in parity with conventional science, conservation and management. Quiocho is currently the Native Hawaiian Program Specialist for the NOAA Papahānaumokuākea Marine National Monument. Part of his responsibilities, or kuleana, is to ensure that traditional Hawaiian principles and concepts are effectively integrated into the overall management and stewardship of the Northwestern Hawaiian Islands; a place that is both naturally and culturally significant.

WELCOME IN THE FIELD, WELCOME IN OUR FIELD: ATTRACTING THE BEST AND BRIGHTEST

Monday, 27 February 2017, 09:00 – 09:50
Kalakaua Ballroom – Hawaii Convention Center

Marcia McNutt, President, National Academy of Sciences, Washington, DC, USA

Presentation Description: Aquatic scientists are all constantly in competition for the best talent. Both the success of individuals and of the field as a whole depends on the overall strength of the talent pipeline. Therefore, we must create both the perception and the reality of a discipline that is welcoming to everyone, regardless of gender, race, or any other distinguishing feature that does not impact merit. Aquatic science as a discipline faces challenges in this regard included the isolated nature of many marine labs and the long duration of shipboard expeditions that must be addressed. Fortunately, these issues are not unique to oceanographers, and thus some strategies that have proven effective from other disciplines can be applied.

Biographical Information: Marcia McNutt received her B.A. in physics at Colorado College, and she obtained her Ph.D. in earth sciences from Scripps Institution of Oceanography. She is a geophysicist and the 22nd president of the National Academy of Sciences. From 2013 to 2016, she was editor-in-chief of Science journals. McNutt was director of the U.S. Geological Survey from 2009 to 2013, during which time USGS responded to a number of major disasters, including the Deepwater Horizon oil spill. For her work to help contain that spill, McNutt was awarded the U.S. Coast Guard's Meritorious Service Medal. She is a fellow of the American Geophysical Union (AGU), Geological Society of America, American Association for the Advancement of Science, and the International Association of Geodesy. Her honors include membership in the American Philosophical Society and the American Academy of Arts and Sciences. In 1998, McNutt was awarded the AGU's Macelwane Medal for research accomplishments by a young scientist, and she received the Maurice Ewing Medal in 2007 for her contributions to deep-sea exploration.

TARA OCEANS: THE BIOLOGICAL CARBON PUMP FROM GENES TO ECOSYSTEMS

Tuesday, 28 February 2017, 09:00 – 09:50
Kalakaua Ballroom – Hawaii Convention Center

Lionel Guidi, Affiliated Researcher, CNRS, Sorbonne Universités, UPMC, Université Paris 06, Laboratoire d'oceanographie de Villefranche, Villefranche-sur-Mer, France, and Department of Oceanography, University of Hawaii, Honolulu, Hawaii, USA

Presentation Description: The Tara Oceans expedition (2009-2013) is the largest DNA sequencing effort ever done for the ocean revealing around 40 million genes, the vast majority of which are new to science, thus hinting towards a much broader biodiversity of plankton (from viruses to eukaryotes) than previously suggested. Thanks to novel computer models, these data also allowed to predict how these diverse

planktonic organisms interact. These resources provided a unique opportunity to look at the biological carbon pump integrating its entire biological complexity, describing the first "planktonic social network" associated with carbon export in the oligoptrophic ocean.

Biographical Information: Lionel Guidi has been a CNRS researcher since 2013 in Villefranche-sur-Mer, one of the three marine stations of the Université Pierre et Marie Curie (Paris 06) in France. He graduated in 2008 from the Sorbonne Universités, UPMC, Université Paris 06, and Texas A&M University in Texas, USA. Shortly after graduation, he started four years of postdoctoral research at the C-MORE (Center for Microbial Oceanography: Research and Education) at the University of Hawaii. Guidi's main research interests are driven by the need to better understand the global carbon cycle, and, in particular, the biological carbon pump, from gene to the ecosystem level. In order to achieve that goal, he had early motivation to bring "standard methods" together with new instruments and analytical tools to study the biology and biogeochemistry of the ocean.

STATION ALOHA: A GATHERING PLACE FOR DISCOVERY, EDUCATION AND SCIENTIFIC COLLABORATION

Wednesday, 1 March 2017, 09:00 – 09:50
Kalakaua Ballroom – Hawaii Convention Center

David M. Karl, Director, Daniel K. Inouye Center for Microbial Oceanography: Research and Education, University of Hawai'i, Honolulu, Hawaii, USA

Presentation Description: The North Pacific Subtropical Gyre (NPSG) is one of the largest biomes on Earth. Despite the global significance of the NPSG for energy and matter transformations and its key role in the ocean's carbon cycle, it is undersampled and not well characterized with respect to ecosystem structure and dynamics. Since October 1988, interdisciplinary teams of scientists from the University of Hawaii and around the world have conducted research at Station ALOHA (22.75 N, 158 W), a site chosen to be representative of this expansive oligotrophic habitat. Three major field programs, the Hawai'i Ocean Time-series (HOT; 1988-present), the Center for Microbial Oceanography: Research and Education (C-MORE; 2006-2016) and the Simons Collaboration on Ocean Processes and Ecology (SCOPE; 2014-present), have contributed to the creation and dissemination of knowledge with a focus on microbial processes and biogeochemistry. In Nov 2015, the American Society for Microbiology-designated Station ALOHA a "Milestones in Microbiology" site in recognition of historic and visionary accomplishments. After nearly three decades of intensive study, we now have a new view of an old ocean, with revised paradigms built on the strength of high-quality time-series data, insights from the application of –omics techniques and observations from autonomous gliders. The pace of new discovery, and the importance of integrating this new understanding into predictive models is an enormous contemporary challenge with great scientific and societal relevance.

Biographical Information: David Karl is the Victor and Peggy Brandstrom Pavel Professor of Oceanography and Director of the Daniel K. Inouye Center for Microbial Oceanography: Research and Education (C-MORE) at the University of Hawaii at Manoa. In spring of 1973, he participated in his first oceanographic research expedition, and since that time has spent more than 1000 days at sea conducting research, including 23 expeditions to Antarctica. In 1988, he co-founded (with Roger Lukas) the Hawaii Ocean Time-series program that has conducted sustained physical, biogeochemical and microbial measurements and experiments at Station ALOHA on approximately monthly intervals for the past 28 years. In 2014, he co-founded (with Ed DeLong) the Simons Collaboration on Ocean Processes and Ecology (SCOPE), a field-based research program that investigates the role of marine microbes – from genomes-to-biomes. Through HOT, C-MORE and SCOPE, Karl participates in the vital training mission to prepare the next generation of microbial oceanographers, and is active in a number of community-based outreach and educational activities. He is pleased to welcome all ASLO participants to Honolulu, and to Station ALOHA.

ACTIONABLE WATER SCIENCE AND EFFECTIVE COMMUNICATION

Thursday, 2 March 2017, 09:00-09:50
Kalakaua Ballroom – Hawaii Convention Center

Margaret Palmer, Professor of Entomology, University of Maryland, Professor, University of Maryland Center for Environmental Science and Director, National Socio-environmental Synthesis Center, Annapolis, Maryland, USA

Biographical Information: Margaret Palmer is a Distinguished University Professor at the University of Maryland (www.Palmer-Lab.umd.edu) and director of the National Socio-Environmental Synthesis Center (www.SESYNC.org). She is a graduate from Emory University (B.S., 1977) and the University of South Carolina (Ph.D., 1983). Palmer has tested and extended fundamental theory in marine and stream ecosystems on the interactions between organisms, boundary layer flows, and geomorphic processes. She is an international expert on river restoration and is well known for work at the interface of water science and policy, having served as a technical advisor, and an innovator that helps build solution-focused teams to solve problems that have social, legal, policy, and scientific aspects. Palmer has published extensively, received many awards, and been an invited speaker in numerous and diverse settings including regional and international forums, science-diplomacy venues (e.g., in North Korea), and popular outlets such as the Steven Colbert show.

HARNESSING BASIC SCIENCE TO ADVANCE SOLUTIONS FOR CORAL REEFS

Friday, 3 March 2017, 09:00-09:50
Kalakaua Ballroom – Hawaii Convention Center

Ruth Gates, Director and Researcher, Hawai'i Institute of Marine Biology, School of Ocean and Earth Science and Technology, University of Hawai'i at Manoa, Kaneohe, Hawai'i, USA

Presentation Description: Coral reefs in Hawaii and across the globe continue to decline in health due to intensifying climate change, resource extraction and pollution.

Although the future looks bleak, certain corals and reefs are not only surviving, but also thriving in conditions that kill others. Dr. Gates will unveil the complex biology that underpins this natural variation in the response of corals to stress. She will then discuss how this knowledge can be harnessed to develop tools that build resilience on reefs, arresting and improving the prognosis for coral reefs.

Biographical Information: Dr. Ruth D. Gates is the director of and a researcher at the Hawaii Institute of Marine Biology (HIMB), University of Hawaii at Manoa. She attained her PhD from the University of Newcastle upon Tyne in England and completed her postdoctoral training at the University of California at Los Angeles. In 2003 she moved to Hawaii where she has built a dynamic and globally recognized research program that focuses on coral health. Leveraging advances in this basic research area, Ruth and her colleague Madeleine van Oppen won the 2012 Paul G. Allen Ocean Challenge with their idea to assist the evolution of corals and develop capacity to stabilize reefs in the face of climate change. She has published well over 100 scholarly articles and has been recognized with many awards, including the University of Hawaii Board of Regents Medal for Excellence in Research in 2014 and Honolulu Magazine's Islander of the Year for Science in 2016. Ruth is the elected president of the International Society for Reef Studies and a passionate advocate for coral reefs.

SOCIETY AWARD TALK SESSIONS

The 2017 society awards will be presented during the award talk sessions Monday through Friday afternoons. Biographical information and award citations will be included in the May 2017 issue of the *L&O: Bulletin.*

RAYMOND L. LINDEMAN AWARD

Monday, 27 February 2017, 17:40-18:30
Kalakaua Ballroom – Hawaii Convention Center

Monday's Award Talk Session will feature an award acceptance presentation by the 2017 Raymond L. Lindeman Award recipient. The Raymond L. Lindeman Award honoring a young author for an outstanding peer-reviewed, English-language paper in the aquatic sciences is being presented to **Shawn Devlin** (University of Montana, Flathead Lake Biological Station). Devlin and colleagues' *Nature Communications* paper entitled, "Top consumer abundance influences lake methane efflux" documents a novel whole-ecosystem experiment showing that food web structure can control methane efflux from lakes.

About the Award: The Raymond L. Lindeman Award honors a young author for an outstanding peer-reviewed, English-language paper in the aquatic sciences. This annual award is given in honor of Raymond L. Lindeman (1915-1942) and was first presented in 1987 to recognize an outstanding paper written by a young scientist at 35 years of age or less.

RAMÓN MARGALEF AWARD FOR EXCELLENCE IN EDUCATION AND JOHN H. MARTIN AWARD

Tuesday, 28 February 2017, 17:40-18:30
Kalakaua Ballroom – Hawaii Convention Center

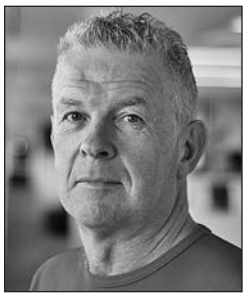
Tuesday's Award Talk Session will feature an award acceptance presentation by the 2017 Ramón Margalef Award recipient. The Ramón Margalef

Award for Excellence in Education honoring excellence in teaching and mentoring in the fields of limnology and oceanography is awarded to **Caroline Solomon** (Gallaudet University). Solomon is recognized for her extraordinary accomplishments in bringing the deaf and hearing worlds in science together, coupled with her exceptional skill as a mentor, educator, and leader to inspire us all. The 2017 John Martin Award recipients also will be recognized. The John H. Martin Award recognizes a paper in aquatic sciences that is judged to have had a high impact on subsequent research in the field. The 2017 Martin Award is for "Algal nutrient limitation and the nutrition of aquatic herbivores" by **Robert Sterner and Dag Hessen.** Sterner and Hessen (1994) created a major paradigm shift in our understanding of producer-consumer interactions and the biogeochemistry of C, N, and P, and is one of the founding contributions to the field of "Ecological Stoichiometry."

About the Awards: The Ramón Margalef Award for Excellence in Education is targeted to honor ASLO members at any stage in their careers and is presented to the member who best exemplifies the highest standards of excellence in education. The Ramón Margalef Award was first presented in 2009 and is presented annually. The John H. Martin Award recognizes a paper in aquatic sciences that is judged to have had a high impact on subsequent research in the field. The model for such a paper is Martin et al (1991), which laid out the case for iron limitation of phytoplankton productivity in the ocean. The Martin Award is for papers at least 10 years old.

G. EVELYN HUTCHINSON AWARD

Wednesday, 1 March 2017, 17:40-18:30
Kalakaua Ballroom – Hawaii Convention Center



Wednesday's Award Talk Session will feature an award acceptance presentation by the 2017 G. Evelyn Hutchinson Award recipient. The G. Evelyn Hutchinson Award honors a scientist who has made considerable contributions to knowledge in limnology and oceanography, and whose future work promises a continuing legacy of scientific excellence. **Philip Boyd** (University of Tasmania, Australia) is the 2017 award winner for his pioneering work on the complex interactions of biogeochemistry, climate change multiple drivers, and their impacts on ocean planktonic ecosystems.

About the Award: The G. Evelyn Hutchinson Award has been presented annually since 1982 to recognize excellence in any aspect of limnology or oceanography. The award is intended to symbolize the quality and innovations toward which the society strives and to remind its members of these goals. In lending his name to the award, Hutchinson asked that recipients be scientists who had made considerable contributions to knowledge, and whose future work promised a continuing legacy of

scientific excellence. The award is given to mid-career scientists for work accomplished during the preceding five to 10 years.

RUTH PATRICK AND YENTSCH-SCHINDLER EARLY CAREER AWARDS

Thursday, 2 March 2017, 17:40-18:30
Kalakaua Ballroom – Hawaii Convention Center

Thursday's Award Talk Session will feature an award acceptance presentation by the 2017 Ruth Patrick Award recipient. The Ruth Patrick Award honors scientists who have applied the aquatic sciences towards solving critical environmental problems. **Walter Boynton** (University of Maryland's Center for Environmental Science, Chesapeake Biological Laboratory) is the 2017 recipient of the Ruth Patrick Award for his research to solve environmental problems and shape policy with long-lasting impacts on estuarine ecosystems. The 2017 Yentsch-Schindler Award recipient also will be recognized. The Yentsch-Schindler Early Career Award honors an early-career scientist for outstanding and balanced contributions to research, science training, and broader societal issues such as resource management, conservation, policy, and public education. The 2017 recipient is **Meghan Duffy** (University of Michigan) for her transformative research involving parasitism as a food-web process and her influential mentoring of undergraduate students.

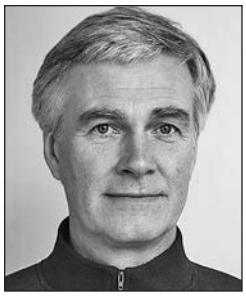
About the Awards: The Ruth Patrick Award honors outstanding research by a scientist in the application of basic aquatic science principles to the identification, analysis, and/or solution of important environmental problems. The award is given to aquatic scientists who have made either sustained contributions or a single, but critical, contribution towards solving an environmental problem. In 2012, the ASLO Board initiated a new annual award in honor of early career scientists. The Yentsch-Schindler Early Career Award honors an aquatic scientist within 12 years of the completion of their terminal degree for outstanding and balanced contributions to research, science training, and broader societal issues such as resource management, conservation, policy, and public education. The award was presented for the first time in 2013.

The Challenging Nutrients Coalition will be announcing the **winners of the Nutrient Sensor Challenge** (www.nutrients-challenge.org) during this session as well.

A.C. REDFIELD LIFETIME ACHIEVEMENT AWARD

Friday, 3 March 2017, 17:40-18:30
Kalakaua Ballroom – Hawaii Convention Center

Friday's Award Talk Session will feature an award acceptance presentation by the 2017 A.C. Redfield Award recipient. The Alfred C. Redfield Lifetime Achievement Award award honors major, long-term achievements in the fields of limnology and oceanography, including research, education, and service to the community and society. **Bo Barker Jørgensen** (University of Aarhus Center for Geomicrobiology)



is the 2017 recipient of the A.C Redfield Award for fundamental contributions to unraveling the ecology and biogeochemical interactions of microbes in environments ranging from surface sediments to the deep biosphere.

About the Award: The Lifetime Achievement Award recognizes and honors major, long-term achievements in the fields of limnology and oceanography, including research, education, and service to the community and society. In 2004 the ASLO Board renamed the Lifetime Achievement Award in honor of Alfred C. Redfield. Emphasis in selection is given to established aquatic scientists whose work is recognized for its importance and long-term influence.

NUTRIENT SENSOR CHALLENGE WINNER ANNOUNCEMENT

Thursday, 2 March 2017, 17:40-18:30
Kalakaua Ballroom – Hawaii Convention Center

The Challenging Nutrients Coalition will be announcing the winners of the Nutrient Sensor Challenge (www.nutrients-challenge.org) during Thursday's award session. The Nutrient Sensor Challenge was a market stimulus initiative launched in 2014 to incentivize development and adoption of affordable, accurate, and reliable sensors for nitrate and phosphate in water. After two years of research and development and Alliance for Coastal Technologies (ACT) lab and field testing, awards for best performance will be made to sensors developers.

PLANKTON ART EXHIBIT

Plankton: The Bizarre and the Beautiful –Ernst Haeckel, his Art, the HMS Challenger Expedition, and the Glass Models of the Blaschkas

A small collection of the intricate lithographs of the renowned 19th-century biologist and illustrator Ernst Haeckel, one of the world's most celebrated naturalists and artists, will be on display in an art exhibition in the lobby of the Honolulu Convention Center during the 2017 ASLO Meeting. Featured will be startlingly beautiful images of Siphonophores, Medusae, and Radiolaria created by Haeckel for three of the reports of the HMS Challenger expedition. The ship, a steam corvette, circumnavigated the world from 1872-76, discovering and cataloging nearly 5,000 new species from the depths of Earth's oceans. The Haeckel images that will be showcased have been selected from the images published in *Art Forms from the Abyss*, a volume of Haeckel's work compiled and written by Peter Williams, Dylan Evans, David Roberts and David Thomas.

Among the artists inspired by the work of Haeckel was a father-son team of Dresden glass smiths, the Blaschkas. They created spectacularly beautiful and true-to-life glass models of planktonic organisms, as well flowers and other animals, primarily designed as teaching aids. The Honolulu exhibit will feature images of some of the work of the Blaschkas, who were contemporaries of and consulted with Haeckel. The images represent pieces from the Cornell University and the Museum of Ireland, Natural History collections as described in *A Sea of Glass* by Drew Harvell.

The Challenger made landfall in Honolulu in July of 1875, and hosted a visit from Hawaiian King Kalākaua and his retinue. Included in the Honolulu exhibit is a small collection of historical boards highlighting

the point of intersection of the historical Challenger Expedition and a piece of Hawaiian cultural history.

We extend special thanks to ASLO for funding the Haeckel and Blaschka displays, to Dr. David Karl for providing access to the historical photographs and funding the historical portion of the exhibit, to Dr. Rosie Alegado for providing translations of text from historic Native Hawaiian newspaper stories that covered the Challenger's port call in Honolulu, and to Nancy Hulbirt, SOEST illustrator, who provided assistance in drafting the historical boards. We also especially thank Dr. Drew Harvell who was inspired by the idea of a Plankton Art exhibit to offer access to the Blaschka images. Finally, we gratefully acknowledge the artistry and passion of Peter J. le B. Williams, who was the driving force behind creating the composition and design of the boards, giving generously of his time. He in turn wishes to give sincere thanks for assistance and input to Drew Harvell, David Roberts and Dylan W. Evans. Exhibit boards were printed by Hagadone Printers, Honolulu. Selected images from the exhibit will remain on display at the University of Hawaii.

ABOUT THE HAWAI'I CONVENTION CENTER

1801 Kalakaua Avenue
Honolulu, Hawai'i 96815
https://www.meethawaii.com/convention-center/

The Hawai'i Convention Center is centrally located in the heart of Honolulu, at the gateway to Waikiki, the corner of Kalakaua Avenue and Kapi'olani Boulevard.

Hawai'i has been thoughtfully applying concepts of sustainability for generations. For centuries, an approach to land use called "ahupua'a" spread from the uplands to the sea. It integrated available resources and regulated development of social obligations and cooperation. Hawaiians demonstrated a thorough understanding of sustainability with an approach to land and water use that allowed them to self-sustain nearly 1 million islanders. Hawaiian culture blends flawlessly with high-tech innovation at the Hawai'i Convention Center. It is truly a living work of art as nature, technology, and humanity converge in this unique facility. The design is a study in environmental accountability, energy-saving efficiency, and architectural splendor.

Environmental Responsibility-The foyer is crowned with canvas canopies, reminiscent of ocean white caps and the sails of voyaging canoes, and its airy, glass-walled lobby is welcoming. This "sail" design allows cooling tradewinds to circulate throughout the towering structure, while venting off heat. Lighting and air conditioning is computer controlled, and automated systems in the restrooms reduce water usage. Recycling programs are in place, ecologically friendly products are used, and "think green" messages appear throughout the building to remind delegates of their part.

Though recyclable paper cups will be available at the water coolers, meeting attendees are encouraged to bring a re-usable water bottle and use it throughout the meeting.

INTERNET ACCESS

Complimentary wireless Internet access is limited but is available at the Hawaii Convention Center in all public areas. To connect to the WiFi at the convention center you should enable your wireless access on your device and connect to Network Name (SSID): ASLO2017. No password is necessary.

HAWAI'I CONVENTION CENTER PARKING

On-site vehicle parking is available at the Hawai'i Convention Center. The parking garage is located on the second floor of the facility, and the entrance is located on Kalakaua Avenue. ADA accessible parking is available in Row A of the garage. Parking is allowed during business/event hours only. The convention center's parking lot opens one hour before and closes one hour after an event. If you exit within 30 minutes of entering the garage, there is no charge for parking. Overnight parking is not allowed.

Current published rates for parking will apply during the meeting. For more information or assistance, please call 1-808-943-3500 or the parking hotline at 1-808-943-3081. For traffic and advisory information, tune in to radio station 1610 AM.

CURRENCY

The currency is the U.S. dollar. Credit cards are widely accepted. Automated teller machines (ATM) are available throughout the area. For other ATM locations please go to the website for your financial institution. Traveler's checks are accepted at many businesses.

ATM MACHINES AT HCC

There are three (3) Automatic Teller Machines (ATM) at the Hawai'i Convention Center. Two are located on the first floor in the lobby area, one under the escalators and one towards the bathrooms. The third ATM is located on the third floor just to right of the escalators that come up from the lobby.

CHECK CASHING

Money Mart #2601
435 Atkinson Dr., Suite B
Honolulu, HI 96814-4734
Phone 808-946-2435

Money Mart is open seven days per week and is located within walking distance of the Hawaii Convention Center and Ala Moana Hotel. Please be aware that the name on any check that is cashed must match exactly to that on the person's identification. International attendees must have their passport when they cash a check. Money Mart charges a fee for check cashing which is a percentage of the check amount.

HCC BUSINESS CENTER

The Business Center is located on the 3rd level, across from Room 301. This is a full service business center offering the following services: computer usage, color, black and white copies, prints, faxing, scanning, office supplies, various paper supplies, postcards, and gifts. FedEx and UPS shipping are also available.

Business Center Hours (Subject to change):

Sunday, 26 February ..... 13:00 to 17:00
Monday, 27 February, through Friday, 3 March ..... 08:00 to 17:00

CHARGING STATIONS/CHARGING LOCKERS

The convention center has charging lockers for you to use at no cost to charge devices. There also will be tables on the third floor with electrical outlets for you to use. Please respect the time spent at these tables to allow other conference attendees the opportunity to also charge their devices.

CONCESSIONS

Concessions are available at the Hawai'i Convention Center on the 3rd floor concourse. Vendors offer coffee, continental breakfast items, snacks, espresso, and specialty coffee drinks. They specialize in Hawaiian coffees. Deli-style lunches will be sold from 10:00 to 17:00 Monday through Friday. This includes deli sandwiches, hot dogs, entrée salads, vegetarian bowls, and plate lunches. Concession Hours (Subject to change): Monday, 27 February, through Friday, 3 March, 08:00 to 17:00.

SPECIAL CAR RENTAL RATES

Avis has been designated the official car rental company for the ASLO ASM in Honolulu, Hawai'i. Special meeting rates and discounts are available on a wide selection of GM and other cars at the Honolulu International Airport.

To receive these special rates, be sure to mention your Avis Worldwide Discount (AWD) number is D130903. When calling Avis at (800) 331-1600 to make reservations, attendees should provide reservations agents with this AWD number to ensure they receive the best available car rental rates. The AWD will be effective from seven days prior to the event until seven days after the event. Avis reservation via the web: http://bit.ly/2besiUt

TAXI SERVICE

The fare from the airport to Waikiki beach area during non-rush hour periods is approximately $40.00-$45.00, plus a baggage charge of 50 cents per bag. Fare is by meter only. Taxi service is available on the center median fronting the terminal baggage claim areas. See the taxi dispatchers wearing yellow shirts with black lettering, and the wording "TAXI DISPATCHER" for service.

A number of taxi services provide transportation to and from the convention center. Please inquire at your hotel.

Charley's Taxi serves the Hilton Hawaiian Village, Marriott Waikiki Beach Hotel, Outrigger Luana, Ko Olina Resort, and many smaller hotels in Waikiki. Charley's serves the local community and can dispatch cars quickly, 24/7. Call them at 1-808-531-2333.

TheCab Company provides taxi services to and from the major hotels in Waikiki (Hyatt, Sheraton, Pacific Beach, Waikiki Beach Hotel) and many small hotels in Waikiki. TheCAB serves Ala Moana Shopping Center and the Kahala Mall. They also provide services 24/7 and have a system to dispatch cars quickly. Call them at 1-808-422-2222.

If you are interested in verifying or calculating fares in advance, the Honolulu Taxi Fare Calculator, www.taxifarefinder.com/main.php?city=Honolulu can provide a good reference. The site uses current fares and potential flat rates.

If you are at a hotel, restaurant, or club and need a taxi, you can ask someone at the hostess stand or bell stand to call a taxi for you. Taxis are available outside the front entrance of the Hawaii Convention Center.

TRANSPORTATION NETWORK COMPANIES

Both Uber and Lyft operate in Honolulu.

BUS SERVICE

Public transportation to the Hawai'i Convention Center from the airport and all parts of Oahu is available on "TheBus." For information on routes, times and fares, call 1-808-848-5555 or visit their website at www.thebus.org.

WALKING MAPS

Downtown Honolulu is the state's main business center and financial district. Located in and around are the office buildings and bank towers of some of Hawaii's most significant and cherished treasures—all within comfortable walking distance of each other. For a list of downtown landmarks and a map go to www.aloha-hawaii.com/oahu/honolulu. Another resource is www.meethawaii.com/Hawaii-Convention-Center/About-Hawaii-Convention-Center/Getting-to-the-Center.aspx for walking and driving directions from the hotels near Waikiki to the convention center.

CHILD CARE SHARING

ASLO is not able to provide licensed childcare at this meeting. However, if you would be willing to share child care responsibilities with other families during the meeting, please send an email to Sue Rulla at suer@sgmeet.com to receive a list of those who have indicated such interest. All arrangements are strictly between you and the parent(s) whom you contact. You would need to provide any portable cribs for sleeping, food for meals, toys and games, etc. The meeting and its organizers are not responsible for any arrangements other than facilitating contact with others interested in sharing child care during the meeting. As an alternative, Kama`aina Kids is a local resource for sitter services. Additional information is available via http://kamaainakids.com/hotel-and-conventions/sitter-services or by calling 1-808-372-5992. You can also email Kathy Hew at kathyhew@kamaainakids.com.

FAMILY ROOM

A family room will be open throughout the meeting in room 327 on the 3rd level of the Hawaii Convention Center. This is a room where you may go to relax with your children if you bring them to the convention center. Please keep in mind that this is not a room for childcare and no service is offered in this room. You may not leave children unattended.

NURSING MOTHERS ROOM

If you are a nursing mother and need a private place for you and your infant, a quiet room is available for you. Please go to the First Aid room on the 3rd level between Room 318 and Room 319. Staff there will be happy to accommodate you with a private room.

EMERGENCIES/FIRST AID AT THE HAWAII CONVENTION CENTER

There will be a registered nurse staffing the First Aid room on the 3rd floor between Room 318 and Room 319. You may contact the nurse at any time by dialing "0" on any house phone in the convention center. The nurse carries a security radio and can respond anywhere within the facility. This would be your resource for comfort needs such as Band Aids or Tylenol while in the convention center as well as emergency assistance.

Hours (Subject to change):

Sunday, 26 February ..... 18:00 to 20:00
Monday, 27 February, through Friday, 3 March ..... 08:00 to 18:00

SPECIAL NEEDS

If you have a disability or limitation that may require special consideration in order to ensure your full participation in this meeting, please see a staff person at the conference registration desk. You also may send an email to business@aslo.org prior to your arrival at the meeting.

FOOD ALLERGIES

Food that is served at the convention center will be labeled by the catering company. For those with strict dietary restrictions or allergies to foods, please contact Kristin Tait. She will work with you on what might be possible to accommodate your needs.

Contact information:
Kristin Tait
Levy Restaurants
ktait@Levyrestaurants.com, Phone: 808-943-3063

LOCAL RESTAURANTS/BARS

Information about Honolulu is available at the kiosk in the lobby of the Hawai'i Convention Center.

LOST AND FOUND

Please come to the Registration Desk for inquiries concerning lost and found items.

MESSAGE BOARDS

There will be a message board located near the conference registration desk area where you may post or check for messages throughout the conference.

COFFEE BREAKS

Coffee breaks are planned in conjunction with the poster sessions Monday through Friday from 11:00 to 12:00 and from 15:30 to 16:30. This will allow for extended time to view the posters on display in the exhibit area. Complimentary coffee and tea will be served. Water will be provided in coolers, and attendees are encouraged to bring their own water bottles. A light snack item will be served. Morning and afternoon coffee breaks will be set in the exhibit area.

CONFERENCE REGISTRATION AND CHECK IN

Registration and check in for the meeting will be available all week in the lobby area of the Hawaii Convention Center. Please check in upon your arrival at the meeting in order to receive your name badge and other important materials and information. Programs will be available to those who requested a printed copy when they registered for the meeting. Additional copies may be distributed while supplies last.

In order to facilitate easier check in at the meeting, it is very important that you bring a copy of the email confirmation that you received when you registered. This will allow us to locate your name badge quickly and efficiently. Badges are filed alphabetically under the last name (family name) as entered.

Registration Desk Hours (Subject to change):

Sunday, 26 February ..... 15:00 to 19:00
Monday, 27 February, through Friday, 3 March ..... 08:30 to 17:30

RECEIPTS

Your registration confirmation that was emailed to you when you registered for the meeting will serve as your receipt. In keeping with our conservation efforts, we will not provide printed receipts to attendees on site at the meeting. If you have misplaced your original receipt and need another copy, you may print your own receipt by going to: https://www.sgmeet.com/aslo/honolulu2017/userlogon.asp. Select the option to Re-print/Re-send Your Receipt and Confirmations. Your username is your email address, and your password is your registration ID number which is printed on your conference name badge.

LETTERS OF PARTICIPATION

Likewise, letters of participation only will be provided to those who are registered for the meeting, and copies cannot be provided on site. If you need a letter of participation, please go to https://www.sgmeet.com/aslo/honolulu2017/userlogon.asp.

EXHIBITORS

Exhibits will be in the exhibit hall at the Hawaii Convention Center. Exhibitors will set up Sunday afternoon from 12:00 to 17:00, and exhibits will be in place over the following days and times:

Monday, 27 February 2017 ..... 09:00 to 19:00
Tuesday, 28 February 2017 ..... 09:00 to 19:45
Wednesday, 1 March 2017 ..... 09:00 to 19:45
Thursday, 2 March 2017 ..... 09:00 to 19:45
Friday, 3 March 2017 ..... 09:00 to 16:30

Attendees will have access to the exhibits during the exhibit hours listed above. Morning and afternoon coffee breaks will be set in the area with the exception of the Friday afternoon break which will be in the Kalakaua Ballroom foyer area.

ASLO appreciates the support of the following organizations who are exhibiting at the 2017 Aquatic Sciences Meeting:

SPONSORS:

ASLO (BOOTH E-19/24)

5400 Bosque Blvd., Suite 680
Waco, Texas 76710 USA
Contact: Helen Schneider Lemay
Phone: 254-776-3550, Fax: 254-776-3767
Email: business@aslo.org, Website: http://aslo.org

JOHN WILEY & SONS, INC. (BOOTH E-19/24)

111 River Street – Mail Stop 8-02
Hoboken, NJ 07030 USA
Contact: Fiona Sarne, Phone: 201-748-7850
Email: fsarne@wiley.com, Website: www.wiley.com

EXHIBITORS:

ASL ENVIRONMENTAL SCIENCES (BOOTH E-28)
#1-6703 Rajpur Place
Victoria, BC V8M 1Z5 Canada
Contact: Jan Buermans
Phone: 250-656-0177, Fax: 250-656-0177
Email: jbuermans@aslenv.com, Website: www.aslenv.com

FAU HARBOR BRANCH OCEANOGRAPHIC INSTITUTE (BOOTH E-20)
Public Affairs
777 Glades Road
Boca Raton, FL 33431 USA
Contact: Cara Perry, Phone: 772-332-0515
Email: perryc@fau.edu, Website: www.fau.edu/hboi

FLORIDA A&M UNIVERSITY (BOOTH E-29)
NOAA Environmental Cooperative Science Center
1515 South MLK Blvd., #305 SRC
Tallahassee, FL 32307 USA
Contact: Michael Abazinge, Phone: 850-599-3550
Email: michael.abazinge@famu.edu, Website: www.famu.edu

FLUID IMAGING TECHNOLOGIES (BOOTH E- 7/8)
200 Enterprise Drive
Scarborough, Maine 04074 USA
Contact: Harry Nelson, Phone: 207-289-3200
Email: harry.nelson@fluidimaging.com, Website: www.fluidimaging.com

FRONTIERS (BOOTH E-9)
EPFL Innovation Park, Building I
Lausanne 1015 Switzerland
Contact: Kevin Baumer, Phone: +41-21-510-1700
Email: kevin.baumer@frontiersin.org, Website: www.frontiersin.org

JFE ADVANTECH CO., LTD. (BOOTH E-6)
Rockland Scientific
3-48, Takahata-Cho
Nishinomiya, Hyogo 663-8202 Japan
Contact: Hua Li
Phone: +81-798-66-1783, Fax: +81-798-66-1654
Email: lihua@jfe-advantech.co.jp, Website: www.jfe-advanatech.co.jp/eng/

LOTEK WIRELESS, INC. (BOOTH E-27)
115 Pony Dr.
Newmarket, ON L3Y7B5 Canada
Contact: Donna Kehoe, Phone: 905-836-2096
Email: dkehoe@lotek.com, Website: www.Lotek.com

MCLANE RESEARCH LABORATORIES, INC. (BOOTH E-23)
121 Bernard St. Jean Drive
East Falmouth, MA 02536 USA
Contact: Ivory Engstrom, Phone: 508-495-4000
Email: mclane@mclanelabs.com, Website: www.mclanelabs.com

MECCO, INC. (BOOTH E-18)
PO Box 790
15614 Main Street NE
Duvall, WA 98049 USA
Contact: Mike Chapman
Phone: 206-979-6150, Fax: 425-788-4522
Email: m.e.chapman@gmail.com, Website: www.meccoinc.com

NASA APPLIED SCIENCES PROGRAM (BOOTH E-26)
University of Alabama in Huntsville
Ecological Forecasting Program
320 Sparkman Drive
Huntsville, AL 35805 USA
Contact: Maurice G. Estes, Jr., Phone: 256-961-7735
Email: maury.estes@nsstc.uah.edu, Website: http://appliedsciences.nasa.gov/

NOAA NATIONAL SEA GRANT COLLEGE PROGRAM (BOOTH E-5)
1315 East West Highway, SSMC3
Silver Spring, MD 20910 USA
Contact: Rebecca Briggs, Phone: 301-734-1084
Email: rebecca.briggs@noaa.gov, Website: http://seagrant.noaa.gov/

NATIONAL SCIENCE FOUNDATION (BOOTH E-13)
Division of Ocean Sciences
4201 Wilson Blvd., Suite 725
Arlington, VA 22230 USA
Contact: Roxanne Nikolaus, Phone: 703-292-7578
Email: rnikolau@nsf.gov, Website: www.nsf.gov/div/index.jsp?div=oce

OXFORD UNIVERSITY PRESS (BOOTH E-4)
198 Madison Avenue
New York, NY 10016 USA
Contact: Mrs. Xavier McCutcheon, Phone: 800-451-7556
Email: gab.exhibitions.us@oup.com, Website: global.oup.com

PRECISION MEASUREMENT ENGINEERING (BOOTH E-21)
1487 Poinsettia Avenue
Vista, CA 92081 USA
Contact: Kristin Elliott
Phone: 760-727-0300, Fax: 760-727-0300
Email: kristinhead@pme.com, Website: www.pme.com

PRESENS PRECISION SENSING GMBH (BOOTH E-14/15)
Am BioPark 11
Regensburg, Bavaria 93053 Germany
Contact: Christina Artinger, Phone: +49-941-942-72-132
Email: christina.artinger@presens.de, Website: www.presens.de

PRO-OCEANUS SYSTEMS (BOOTH E-22)
80 Pleasant Street
Bridgewater, Nova Scotia B4V 1N1 Canada
Contact: Mark Barry, Phone: 902-530-3550
Email: mark@pro-oceanus.com, Website: www.pro-oceanus.com

SCHMIDT OCEAN INSTITUTE (BOOTH E-12)

555 Bryant Street, #374
Palo Alto, CA 94301 USA
Contact: Carlie Wiener, Phone: 808-628-8666
Email: cwiener@schmidtocean.org, Website: www.schmidtocean.org

SEAL ANALYTICAL (BOOTH E-30)

10520-C Baehr Rd.
Mequon, WI 53092 USA
Contact: Margaret Bradley
Phone: 262-241-7900, ext. 225, Fax: 262-241-7970
Email: mbradley@seal-us.com, Web: www.seal-analytical.com

SPRINGER NATURE (BOOTH E-17)

Van Godewijckstraat 30
3311 GX Dordrecht Netherlands
Contact: Alex Cheronet, Phone: +31 78 657 6161
Email: Alexandrine.Cheronet@springer.com
Website: www.springernature.com

TURNER DESIGNS (BOOTH E-25)

1995 N. 1st Street
San Jose, CA 95112 USA
Contact: Tom Brumett
Phone: 408-749-0994, Fax: 408-749-0998
Email: sales@turnerdesigns.com, Website: www.turnerdesigns.com

UNISENSE A/S (BOOTH E-16)

Tueager 1
Aarhus 8200 Denmark
Contact: Dr. Thomas Rattenborg, Phone: +45-89-44-9500
Email: tr@unisense.com, Website: www.unisense.com

UNIVERSITY OF HAWAII HILO ANALYTICAL LAB (BOOTH E-10)

Marine Science – Natural Science Division
200 W. Kawili Street
Hilo, HI 96720 USA
Contact: Tara Holitzki, Phone: 808-932-7590
Email: analytic@hawaii.edu, Website: http://www.hilo.hawaii.edu/~analab

XYLEM (BOOTH E-11)

1725 Brannum Lane
Yellow Springs, OH 45387 USA
Contact: Amber Botkin, Phone: 937-767-7241, ext. 373
Email: amber.botkin@xyleminc.com, Website: http://www.YSI.com

WORKSHOPS, AUXILIARY EVENTS, AND TOWN HALLS

PACIFIC MARINE ANALYSIS AND RESEARCH ASSOCIATION-LINKING SCIENCE TO DECISION MAKING-INTRODUCTION TO MARXAN

Wednesday, Thursday, and Friday, 22-24 February 2017, 08:00-17:00
Off-Site Location – University of Hawaii

This is a pre-meeting workshop sponsored by PacMARA. This hands-on three-day technical course will provide participants with the basic knowledge and skills necessary to use Marxan in a marine conservation planning exercise. The following topics will be covered over the three days of this course: Key concepts in systematic conservation planning Creating planning units Creating the essential Marxan input files Parameter setting in Marxan Understanding and using Marxan results Zonae Cogito (front-end Marxan support software) Introduction to Marxan with Zones During the third day participants will also have the opportunity to work on their own planning scenarios, starting with the definition of their project objectives and identification of data needs. Participants will also discuss what type of cost information is more suitable for their projects and how to set targets for conservation features. The course will take place in Honolulu, Hawaii, on February 22, 23 and 24, 2017. To register, please visit our website at: http://pacmara.org/events-workshops Course fees are US $545 for students (including Postdoctoral fellows) and US $745 for non-students. For more information visit www.pacmara.org or contact Norma Serra at nserra@pacmara.org

Course cancellation policy: PacMARA reserves the right to cancel Marxan courses at any time. Generally, courses will be confirmed at least two weeks (and no later than one week) before the start date of a course. If PacMARA must cancel a course due to low attendance or unforeseen circumstances beyond the control of PacMARA, you are entitled to a full refund of the course fee, or your course fee can be credited towards a future course. PacMARA is not responsible for travel fees, or any expenses incurred by you as a result of such cancellation. Every effort will be made to avoid cancelling any planned course, but please understand that as a charitable organization we must cover the costs involved.

AQUATIC SCIENCE EDUCATION AND OUTREACH: BROADENING THE REACH OF YOUR SCIENCE (SPONSORED BY ASLO)

Sunday, 26 February 2017, 09:00-12:00
308 A/B – Hawaii Convention Center

This workshop will focus on helping participants develop ideas for effective education and outreach activities. Featuring active, hands-on learning, small group discussions, and guided inquiry, this workshop will include short presentations on exemplary projects in formal and informal education designed for K-12, undergraduate, graduate, and public audiences to stimulate ideas. Discussions of how people learn, how to assess the effectiveness of outreach activities, and how to develop projects that meet specific goals will help support project development. Participants are welcome to bring ideas that they would like to develop and share, and for which they would like to receive feedback. For more information regarding this workshop, please contact Bob Chen, bob.chen@umb.edu. This workshop is open to all attendees.

ASLO LEADERSHIP WORKSHOP (SPONSORED BY ASLO)

Sunday, 26 February 2017, 09:00-12:00
306 A – Hawaii Convention Center

The purpose of the workshop is to build leadership skills and approaches among ASLO members so that they may feel comfortable to take on leadership roles in the Society and other scientific organizations and teams. The workshop organizers will invite 20 to 30 ASLO members of a range of seniorities from the list of those expressing leadership experience and interest in membership surveys. (They will be

glad to entertain requests from early career members seeking leadership roles, too!). Debbie Bronk and Jon Downing will first discuss the importance of leadership in science, discuss their own experiences and present skills and approaches that were useful in their leadership. Next they will review leadership opportunities in ASLO, including board procedures, and build a discussion about how leadership roles can be beneficial from a personal, societal, and scientific basis. We will keep discussions informal to allow substantial conversation and Q&A. The workshop will conclude around the end of the ASLO Board meeting so that workshop participants can meet with the current Board and officers to hear about recent Board proceedings. Inquiries should be sent to downing@umn.edu and bronk@vims.edu. Participation is by Invitation Only for this workshop.

SCIENCE COMMUNICATIONS LAB. YES, LAB. SECTION 1 (SPONSORED BY ASLO)

Sunday, 26 February 2017, 10:00-13:00
303 B – Hawaii Convention Center

The Science Communication Lab in Honolulu will help you improve your communications skills so you can present your work more effectively. The Hollywood entertainment industry has traditionally been the source of both innovation and perfection of narrative elements. The same approach is applicable to the communication of science to all audiences, from the general public to fellow academics. Communications expert, Brian Palermo, will return to ASLO to lead the 2017 workshops. He is a professional actor and improv instructor (e.g., The Social Network, The Tonight Show with Jay Leno, the Groundlings Theatre, Los Angeles). It will build on the success of previous workshops by Palermo (2012, 2013), also organized by Jonathan Sharp (University of Delaware) and Adrienne Sponberg (ASLO). There will be two (identical) 3-hour workshops (10:00-13:00, 14:00-17:00) on Sunday before the formal opening of the 2017 Aquatic Sciences Meeting. Participation in one of the workshop sessions will be limited and prior registration will be required (no fee). Open to all attendees, but participation in the workshop is limited, so, please be committed to attend if you register.

Register at: http://bit.ly/SunWkshp

Financial support for this workshop has been received from the Ocean Sciences Division of the US National Science Foundation. For more information about this workshop, please contact Jonathan Sharp, jsharp@udel.edu.

BEST PRACTICES IN MENTORING (SPONSORED BY ASLO)

Sunday, 26 February 2017, 13:00-16:00
306 B – Hawaii Convention Center

This workshop will explore best practices in mentoring. Good mentoring includes advising high school, undergraduate, graduate, and post-doctoral research, guiding early career scientists, broadening participation in Aquatic Science, and establishing a network of productive colleagues. Participants will share best practices across a wide variety of mentoring situations, explore strategies to address a diversity of mentoring scenarios, and dig deeply into personal experiences to uncover both productive and non-productive mentoring situations. Come join us for an energetic workshop that will help you become a better mentor. For more information regarding this workshop, please contact Bob Chen, bob.chen@umb.edu.

DEMYSTIFYING THE TEACHING PHILOSOPHY STATEMENT FOR ACADEMIC JOB APPLICATIONS (SPONSORED BY ASLO)

Sunday, 26 February 2017, 13:00-16:00
302 A/B – Hawaii Convention Center

Seeking a career in academia – in teaching, research, or both? Regardless of your academic career path, chances are, you will need to include a teaching philosophy statement in your application package. In this workshop we will cover the elements of a good teaching philosophy statement and how to customize statements to match job descriptions and get your application noticed. Participants will leave the workshop with a working outline or draft of their own statement to complete at home for their next application. Please register for the event online at https://www.surveymonkey.com/r/2017TPS.

FLOWCAM AND FLOWCAM 'MACRO' WORKSHOP

Sunday, 26 February 2017, 13:00-16:00
301 B – Hawaii Convention Center

The FlowCam® is a continuous imaging flow cytometer and particle analyzer designed for conducting research and monitoring of microorganisms and particles in both marine and freshwater systems. Developed at Bigelow Laboratory for Ocean Sciences, the FlowCam is manufactured by Fluid Imaging Technologies of Scarborough, Maine USA. Fluid Imaging will be conducting a 3-hour workshop demonstrating the new FlowCam 8000 and the new FlowCam 'Macro'. Applicatio ns for the FlowCam 8000 include the following:

- Identify and enumerate phytoplankton and micro zooplankton
- Monitor HABS in both marine and freshwater systems
- Characterize particles with fluorescing probes: lipid analysis, FISH probes, cell viability
- Analyze sediment: tephra particles, marine foraminifera, paleolimnology

The FlowCam 'Macro' is Fluid Imaging's latest product, incorporating the FlowCam's technology into an instrument capable of providing high resolution images and data for zooplankton and particles ranging in size from 250µm up to 5mm in size. The workshop will feature a 20-minute presentation of FlowCam applications followed by hands-on experience with the instrument. Attendees are encouraged to bring samples – whether they be from cultures or freshwater or marine systems, phytoplankton or zooplankton-to run on the FlowCam 8000 or FlowCam Macro. http://info.fluidimaging.com/aslo-2017-flowcam-workshop-hands-on-demonstration

The workshop will be limited to 30. Register by contacting Frances Buerkens frances.buerkens@fluidimaging.com.

This workshop is open to all, but advance registration is necessary. For more information about workshop content, please contact Harry Nelson, harry.nelson@fluidimaging.com.

U.S. COAST GUARD ICEBREAKER HEALY WORKSHOP

Sunday, 26 February 2017, 13:00-16:00; Monday, 27 February, and Tuesday, 28 February, 2017, 13:00 – 14:30
304 A/B – Hawaii Convention Center

Find out about opportunities to use the Healy for High Latitude research in the Arctic. Learn about Healy facilities and economical

day rate. Movies of Healy missions in the Arctic as well as interactive display of the oceanographic facilities. This workshop is open to all attendees. The full workshop will be facilitated on Sunday from 13:00 to 16:00. Movies will be shown, and the program will be discussed during lunch on Monday and Tuesday. For more information, please contact David Forcucci at David.Forcucci@uscg.mil.

SCIENCE COMMUNICATIONS LAB. YES, LAB. SECTION 2 (SPONSORED BY ASLO)

Sunday, 26 February 2017, 14:00-17:00
303 B – Hawaii Convention Center

The Science Communication Lab in Honolulu will help you improve your communications skills so you can present your work more effectively. The Hollywood entertainment industry has traditionally been the source of both innovation and perfection of narrative elements. The same approach is applicable to the communication of science to all audiences, from the general public to fellow academics. Communications expert, Brian Palermo, will return to ASLO to lead the 2017 workshops. He is a professional actor and improv instructor (e.g., The Social Network, The Tonight Show with Jay Leno, the Groundlings Theatre, Los Angeles). It will build on the success of previous workshops by Palermo (2012, 2013), also organized by Jonathan Sharp (University of Delaware) and Adrienne Sponberg (ASLO). There will be two (identical) 3-hour workshops (10:00-13:00, 14:00-17:00) on Sunday before the formal opening of the 2017 Aquatic Sciences Meeting. Participation in one of the workshop sessions will be limited and prior registration will be required (no fee). Open to all attendees, but participation in the workshop is limited, so, please be committed to attend if you register.

Register at: http://bit.ly/SunWkshp

Financial support for this workshop has been received from the Ocean Sciences Division of the US National Science Foundation. For more information about this workshop, please contact Jonathan Sharp, jsharp@udel.edu.

CYBER TOOLS AND RESOURCES FOR RESEARCH AND ANALYSIS

Sunday, 26 February 2017, 09:00-16:00
323 B – Hawaii Convention Center

Digital tools, resources, and capabilities are exploding. This workshop will be structured as a series of mini-workshops throughout a day designed to (1) make researchers more aware of a vast range of new tools, resources, and databases, (2) highlight uses for some particularly relevant tools of interest to ASLO attendees, (3) show some of the current planning for an EarthCube workbench that can help tie these tools together to address workflows, and (4) hear from you about your greatest workflow, data, and analysis challenges.

The workshop is free but registration is required (email: crescyntrcn@gmail.com). Sponsored by NSF EarthCube CRESCYNT, Coral Reef Science and Cyberinfrastructure Network (http://crescynt.org) along with other EarthCube members and groups (http://earthcube.org). For more information on this workshop, please contact Ouida Meier, University of Hawaii, at omeier@hawaii.edu. This workshop is open to all attendees, but registration is required.

NATIONAL SCIENCE FOUNDATION DIVISION OF OCEAN SCIENCES TOWN HALL

Monday, 27 February 2017, 13:00-14:30
302 A/B – Hawaii Convention Center

An update from the U.S. National Science Foundation, Division of Ocean Sciences, regarding recent developments in research funding, infrastructure, and education. A budgetary outlook and discussion of Division of Ocean Sciences initiatives throughout the Division portfolio will be presented. Rick Murray, Division Director, will provide a brief presentation, to be followed by a question-and-answer session. National Science Foundation Program Officers will also be present to provide additional information as needed. For more information regarding this town hall, please contact Roxanne Nikolaus, rnikolau@nsf.gov.

TEACHING INTRODUCTORY AQUATIC AND ENVIRONMENTAL SCIENCES (SPONSORED BY ASLO)

Monday, 27 February 2017, 13:00-14:30
301 B – Hawaii Convention Center

Introductory environmental and aquatic science courses provide an excellent opportunity to prepare both majors and non-majors for thinking about some of the largest issues facing society such as climate change and energy needs. Introductory courses can also serve to recruit students from highly diverse backgrounds into the field. Often, these courses are large (>50 students). This workshop will provide strategies to overcome some of the challenges of these large introductory courses while making your teaching engaging, relevant, and effective. Come ready to share ideas, to think actively about teaching and learning, and to discuss what works and why. For more information regarding this workshop, please contact Bob Chen, bob.chen@umb.edu.

MEET THE ASLO EDITORS LUNCHEON (SPONSORED BY ASLO)

Monday, 27 February 2017, 13:00-14:30
315 – Hawaii Convention Center

Join ASLO publication editors for lunch to discuss publishing in and reviewing for ASLO journals, as well as broader issues about scientific publications. Box lunches will be available on a first-come, first-served basis. This workshop is open to all attendees. For more information, please contact Teresa Curto, ASLO Executive Director, execdir@aslo.org.

FLUSHING OUR FUTURE

Monday, 27 February 2017, 13:00-14:30
306 A – Hawaii Convention Center

This Town Hall event will connect and engage scholars, other experts, community members, students and decision-makers in the examination of the status of wastewater treatment in Hawai'i. Hawai'i's experience includes elements facing communities throughout the U.S. and worldwide, but in a geographically delimited insular environment. As such, Hawai'i provides a tractable model from which to generate solutions to wastewater management in a world experiencing rapidly changing climate, population growth and ageing infrastructure. Just as wastewater management is a multifaceted issue, we will address this issue via a multidisciplinary lens. By coupling recognition and acknowledgement of diverse perspectives and the best available science, workshop

participants will examine, gain a better understanding of, and establish a foundation from which practical and effective solutions to the challenges of wastewater management can be envisioned. The natural, social and design sciences and Native Hawaiian perspectives will be drawn on to frame issues, discuss local efforts and brainstorm solutions. Multidisciplinary cluster faculty of the University of Hawai'i at Manoa focused on sustainability and community outreach will each provide their impressions and expertise on this issue forming, in aggregate, a thoughtful and reasoned foundation for identifying specific challenges and seeking applied solutions. This event is open to all attendees. For more information, please contact Daniele Spirandelli, University of Hawaii Sea Grant College, at danieles@hawaii.edu.

BYSTANDER INTERVENTION FOR COMBATING SEXUAL MISCONDUCT IN SCIENCE: EVERYONE CAN BE PART OF THE SOLUTION (SPONSORED BY ASLO)

Monday, 27 February 2017, 13:00-14:30
308 A/B – Hawaii Convention Center

Many within the science community have been shocked and disturbed to hear news reports of egregious sexual misconduct among our fellow scientists in recent years. In addition to such high-profile incidents, a 2014 study demonstrated that sexual harassment and assault during field research is a common occurrence, typically involving junior women scientists targeted by senior male colleagues. We all recognize that this problem must be addressed, but how can individuals make a contribution to shifting a culture that tolerates sexual misconduct, often in subtle ways? We can start by recognizing that the solution must come from all of us, not just those who experience sexual harassment and assault. This workshop will explore the approach of bystander intervention to empower and equip individuals with the knowledge, motivation, and skills to make our field inclusive and supportive of all its members, in particular our female colleagues. Jane Stapleton of the Prevention Innovations Research Center at the University of New Hampshire will use case studies and interactive exercises to teach attendees how to be engaged bystanders to intervene before, during and after instances of sexual and relationship violence and stalking. This workshop is intended for all attendees at every career stage, and we especially encourage senior faculty and PIs to attend, as their role in positions of authority has an outsized influence on the culture of their professional communities.

INTERDISCIPLINARY PRESENTATIONS WORKSHOP (SPONSORED BY ASLO)

Tuesday, 28 February 2017, 13:00-14:30
302 A/B – Hawaii Convention Center

Limnology and Oceanography as multi-disciplinary sciences, combine aspects of physics, chemistry, biology, and geology; and often include socio-economics. You can make a presentation at a meeting with narrow scope, using specialized terminology, not explaining the relevance of your results, and presenting in a boring fashion. This is fine for a small number of specialty peers. However, if you want to reach and appeal to a broader interdisciplinary audience, you need another approach. This workshop will address things to make presentations more engaging and appealing to those outside your specialty. This workshop is open to all. It is organized by Jonathan Sharp (University of Delaware), Adrienne Sponberg (ASLO); using the skills of communications expert, Brian Palermo (professional actor and improv instructor at the Groundlings Theatre in Los Angeles). Organizers will attend a few presentations early in the 2017 Honolulu Aquatic Sciences Meeting. Then at the workshop, they will use those talks as examples, illustrating how to make improvements to transform a solid presentation into one that is memorable and compelling to a broad interdisciplinary audience. This workshop is open to all attendees.

This effort is partially supported by a grant from the Ocean Sciences Division of the US National Science Foundation. For more information about this workshop, please contact Jonathan Sharp, jsharp@udel.edu.

TOWN HALL-AQUAWATCH, THE GEO WATER QUALITY COMMUNITY OF PRACTICE

Tuesday, 28 February 2017,13:00-14:30
323 A – Hawaii Convention Center

AquaWatch is the Group on Earth Observations (GEO) Water Quality Community of Practice. The aim of AquaWatch is to develop an international operational water quality information system based on Earth observation with a focus on the developing world. The overall goal of AquaWatch is to produce a global water quality monitoring and forecasting service within 10 years. AquaWatch will accomplish this goal by incrementally completing service-related projects and tasks that will be integrated into the overarching global activity. Current projects include the development of a global turbidity and reflectance product and the production of an informational booklet highlighting the functionality of prototype projects targeted at educating potential end users and funders about water quality monitoring. The purpose of this open town hall meeting is to update the water quality community on the past year's activities and provide a forum to discuss issues relevant to the AquaWatch effort. For more information regarding this town hall, please contact Steven Greb, steven.greb@wisconsin.gov. This town hall is open to all attendees.

WORKING AT A COMMUNITY COLLEGE AND ENGAGING COMMUNITY COLLEGE FACULTY AND STUDENTS

Tuesday, 28 February 2017,13:00-14:30
306 A – Hawaii Convention Center

Community colleges play a crucial role in undergraduate STEM education. They enroll 12.8 million students, approximately 45% of all U.S. undergraduates. A higher percentage of minorities underrepresented in the STEM fields attend two-year institutions than four-year institutions. Nearly one-half of Americans who receive bachelor's degrees in science and engineering and one-third of recipients of science or engineering master's degrees attended a community college at some point in their education. Community colleges are also important in teacher preparation with almost forty percent of the nation's teachers completing some of their STEM courses at community colleges.
In this session we will provide insights into the community colleges' missions, faculty, students, and curriculum. In so doing, we hope to assist the growing number of graduates, post-docs and faculty interested in exploring a community college career, or those who desire to partner with community college faculty to improve STEM education, or are interested in engaging community college students in research activities. For more information regarding this event, please contact Jan Hodder, jhodder@uoregon.edu. This event is open to all attendees.

MARGINAL ICE ZONE WORKSHOP

Tuesday, 28 February 2017,13:00-14:30
313 C – Hawaii Convention Center

This workshop is a follow-on to Session 004 Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean.

OCEAN SCIENCE AND TECHNOLOGY: OPEN DISCUSSION ON FEDERAL RESEARCH PLAN

Tuesday, 28 February 2017, 18:30-20:00
304 A/B – Hawaii Convention Center

In a time of environmental, political, and social change, a cohesive Federal strategy to advance ocean science and technology, in partnership with other sectors and levels of government, will set the stage for inspired action in the coming decade for the good of the ocean and the Nation. With substantial community input, the Subcommittee on Ocean Science and Technology under the National Science and Technology Council is developing a plan on Ocean Research in the Coming Decade (the Plan) describing the most pressing research questions and most promising areas of opportunity to guide Federal planning. This interactive session will seek input and gather information from the science and technology community to guide the continued development of the Plan, including societal issues that stimulate ocean research and technology and the activities needed to address compelling local, regional, national, and global challenges. The Plan will focus on science, technology, and innovation to advance ocean research and promote its societal relevance. Because the ocean is a component of the larger Earth system with a highly influential human dimension, the Plan will address multi-faceted topics with relevance to ocean, polar, terrestrial, freshwater, atmospheric, and social research. It will be complementary to and informed by related research carried out by other Federal activities, non-Federal efforts, and international entities. For more information regarding this workshop, please contact Jessica McGrath, jfmcgrat@nsf.gov. This workshop is open to all attendees.

SCIENCE VIDEOS THAT ENGAGE (SPONSORED BY ASLO)

Tuesday, 28 February 2017, 18:30-21:30
301 B – Hawaii Convention Center

This workshop designed to help you make effective, engaging and compelling videos will be led by Brian Palermo, professional actor and improv instructor (e.g., The Social Network, The Tonight Show with Jay Leno, the Groundlings Theatre, Los Angeles). It will build on the success of previous workshops with both Palermo (2012, 2013) and marine biologist-turned filmmaker Randy Olson (2010-2013), organized by Jonathan Sharp (University of Delaware) and Adrienne Sponberg (ASLO). Participants are invited to submit a short video (not to exceed 5 minutes in YouTube format; *Submit your video: http://bit.ly/VideoWkshp. All submitted videos will be posted and discussed online prior to the meeting; several will be screened and discussed at the workshop. Palermo will review features of participant-submitted as well as other videos that create a connection and resonate with the public. This is not a "how to" workshop but more of commentary on existing videos with an eye towards creating the most effective narrative and connection with audience. Submissions are encouraged from all attendees, including: a broad array of graduate students, early career scientists, more established scientists, professional filmmakers, high school teachers, etc. This workshop is open to all attendees. This effort is partially supported by a grant from the Ocean Sciences Division of the US National Science Foundation. For questions about this event, please contact Jonathan Sharp, jsharp@udel.edu.

SEA GRANT RESEARCH: UNDERSTANDING HOW SEA GRANT FUNDING CAN HELP YOUR RESEARCH PROGRAM

Wednesday, 1 March 2017, 13:00-14:30
301 A – Hawaii Convention Center

For 50 years NOAA's National Sea Grant College Program (Sea Grant) has been putting science to work for America's coastal communities. This town hall event will provide an overview of the Sea Grant research program, highlight our successes, and provide valuable insights on how to apply for Sea Grant funding. The informal lunch discussion is open to anyone that is interested in Sea Grant research funding and graduate student support. Early career scientists will learn how to utilize Sea Grant projects to launch larger research initiatives and take their science to the next level through our vast extension and education networks. Sea Grant celebrated our 50th anniversary in 2016. After 50 successful years we are looking ahead to the future and hope you will join us as we grow and meet new research challenges facing our coasts and oceans. Lunch will be provided.

Panel Participants:

- Linda Duguay; Director of the University of Southern California (USC) Sea Grant Program and President of the Association for the Sciences of Limnology and Oceanography.
- John Downing; Director of the University of Minnesota Sea Grant College Program.
- Others include Sea Grant ASLO researchers and early career scientists.

For more information about this event, please contact Rebecca Briggs, rebecca.briggs@noaa.gov. This workshop is open to all attendees.

SHARING SCIENCE THROUGH STORYTELLING (SPONSORED BY ASLO)

Wednesday, 1 March 2017, 13:00-14:30
302 A/B – Hawaii Convention Center

Communicating science to the general public, policymakers, students, and even scientists outside your discipline can be challenging. But the importance of communicating beyond our peers is increasing. Therefore, scientists should adopt a communication strategy that has been fundamental to the development of our society, the art of storytelling. Storytelling has been a tool for sharing knowledge and ideas for thousands of years. A good story can evoke wonder, which fosters greater interest in complex scientific discoveries, enables a better understanding of the scientific method, and emphasizes the importance of science to society. In this workshop, you will learn 1) the basic elements of storytelling, 2) get ideas on how to structure your science into a story, 3) how to spot common science communication mistakes when telling a good story, like using jargon or drafting long sentences, and 4) how (and where) to share your science stories. Participants are encouraged to bring a current or past conference abstract and plan to leave the workshop ready to turn your science abstract into a well-crafted science story. Participants should register using the following link https://www.surveymonkey.com/r/2017Storytelling. For more information, please contact Kylla Benes, Kbenes@uci.edu. This workshop is open to all attendees.

WRITING A GREAT APPLICATION FOR GRADUATE SCHOOL AND FOR THE NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM

Wednesday, 1 March 2017, 13:00-14:30
304 A/B – Hawaii Convention Center

Each year GRFP awards 2,000 new fellowships for graduate students pursuing research-based Master's and doctoral degrees in science and engineering. Each Fellowship consists of three years of support during a five-year fellowship period. NSF provides a stipend of $34,000 to the Fellow and a cost-of-education allowance of $12,000 to the graduate degree-granting institution for each Fellow who uses the fellowship support in a fellowship year. NSF especially encourages women, members of underrepresented minority groups, persons with disabilities, veterans, and undergraduate seniors to apply. This workshop for undergraduates and beginning graduate students will provide tips and strategies for preparing effective fellowship applications and graduate school application research statements. Workshop activities include review and discussion of anonymous research statements and application preparation tips from GRFP awardees and NSF program officers. The event URL: www.nsfgrfp.org. This workshop is open to all attendees. Students are particularly encouraged to attend. For more information, please contact: Gisele Muller-Parker at gtmuller@nsf.gov

MOSAIC INTERNATIONAL ARCTIC DRIFT EXPEDITION

Wednesday, 1 March 2017, 18:30-20:30
302 A/B – Hawaii Convention Center

The Multidisciplinary Observatory to Study Arctic Climate is a planned year-long drift aboard the RV Polarstern that is scheduled to begin in Autumn 2019. This organizational meeting is intended to inform all interested attendees of ASLO 2017 about the goals and objectives for MOSAiC. The meeting will highlight proposals for science activities that are currently in the works, welcome new ideas, and describe the process for participation. This meeting is open to all attendees and will focus on the Biogeochemistry portion of the MOSAiC science plan. Event URL: http://www.mosaicobservatory.org/. For more information regarding this town hall meeting, please contact: Brice Loose at bloose@uri.edu

OCEAN ISSUES IN THE UPCOMING U.S. NATIONAL CLIMATE ASSESSMENT

Thursday, 2 March 2017, 13:00-14:30
306 A – Hawaii Convention Center

The next congressionally-mandated U.S. National Climate Assessment (NCA), due in 2018, includes a specific chapter on climate-related impacts on Ocean and Marine Resources as well as Regional Chapters that may include region-specific ocean information. The Ocean chapter in the previous NCA (2014) highlighted issues such as rising ocean temperatures, increasing ocean acidification, changing habitats, shifting distributions of marine species (including diseases) and some implications for ocean-dependent businesses and communities. The authors of the current NCA seek feedback from the ASLO community on key topics to cover based on recent advancements in knowledge, including case studies and critical information sources. The presentation will provide information on the overall NCA report process, connection to other major climate reports, timeline and current draft focal areas, followed by open discussion with participants. This town hall is open to all attendees. For more information, please contact Fred Lipschultz, U.S Global Change Research Program, at flipschultz@usgcrp.gov

SCIENTIFIC PUBLICATION WORKSHOP-AN EVENING WITH THE EDITORS IN CHIEF OF ASLO'S LIMNOLOGY & OCEANOGRAPHY AND AGU'S JOURNAL OF GEOPHYSICAL RESEARCH – BIOGEOSCIENCES (SPONSORED BY ASLO)

Thursday, 2 March 2017, 18:30-20:30
301 B – Hawaii Convention Center

In this workshop, the Editors in Chief from two leading journals in aquatic science research (AGU's *Journal of Geophysical Research-Biogeosciences* and ASLO's *Limnology & Oceanography*) will host a workshop focused on key issues in the scientific publication process. The workshop will be a collection of short presentations and discussions on topics such as: "What makes a good paper?," "Selecting the correct journal," and "Peer review for authors." The workshop is targeted to scientists in the early stages of their career who want to learn about the writing and publication of scientific research articles. Refreshments and light hors d'oeuvres will be provided. For more information regarding this workshop, please contact Miguel Goni, mgoni@coas.oregonstate.edu. This workshop is open to all attendees.

SPECIAL ACTIVITIES

COMING CLEAN ABOUT BAIKAL – A DOCUMENTARY FILM

Monday, 27 February 2017, 13:30-14:30
313 C – Hawaii Convention Center

This Russian documentary film, shot in summer 2016, portrays the ecological crisis that has erupted recently in the coastal zone of Lake Baikal, Siberia -- the world's oldest, deepest, and most species-rich lake. Accompanying a scientific sampling expedition around the lake, the filmmaker features Russian and Japanese limnologists as they investigate the causes of severe benthic eutrophication and the mysterious die-offs of the lake's unique sponge forests. Local citizens, government officials, and other Russian stakeholders are interviewed providing a rich cultural and sociological lens for revealing the nuances and complexities that face the Lake Baikal region as it develops economically. The film is in Russian with English subtitles. 55 minutes. For more information about the documentary film showing, please contact Marianne Moore at mmoore@wellesley.edu.

MEETINGS AND WORKING GROUPS

IOCCG WORKING GROUP

Sunday, 26 February 2017, 09:00-16:00
307 B – Hawaii Convention Center

International Ocean Color Coordination Group (IOCCG) working group on the "Role of Ocean Color in Biogeochemical, Ecosystem and Climate Modelling." See http://www.ioccg.org/groups/modelling.html. This will be a working meeting of committee members and other interested people. If interested, please contact: Stephanie Dutkiewicz, stephd@mit.edu. Participation is by Invitation Only for this working group.

ASLO BUSINESS MEETING (SPONSORED BY ASLO)

Monday, 27 February 2017, 19:30-20:30
Kalakaua Ballroom – Hawaii Convention Center

The annual ASLO Business Meeting will be held during the conference on Monday, 27 February, from 19:30 to 20:30 in the Kalakaua Ballroom at the Hawaii Convention Center. A reception honoring ASLO fellows and sustaining fellows will precede the business meeting. The business meeting is open to all attendees -- members and non-members. This will be a great time to meet and talk to ASLO officers and board members. Reception food and drinks will be available.

FIELD TRIPS

All of the field trips are sold out!

HAWAI`I INSTITUTE OF MARINE BIOLOGY CORAL REEF FIELD TRIP

Saturday, 25 February 2017, 08:00-15:00

Participants depart from the Bus Stop located at the front entrance of the Hawaii Convention Center.

Participants will have a guided coral reef snorkel tour in Kane`ohe Bay followed by a walking tour of the Hawai'i Institute of Marine Biology (HIMB) on the historic island of Moku o Lo`e in Kane`ohe Bay. Participants will depart from the Hawaii Convention Center promptly at 08:00 on Saturday to go to He`eia boat harbor. They will leave from there on a new education vessel. Participants will hear about the cultural history of the bay and have an opportunity to snorkel on a patch reef with HIMB staff and scientists to learn about current concepts in coral reef ecology and research. At Moku o Lo`e there will be time for lunch, then a walking tour with stops to note the history of the once private island (also known as Gilligan and Coconut Island), then on to the shark research enclosures, invertebrate touch table, and coral research facilities. This field trip is limited to 24 participants. The cost includes lunch, snorkel gear, and transportation from the Hawai`i Convention Center to Kane`ohe Bay and back. If you prefer to use your own snorkel gear, the cost for the trip is the same. For questions about this field trip, please contact the field trip organizer, Mark Heckman, at mheckman@hawaii.edu. If you need snorkel gear, please contact Mark and let him know your fin size if you have not done so already.

HE`EIA FISHPOND WORK DAY

Saturday, 25 February 2017, 08:30-12:45

Note about transportation: Transportation is provided only for those who indicated a need and have paid in advance. If you signed up and paid for transportation to and from the fishpond, please be at the Hawaii Convention Center no later than 7:30 to board the bus. (The bus will will depart from the Bus Stop located at the front entrance of the Convention Center.) If you did not sign up for transportation when you registered to participate in this field trip, you are responsible for securing your own transportation to and from the fishpond. A map and directions are available at: http://paepaeoheeia.org/live/wp-content/uploads/2013/02/Map-to-Heeia-Fishpond.pdf

Hawaiian fishponds represent a unique and advanced form of aquaculture found nowhere else in the world. Their invention was a result of the Hawaiians' deep understanding of the environmental processes specific to the islands, as well as their connection to and observation of the food resources on the `āina (land) and in the kai (ocean). While the techniques of herding or trapping adult fish with rocks in shallow tidal areas are found elsewhere in the world, the six styles of Hawaiian fishponds, especially large walled ponds such as He`eia Fishpond, are uniquely technologically advanced and efficient, as their purpose was to cultivate pua (baby fish), and allow them to grow to maturity within the pond walls. Located in He`eia Uli on the island of Oahu, He`eia Fishpond is a walled (kuapā) style fishpond enclosing 88 acres of brackish water. The kuapā is built on the Malauka`a fringing reef that extends from the shoreline that surrounds the pond out into Kāne`ohe Bay. Built approximately 600 to 800 years ago by the residents of the area, the kuapā is possibly the longest in the island chain, measuring about 1.3 miles (7,000 feet) in length, and forms a complete circle around the pond. This is unique as most other fishpond walls are either straight lines or half circles connecting one point of shoreline to another. This work day will be part of a large community volunteer day at He`eia Fishpond, beginning at 08:30 at the fishpond and ending at noon. Lunch will be provided by the staff. All ages are welcome to participate, but children under 12 years old must be accompanied by an adult. Tasks include moving rock and coral, filling buckets, hauling floating barges through the water, cutting/pulling out invasive mangrove, invasive limu (seaweed) removal, trash pickup, and reconstruction of the kuapā? (the seawall).

Please make sure you bring the following items to the workday:

- Covered Shoes or Tabis (mandatory to participate)
- Clothes you don't mind getting dirty
- Sunscreen
- Water Bottle
- Optional: Hat, Towel, Change of Clothes

For questions about this field trip, please contact the field trip organizer, Hi`ilei Kawelo, at hiilei@paepaeoheeia.org or hkawelo@hotmail.com.

SOUTH EAST O`AHU COASTAL GEOLOGY FIELD TRIP AND HIKE

Saturday, 25 February 2017, 09:00-15:00

Participants depart from the Bus Stop located at the front entrance of the Hawaii Convention Center.

Participants will experience a fun adventure along the stunning South East O`ahu coastline and will explore the area's geology, hike through an unlit tunnel to the coast, and continue along the wave-cut ledge (surf/tide permitting). Lunch will be at Koko Marina, where you can purchase lunch from a variety of vendors (including fast-food, sushi, dim sum, & Kona Brewery). You are also welcome to bring your own picnic lunch, if you prefer, and enjoy it by the marina. Transportation from the Hawaii Convention Center to South East O`ahu coastline and back is included. What to bring: Hiking shoes with good grips; a small backpack containing 2 liters of water, sun protection (hat, glasses, sunscreen), rain jacket (because it can always rain), camera, flashlight or headlamp (for tunnel), lunch money and/or a picnic lunch. Please note: Appropriate hiking shoes are required. You cannot do this hike in flip-flops. For questions about this field trip, please contact the field trip organizer, Barb Bruno, at barb@hawaii.edu.

PARTNERSHIPS FOR RESILIENCE AND SUSTAINABILITY: WAIKIKI AND THE ALA WAI CANAL WATERSHED FIELD TRIP

Saturday, 4 March 2017, 08:00-13:00

Participants need to meet in the parking lot of Waikiki Zoo at 08:00. For the Waikiki walking tour you will want to bring comfortable clothing/footwear and be prepared for heat and sunlight and to get on a sailing catamaran. This field trip will provide an overview of Urban Honolulu (Waikiki) and the adjacent Ala Wai canal and watershed. Participants will learn about coastal management efforts in Waikiki and the challenges facing coastal resources managers tasked with managing this critically important area. The field trip will introduce and showcase new climate and coastal hazard data available for Honolulu, Hawai'i as well as other major regional resilience and sustainability efforts, including the U.S. Army Corps of Engineers $200 million Ala Wai Flood Control Project and new cutting edge proposed projects for sea water air conditioning for Honolulu and Waikiki, using Ocean Thermal Energy Conversion (OTEC). We will highlight and describe new collaborative partnerships for sustainability and resilience in the region that directly engage and apply University research. Participants will learn about the role of community partnerships developed and fostered by Hawai'i Sea Grant and share lessons learned and opportunities for future collaboration and improvements.

This field trip is organized by Dolan Eversole and Matt Gonser with the University of Hawaii Sea Grant College Program (Hawai'i Sea Grant). If you have questions, you may send a message to eversole@hawaii.edu or call 808-956-9780.

STUDENT AND EARLY CAREER OPPORTUNITIES

STUDENT AND EARLY CAREER SOCIAL MIXERS

Informal social mixers will be held Monday evening for students and early career professionals. Beverages and snacks will be served, and drink tickets will be available at the door (soft drinks and alcoholic beverages). All students and early career professionals are welcome and encouraged to attend their respective mixers.

STUDENT AND EARLY CAREER WORKSHOPS

There will be student and early career workshops during the meeting. Topics will focus on career development (e.g., publication and grant writing, communicating science, different career paths, etc.) A limited number of lunches will be available to those who attend the workshops. Further details about these workshops are listed on pages 19-20.

STUDENT LOUNGE/CAREER CENTER

Fostering communication among students and providing information about career opportunities is an important part of this meeting. There will be a Student Lounge / Career Center in the exhibit hall near the ASLO booth that will allow students to meet each other in a fun, relaxed setting. This center will also host the Career Bulletin Board, where prospective employers are invited to post job announcements and students are invited to post a one-page resumé.

STUDENT EVENTS

STUDENT VOLUNTEER TRAINING SESSION

Sunday, 26 February 2017, 17:00 – 18:00
Meet Near the Registration Area – Hawaii Convention Center

Students who have signed up to serve as student volunteer room monitors must attendee this training session. Meet at the registration area in the lobby of the Hawaii Convention Center. Please contact Sue Rulla at suer@sgmeet.com for more information or if you have a travel conflict and will not be available to attend the training session on Sunday.

STUDENT SOCIAL MIXER (SPONSORED BY ASLO)

Monday, 27 February 2017, 20:30-22:00
3rd Level Foyer – Hawaii Convention Center

An informal student social mixer will be held on Monday evening following the ASLO Membership Meeting. This is a time to come and network with peers as well as senior scientists. Beverages and snacks will be available. All students, whether ASLO members or non-members, are invited to attend.

STUDENT WORKSHOPS

Students are encouraged to attend the student workshops planned during lunch on Tuesday and Thursday. A limited number of box lunches will be provided for those who plan to stay and participate.

STUDENT WORKSHOP – EMBRACING DIVERSITY IN OUR SCIENTIFIC COMMUNITY (SPONSORED BY ASLO)

Tuesday, 28 February 2017, 13:00 – 14:30
Room 315 – Hawaii Convention Center

This workshop will address relations of race, power, sexual harassment, and creating a more inclusive learning/work environment from an administrative perspective, particularly with respect to addressing clearly implicit bias in hiring and promotion decisions. There will be opportunity for Q&A to discuss whatever case or questions in which the audience has interest. Speaker Patrick Louchouarn, Ph.D., Executive AVP for Academic Affairs and Chief Academic Officer (TAMUG), Associate Provost (TAMU) Professor: Dept. Marine Sciences (TAMUG) and Dept. of Oceanography (TAMU). Box lunches will be provided on a first come, first served basis.

STUDENT WORKSHOP – PHD, NOW WHAT? (SPONSORED BY ASLO)

Thursday, 2 March 2017, 13:00 – 14:30
Room 315 – Hawaii Convention Center

This workshop will feature a panel focusing on careers in non-academic fields. Speakers will include those from government agencies, consulting firms and other areas to speak on what they do, how they got there, and how they use their PhD and research backgrounds in their current jobs. Speakers for this panel are currently being confirmed! Box lunches will be provided on a first come, first served basis.

EARLY CAREER EVENTS

ARCTIC-GEOTRACES EARLY CAREER RESEARCHER NETWORKING EVENT

Sunday, 26 February 2017, 13:00 – 16:00
305 A/B – Hawaii Convention Center

Over the 2015 and 2016 field seasons, the international GEOTRACES program undertook a coordinated effort to better understand the distribution, biogeochemical cycling, and climate sensitivity of trace elements and isotopes (TEIs) within the Arctic Ocean. Three successful cruises were carried out in 2015 by Canadian, US, and German programs, with follow-up sampling in 2016 by the German team. This effort brought together cross-disciplinary researchers from more than 12 countries working not only in the field of trace metal geochemistry, but also observationalists and modelers studying phytoplankton physiology, air-sea gas fluxes, carbon and nutrient cycling, ocean mixing, sea ice, and rivers. As a result, new data sets are emerging to expand our understanding of the TEIs that regulate, or serve as tracers for, critical biogeochemical and physical processes within the Arctic Ocean.

More than 75 Early Career Researchers (ECRs: students, postdocs and early career scientists) participated in the three Arctic Ocean cruises carried out in 2015, with many more on the sidelines processing samples, interpreting observations, and developing ocean models. The goal of this workshop will be to provide a networking event for Arctic GEOTRACES ECRs who will be attending the ASLO Aquatic Sciences meeting. This forum will provide a bridge to connect ECRs between programs and establish new connections for participants to carry forward into their future careers within the GEOTRACES community. For more information, please contact Kristina Brown, kbrown@whoi.edu. Participation is by Invitation Only for this event.

EARLY CAREER SOCIAL MIXER (SPONSORED BY ASLO)

Monday, 27 February 2017, 20:30-22:00
4th Level, Kalakaua Ballroom Foyer – Hawaii Convention Center

A "meet and mix" reception is planned and organized by members of the ASLO early career (EC) committee to give early career members an opportunity to provide feedback on various topics relevant to them, including any concerns or expectations as an early career member. This is a social gathering for early career members to get to know each other and to network. Refreshments will be served. Come and meet the ASLO Board and members of the EC committee!

EARLY CAREER WORKSHOP – TIPS FOR PUBLICATION (SPONSORED BY ASLO)

Wednesday, 1 March 2017, 13:00 – 14:30
Room 315 – Hawaii Convention Center

MENTOR PROGRAMS

ASLO 2017 MULTICULTURAL PROGRAM

Starting in 1990 the ASLO Multicultural Program has brought over 950 diverse undergraduate and graduate students to the annual ASLO meetings. The program features pre-conference dinner and field trip, meeting-mentors to help guide the students, a student-symposium, and various other activities. The goal of the program is to increase the human diversity of aquatic scientists. This NSF sponsored effort is designed for US citizens and permanent residents, and does not include international students. The program supports the full cost of participation including travel, hotel, food, and meeting registration.

This year's program will feature a special field trip taking advantage of the local environment around Honolulu. ASLOMP also sponsors the Student Symposium to which all ASLO participants are invited. If you have any questions about the program or the requirements for the next meeting, please contact Benjamin Cuker (benjamin.cuker@hamptonu.edu), ASLO Multicultural Program Director.

ASLO 2017 Multicultural Program Meeting of Mentors and Mentees

Sunday, 26 February 2017, 16:00 – 17:00
Room 324 – Hawaii Convention Center

ASLO MEETING MENTOR PROGRAM

The ASLO Meeting Mentor Program provides first time participants with guidance on navigating meetings and making new connections. Mentees will be grouped with more experienced scientists (mentors) who will introduce them to other scientists. This has been a very successful program since it first debuted at the 2013 Aquatic Sciences Meeting in New Orleans. Please wear your name badge and badge ribbon that identify you as a participant in the mentor program. Ribbons will be available at registration when you pick up your badge and meeting materials.

Mentor Breakfast for ASLO Meeting Mentors and Mentees

Monday, 27 February 2017, 07:00 – 08:15
Room 315 – Hawaii Convention Center

A breakfast for those who signed up to be ASLO meeting mentors and mentees will take place first thing Monday morning prior to the first concurrent sessions.

SOCIAL AND EVENING EVENTS

OPENING MIXER RECEPTION

Sunday, 26 February 2017, 19:30-21:30
HCC Rooftop and Ballroom Prefunction Area

Enjoy the breathtaking view from the beautiful rooftop garden area at the Hawaii Convention Center while you reconnect with friends and colleagues that you may not have seen since the last ASLO meeting! This event is always a great start to the week. Refreshments and a cash bar will be available.

ASLO FELLOWS AND MEMBERSHIP RECEPTION (SPONSORED BY ASLO)

Monday, 27 February 2017, 18:30-19:30
Kalakaua Ballroom

A reception honoring ASLO fellows and sustaining fellows will precede the annual business meeting. This will be a great time to meet and to talk to ASLO officers and board members. Reception food and drink will be served. Everyone is encouraged to attend the business meeting and the membership reception -- especially new ASLO members and student members. The timing is planned so you can attend the business meeting and reception before you head out to the student or early career mixer.

PAU HANA-HAPPY HOURS / GET-TOGETHERS

Tuesday, 28 February 2017 and Friday, 3 March 2017, 18:30-19:30

Come and enjoy a happy hour following the award talk sessions on Tuesday and Friday. This will be a great place to meet up with friends before heading out to dinner or prior to attending one of the auxiliary events taking place at the HCC during the evening. Tuesday's pau hana will take place in the exhibit hall. ASLO will close the 2017 Aquatic Sciences Meeting in wonderful Hawaiian tradition on Friday with a happy hour in the Kalakaua Ballroom foyer area. Your registration will include one drink ticket that can be used at either of these happy hours.

ASSOCIATE EDITOR'S RECEPTION (BY INVITATION ONLY)

Tuesday, 28 February 2017, 18:45-20:30
Off-Site Location

This event is for ASLO associate editor's and invited guests only. The Associate Editor's Reception will take place off-site at Tommy Bahama's. Please contact Bob Howarth at rwh2@cornell.edu for information and more details.

NERD NIGHT ASLO HONOLULU

Wednesday, 1 March 2017, 20:00-23:59
Off-Site Location – Rumours (Located in the Ala Moana Hotel)

Nerd Nite ASLO is one of the meeting-after-hours events planned during the 2017 ASM in Honolulu. If you haven't heard of Nerd Nite, it is a monthly event held in more than 90 cities around the world. The goal of Nerd Nite is to share intellectual topics with a general audience in a way that is fun, yet informative. It is a way to highlight the AWE!, the EWW!, and the WOW!! of science, with a beer in hand. For Nerd Nite ASLO Honolulu, the work of five to seven Aquatic Science Meeting attendees will be showcased at Rumours, located in the Ala Moana Hotel (410 Atkinson Drive, Honolulu, HI 96814) beginning at 20:00. Talks are limited to five minutes, with music and on-stage entertainment between speakers. For more information, please contact Tiara Moore, ASLO Student Board Member, at tiaranmoore@gmail.com.

OPTIONAL ACTIVITIES

MORNING YOGA

Tuesday, 28 February and Thursday, 2 March 2017, 07:00-08:00
Off-Site Location – Ala Moana Park

Start your morning off with yoga on Tuesday, 28 February, and Thursday, 2 March Advanced sign up is required for these classes that will be led by yoga instructor Maya Siklai at Ala Moana Park. Classes will take place both days, and the cost is $15.00 per day. Each class must have a minimum number of participants in order to take place, and sign up will be closed when the maximum number is reached. In the event of rain, yoga will take place in the lobby of the Hawaii Convention Center.

ASLO 2017 5K FUN RUN

Wednesday, 1 March 2017, 06:30-07:30
Off-Site Location – Ala Moana Park

A 5K fun run is planned for Wednesday morning, 1 March, during the ASLO ASM. The run will be held at the Ala Moana Park, along the shore just west of the Hawaii Convention Center. This will be fun for those who are serious runners and those who just want to get out and enjoy the Hawaiian morning. The cost of the run is $20.00 USD. Advanced sign up is required.

INFORMATION FOR POSTER PRESENTERS

POSTER DISPLAY

Each poster has been assigned a number. There will be two (2) posters per side of each panel-board. Therefore posters must be no larger than the maximum (44.5 inches high by 45.5 inches wide) or (113.03 cm high by 115.57 cm wide). If your poster exceeds these specifications, it may be subject to removal. Posters will be affixed to the panel-boards using push pins, an adequate supply of which will be available throughout the poster hall.

POSTER SET UP AND TEARDOWN

Posters will be displayed in Kamehameha Exhibit Hall at the Hawaii Convention Center. They will be organized in session groupings for the entire meeting to maximize opportunities for viewing. Posters can go up Sunday, 26 February, from 12:00 to 17:00 and will remain in place through 16:30 on Friday, 3 March. They should be removed by Friday, before 20:30 at the very latest or they will be discarded.

POSTER SESSIONS

There are two designated poster sessions per day, one in the morning and one in the afternoon. Poster presenters are encouraged to be available to present their posters during both sessions in order to ensure maximum exposure for their research. Coffee breaks are scheduled during the poster sessions.

Though poster presenters have been assigned a specific day for interaction with attendees during the poster session, they may be at their poster any time the exhibit hall is open. The poster session times do not conflict with concurrent oral presentations, and poster sessions are scheduled in conjunction with the oral component of the session to which they are assigned.

Poster Session Schedule

Monday, 27 February..... 11:00 to 12:00 and 15:30 to 16:30
Tuesday, 28 February .....11:00 to 12:00 and 15:30 to 16:30
Wednesday, 1 March.....11:00 to 12:00 and 15:30 to 16:30
Thursday, 2 March.....11:00 to 12:00 and 15:30 to 16:30
Friday, 3 March.....11:00 to 12:00 and 15:30 to 16:30

POSTER PREPARATION

For more information on the preparation of a poster, please go to: https://www.sgmeet.com/aslo/honolulu2017/posterguidelines

INFORMATION FOR ORAL PRESENTERS

Talks are scheduled in 15-minute time slots. Please prepare a presentation of no more than 12 minutes to allow three minutes for questions from the audience. The time limit will be strictly enforced to facilitate movement between sessions.

NO PHOTOS OR RECORDING

No recording, taking pictures or videos, etc. is allowed in any of the session rooms during the meeting, including by cell phone. This includes posters displayed in the poster area.

ADVANCE SUBMISSION

There is an advance submission upload web site. The URL and instructions are available at https://www.sgmeet.com/aslo/honolulu2017/oral-presenter-instructions.asp.

ON-SITE SUBMISSION OF ORAL PRESENTATIONS

All oral presentations will need to be submitted in Room 303 A at the Hawaii Convention Center. This is the Presentation Room for the meeting. This room will be staffed and run by audio visual technicians. Presenters may submit their presentations beginning at 15:00 on Sunday, 26 February 2017.

Presentation Room Hours:

Sunday, 26 February ..... 15:00 to 21:00
Monday, 27 February ..... 07:30 to 17:30
Tuesday, 28 February ..... 07:30 to 17:30
Wednesday, 1 March ..... 07:30 to 17:30
Thursday, 2 March ..... 07:30 to 17:30
Friday, 3 March ..... 07:30 to 17:30

All presenters are required to check in to the Presentation Room, Room 303 A on the third floor of the Hawaii Convention Center, at least 24 hours before your assigned presentation day to submit your talk. An audio-visual technician will be available in the room to assist you. Please note: If your presentation is on Monday, please plan to go to the presentation room on Sunday during the hours specified to submit your talk.

REVIEWING YOUR PRESENTATION

After you submit your talk in the presentation room, please make sure that all fonts, images, and animations appear as expected and that all audio or video clips are working properly. When you are finished submitting, reviewing, and/or making changes to your presentation, you must tell the A/V technician you have finalized your presentation file before you leave the Presentation Room. Be sure to bring a backup copy of your presentation with you to the meeting. USB/Flash drives are preferred. Please make sure you have all power, video, and networking adapters with you.

DURING YOUR PRESENTATION

Each meeting room will have a projector, screen, laptop computer, audio, lectern, hardwired lectern microphone, timing device, and a laser pointer. Once the presentation has started, you can control the program from the lectern using a computer mouse or the up/down/right/left keys on a keyboard.

For more information on preparing your presentation, go to: https://www.sgmeet.com/aslo/honolulu2017/oral-presenter-instructions.asp

MEETING SCHEDULE

WEDNESDAY, 22 FEBRUARY 2017

8:00-17:00	Pacific Marine Analysis and Research Association – Linking Science to Decision Making – Introduction to Marxan	Off-Site Location

THURSDAY, 23 FEBRUARY 2017

8:00-17:00	Pacific Marine Analysis and Research Association – Linking Science to Decision Making – Introduction to Marxan	Off-Site Location

FRIDAY, 24 FEBRUARY 2017

8:00-17:00	Pacific Marine Analysis and Research Association – Linking Science to Decision Making – Introduction to Marxan	Off-Site Location

SATURDAY, 25 FEBRUARY 2017

9:00-16:00	ASLO Board Meeting	Hilton Hawaiian Village
8:00-15:00	Hawai`i Institute of Marine Biology Coral Reef Field Trip	Meet at HCC front entrance
8:30-12:45	He`eia Fishpond Work Day	Those who have paid for transportation will meet at HCC front entrance
9:00-15:00	South East O`ahu Coastal Geology Field Trip and Hike	Meet at HCC front entrance

SUNDAY, 26 FEBRUARY 2017

9:00-16:00	ASLO Board Meeting	Hilton Hawaiian Village
8:00-19:00	ASLO Multicultural Program Room Open	324
8:00-19:00	Family Room Open	327
8:00-19:00	Mentor Room Open	301 A
9:00-16:00	Cyber Tools and Resources for Research and Analysis	323 B
9:00-12:00	Workshop: Aquatic Science Education and Outreach: Broadening the Reach of Your Science	308 A/B
9:00-12:00	ASLO Leadership Workshop	306 A
9:00-16:00	IOCCG Working Group (Invitation Only)	307 B
10:00-13:00	Science Communications Lab. Yes, LAB Workshop (Section 1)	303 B
12:00-17:00	Exhibit Set Up by Exhibitors	Kamehameha Exhibit Hall 1 & 2
12:00-17:00	Poster Set Up by Presenters	Kamehameha Exhibit Hall 1 & 2
13:00-16:00	Arctic-GEOTRACES Early Career Researcher Networking Event	305 A/B
13:00-16:00	Best Practices in Mentoring Workshop	306 B
13:00-16:00	Demystifying the Teaching Philosophy Statement for Academic Job Applications Workshop	302 A/B
13:00-16:00	FlowCam and FlowCam 'Macro' Workshop	301 B

13:00-16:00	U.S. Coast Guard Icebreaker HEALY Workshop	304 A/B
14:00-17:00	Science Communications Lab. Yes, LAB Workshop (Section 2)	303 B
15:00-21:00	Presentation Room Open	303 A
15:00-19:00	Registration	HCC Lobby Area
16:00-17:00	ASLO Multicultural Program Meeting	324
17:00-18:00	Student Volunteer Training	HCC Lobby Area
18:00-19:30	Opening Session: Linda Duguay and Kalani Quiocho	Kalakaua Ballroom
19:30–21:00	Opening Mixer Reception	HCC Rooftop and Ballroom Prefunction Area

MONDAY, 27 FEBRUARY 2017

7:00-8:15	Mentor Breakfast	315
7:00-19:00	Plankton Art Exhibit	Exhibit Hall Foyer Area
7:00-19:00	ASLO Multicultural Program Room Open	324
7:00-19:00	Family Room Open	327
7:00-19:00	Mentor Room Open	301 A
7:30-17:30	Presentation Room Open	303 A
8:30-17:30	Registration	HCC Lobby Area
9:00-19:00	Exhibit Hall Open	Kamehameha Exhibit Hall 1 & 2
9:00 – 9:50	Plenary Presentation: Marcia McNutt	Kalakaua Ballroom
10:00-11:00	Concurrent Sessions	Various Rooms
11:00-12:00	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
12:00-13:00	Concurrent Sessions	Various Rooms
13:00-14:30	Lunch Break (Attendees on their own for lunch	HCC Concessions and Off-site
13:00-14:30	Teaching Introductory Aquatic and Environmental Sciences Workshop	301 B
13:00-14:30	National Science Foundation Division of Ocean Sciences Town Hall	302 A/B
13:00-14:30	U.S. Coast Guard Icebreaker HEALY Workshop	304 A/B
13:00-14:30	Flushing Our Future Town Hall	306 A
13:00-14:30	Bystander Intervention for Combating Sexual Misconduct in Science Workshop	308 A/B
13:00-14:30	Meet the ASLO Editors Luncheon	315
13:30-14:30	Coming Clean About Baikal – A Documentary Film	313 C
14:30-15:30	Concurrent Sessions	Various Rooms
15:30-16:30	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
16:30-17:30	Concurrent Sessions	Various Rooms
17:40-18:30	Award Talk Session: Award Recipient: 2017 Raymond L. Lindeman Award – Shawn Devlin	Kalakaua Ballroom
18:30-19:30	ASLO Fellows and Membership Reception	Kalakaua Ballroom Foyer

19:30-20:30	ASLO Business Meeting	Kalakaua Ballroom
20:30-22:00	ASLO Early Career Mixer	Kalakaua Ballroom Foyer
20:30-22:00	ASLO Student Mixer	3rd Floor Foyer

TUESDAY, 28 FEBRUARY 2017

7:00-8:00	Morning Yoga	Ala Moana Park
7:00-19:00	Plankton Art Exhibit	Exhibit Hall Foyer Area
7:00-19:00	ASLO Multicultural Program Room Open	324
7:00-19:00	Family Room Open	327
7:00-19:00	Mentor Room Open	301 A
7:30-17:30	Presentation Room Open	303 A
8:30-17:30	Registration	HCC Lobby Area
9:00-19:45	Exhibit Hall Open	Kamehameha Exhibit Hall 1 & 2
9:00-9:50	Plenary Presentation: Lionel Guidi	Kalakaua Ballroom
10:00-11:00	Concurrent Sessions	Various Rooms
11:00-12:00	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
12:00-13:00	Concurrent Sessions	Various Rooms
13:00-14:30	Lunch Break (Attendees on their own for lunch)	HCC Concessions and Off-site
13:00-14:30	Interdisciplinary Presentations Workshop	302 A/B
13:00-14:30	U.S. Coast Guard Icebreaker HEALY Workshop	304 A/B
13:00-14:30	Working at a Community College, Engaging Community College Faculty and Students Workshop	306 A
13:00–14:00	Marginal Ice Zone Workshop	313 C
13:00-14:30	ASLO Student Workshop-Embracing Diversity in our Scientific Community	315
13:00-14:30	AquaWatch, The GEO Water Quality Community of Practice Town Hall	323 A
14:30-15:30	Concurrent Sessions	Various Rooms
15:30-16:30	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
16:30-17:30	Concurrent Sessions	Various Rooms
17:40-18:30	Award Talk Session: Award Recipient: 2017 Ramón Margalef Award-Caroline Solomon and Award Recipients: 2017 John H. Martin Award – Robert Sterner and Dag Hessen	Kalakaua Ballroom
18:30-19:30	Pau Hana-Happy Hour/Get together	Kamehameha Exhibit Hall 1 & 2
18:30-20:00	Ocean Science and Technology: Open Discussion on Federal Research Plan	304 A/B
18:30-21:30	Science Videos that Engage Workshop	301 B
18:45-20:30	Associate Editor's Reception (Invitation Only)	Off-Site Location
19:00–21:00	L&O Letters Editorial Board Dinner (Invitation Only)	Off-Site Location

WEDNESDAY, 1 MARCH 2017

6:30-7:30	ASLO 2017 5K Fun Run	Ala Moana Park
7:00-19:00	Plankton Art Exhibit	Exhibit Hall Foyer Area
7:00-19:00	ASLO Multicultural Program Room Open	324
7:00-19:00	Family Room Open	327
7:00-19:00	Mentor Room Open	301 A
7:30-17:30	Presentation Room Open	303 A
8:30-17:30	Registration	HCC Lobby Area
9:00-19:45	Exhibit Hall Open	Kamehameha Exhibit Hall 1 & 2
9:00-9:50	Plenary Presentation: David Karl	Kalakaua Ballroom
10:00-11:00	Concurrent Sessions	Various Rooms
11:00-12:00	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
12:00-13:00	Concurrent Sessions	Various Rooms
13:00-14:30	Lunch Break (Attendees on their own for lunch)	HCC Concessions and Off-site
13:00-14:30	ASLO Early Career Workshop-Tips for Publication	315
13:00-14:30	Sea Grant Research Town Hall	301 A
13:00-14:30	Sharing Science through Storytelling Workshop	302 A/B
13:00-14:30	Writing a Great Application for Grad School and for NSF Graduate Research Fellowship Program	304 A/B
14:30-15:30	Concurrent Sessions	Various Rooms
15:30-16:30	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
16:30-17:30	Concurrent Sessions	Various Rooms
17:40-18:30	Award Talk Session: Award Recipient: 2017 G. Evelyn Hutchinson Award – Philip Boyd	Kalakaua Ballroom
18:30–20:30	MOSAiC International Arctic Drift Expedition	302 A/B
20:00–Midnight	Nerd Nite ASLO Honolulu	Off-Site Location

THURSDAY, 2 MARCH 2017

7:00-8:00	Morning Yoga	Ala Moana Park
7:00-19:00	Plankton Art Exhibit	Exhibit Hall Foyer Area
7:00-19:00	ASLO Multicultural Program Room Open	324
7:00-19:00	Family Room Open	327
7:00-19:00	Mentor Room Open	301 A
7:30-17:30	Presentation Room Open	303 A
8:30-17:30	Registration	HCC Lobby Area
9:00-19:45	Exhibit Hall Open	Kamehameha Exhibit Hall 1 & 2
9:00-9:50	Plenary Presentation: Margaret Palmer	Kalakaua Ballroom

10:00-11:00	Concurrent Sessions	Various Rooms
11:00-12:00	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
12:00-13:00	Concurrent Sessions	Various Rooms
13:00-14:30	Lunch Break (Attendees on their own for lunch)	HCC Concessions and Off-site
13:00-14:30	Ocean Issues in the Upcoming U.S. National Climate Assessment Town Hall	306 A
13:00-14:30	ASLO Student Workshop-PhD, Now What?	315
14:30-15:30	Concurrent Sessions	Various Rooms
15:30-16:30	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
16:30-17:30	Concurrent Sessions	Various Rooms
17:40-18:30	Award Talk Session: Award Recipient: 2017 Ruth Patrick Award – Walter Boynton and Award Recipient: 2017 Yentsch-Schindler Early Career Award – Meghan Duffy Nutrient Sensor Challenge Winner Announcement	Kalakaua Ballroom
18:30-20:30	Scientific Publication Workshop-An Evening with the Editors in Chief of ASLO's Limnology & Oceanography and AGU's Journal of Geophysical Research – Biogeosciences	301 B

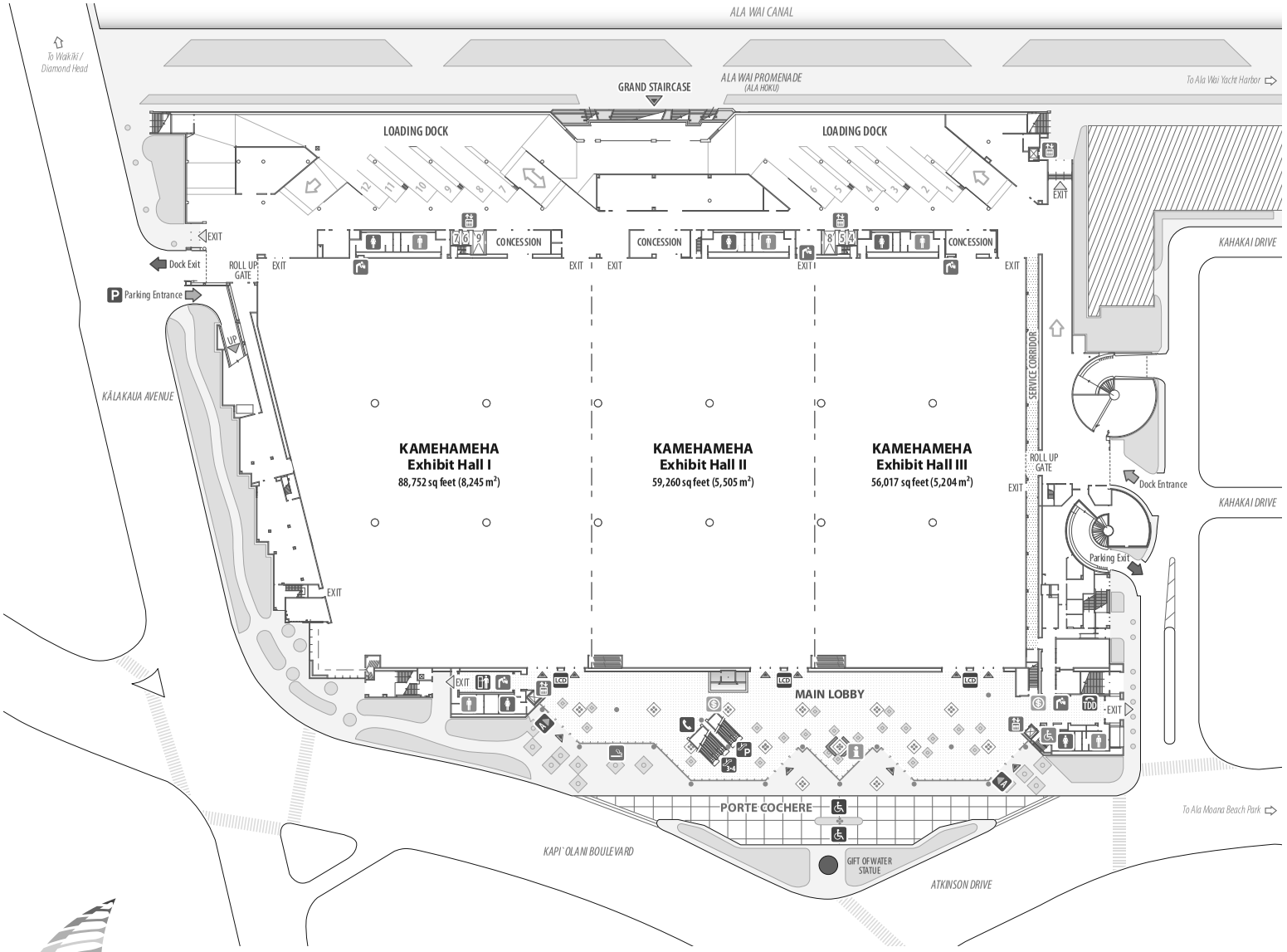
FRIDAY, 3 MARCH 2017

7:00-19:00	Plankton Art Exhibit	Exhibit Hall Foyer Area
7:00-19:00	ASLO Multicultural Program Room Open	324
7:00-19:00	Family Room Open	327
7:00-19:00	Mentor Room Open	301 A
7:30-17:30	Presentation Room Open	303 A
8:30-17:30	Registration	HCC Lobby Area
9:00 – 16:30	Exhibit Hall Open	Kamehameha Exhibit Hall 1 & 2
9:00-9:50	Plenary Presentation: Ruth Gates	Kalakaua Ballroom
10:00-11:00	Concurrent Sessions	Various Rooms
11:00-12:00	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
12:00-13:00	Concurrent Sessions	Various Rooms
13:00-14:30	Lunch Break (Attendees on their own for lunch)	HCC Concessions and Off-site
14:30-15:30	Concurrent Sessions	Various Rooms
15:30-16:30	Poster Session and Coffee Break	Kamehameha Exhibit Hall 1 & 2
16:30-17:30	Concurrent Sessions	Various Rooms
16:30–20:30	Poster and Exhibit Teardown	Kamehameha Exhibit Hall 1 & 2
17:40-18:30	Award Talk Session: Award Recipient – 2017 A.C. Redfield Lifetime Achievement Award-Bo Barker Jørgensen	Kalakaua Ballroom
18:30-19:30	Closing Happy Hour	Kalakaua Ballroom Foyer

SATURDAY, 4 MARCH 2017

8:00-13:00	Waikiki & the Ala Wai Canal Watershed Field Trip	Participants meet in Waikiki Zoo Parking Lot

CONVENTION CENTER MAP-LEVEL 1/EXHIBIT & POSTER HALL



Level 1

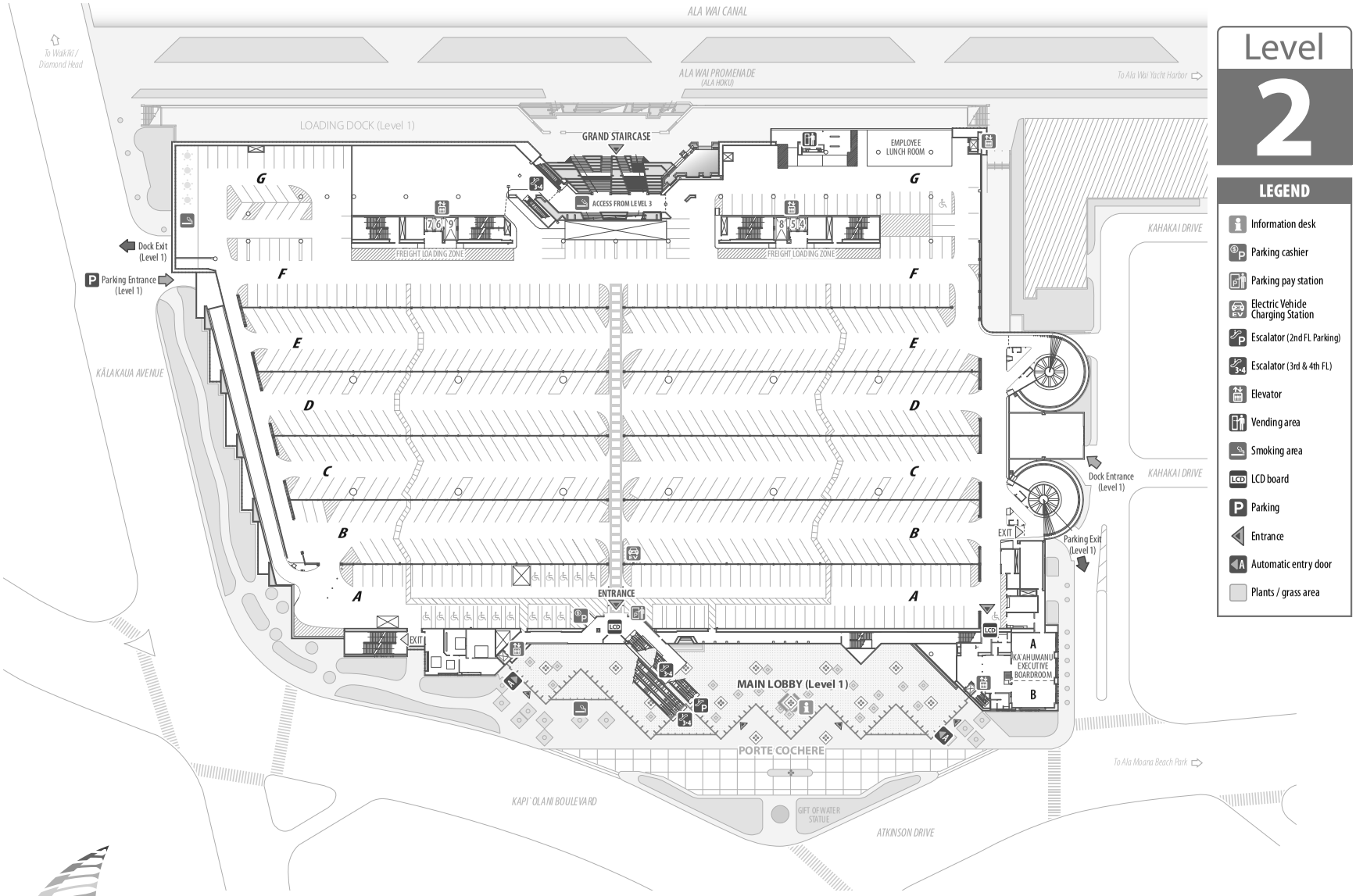
LEGEND

- Information desk
- Escalator (2nd FL Parking)
- Escalator (3rd & 4th FL)
- Elevator
- Restroom (Men)
- Restroom (Women)
- Restroom (Universal)
- Pay phone
- TDD / Pay phone
- ATM
- Vending area
- Water fountain
- Smoking area
- LCD board
- Parking
- Entrance
- Automatic entry door
- Plants / grass area
- Walkway
- Crosswalk
- Service corridor
- Accessible Passenger Loading Zone

HAWAI'I CONVENTION CENTER

1 EXHIBIT HALL / LOBBY

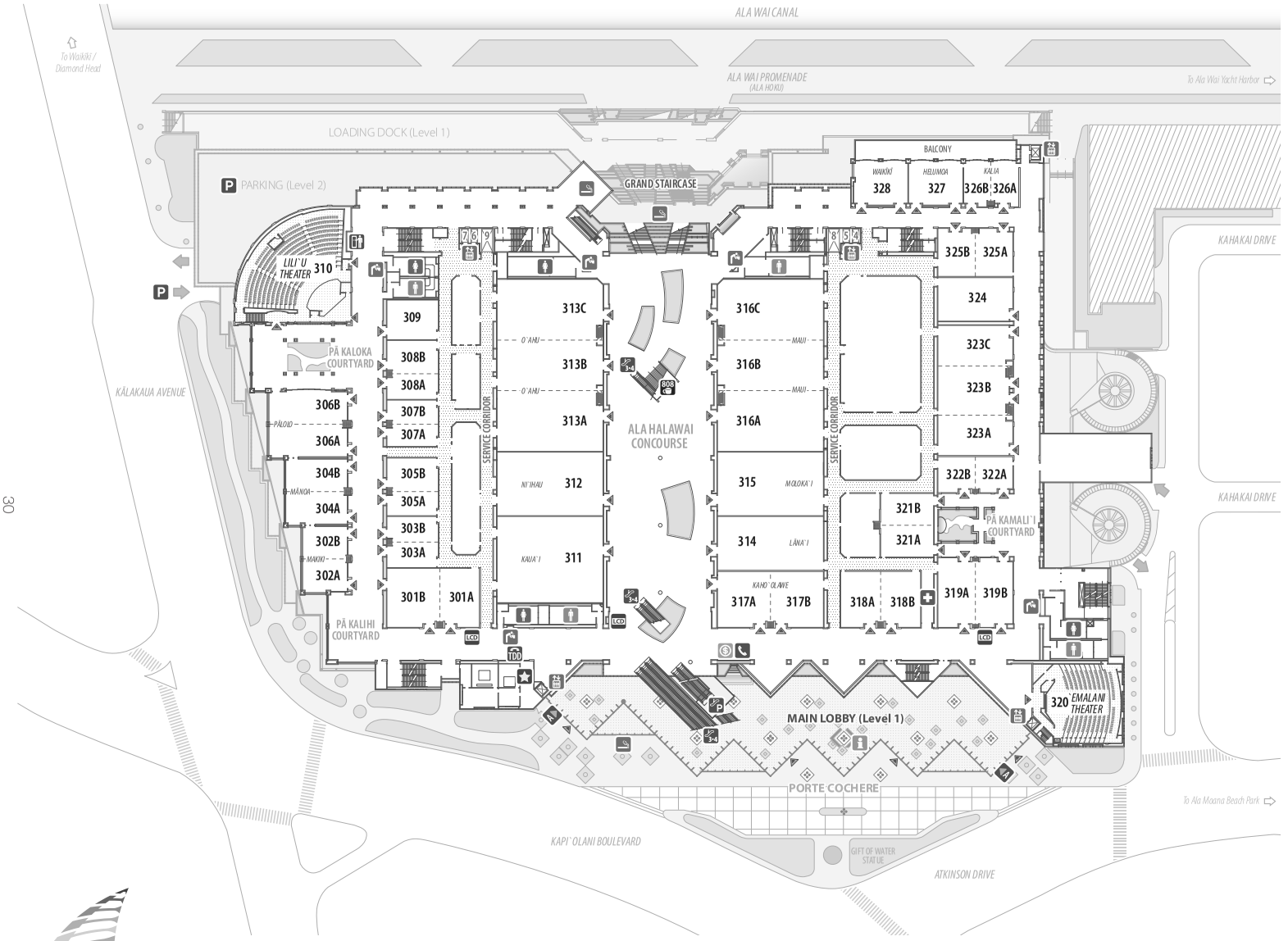
CONVENTION CENTER MAP-LEVEL 2/PARKING



HAWAI'I CONVENTION CENTER

2 PARKING

CONVENTION CENTER MAP-LEVEL 3/MEETING ROOMS



Level 3

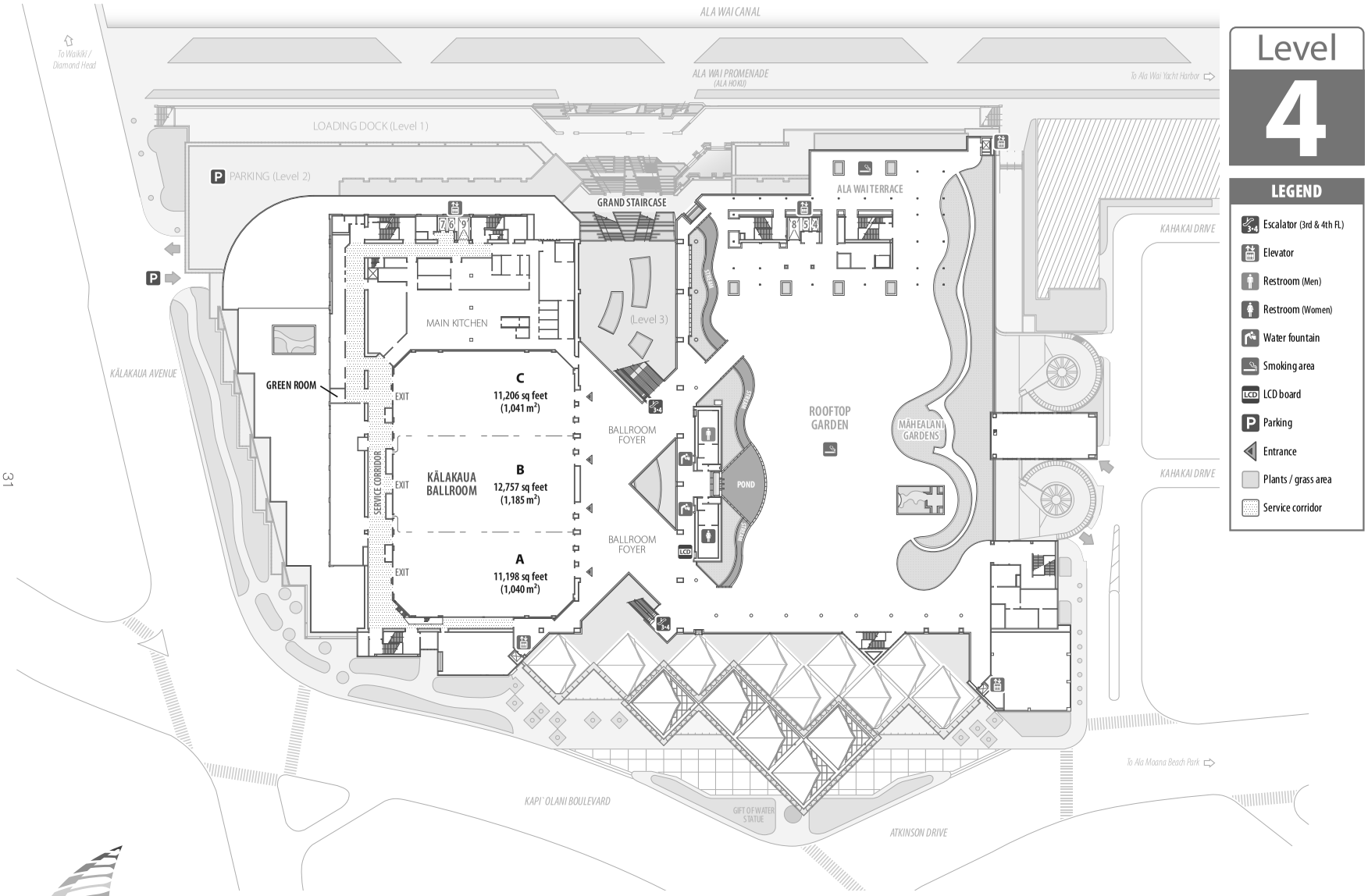
LEGEND

- Information desk
- Business center
- 808 Coffees Café
- First aid
- Escalator (2nd FL Parking)
- Escalator (3rd & 4th FL)
- Elevator
- Restroom (Men)
- Restroom (Women)
- Pay phone
- TDD / Pay phone
- ATM
- Vending area
- Water fountain
- Smoking area
- LCD board
- Parking
- Entrance
- Automatic entry door
- Plants / grass area
- Service corridor

HAWAI'I CONVENTION CENTER

3 MEETING ROOM / THEATERS

CONVENTION CENTER MAP-LEVEL 4/BALLROOM



HAWAI'I CONVENTION CENTER

4 BALLROOM / ROOF TOP GARDEN

MONDAY AT-A-GLANCE

Room	301 B	302 A/B	304 A/B	305 A/B	306 A	306 B	308 A/B
7:00-8:15	ASLO MENTOR PROGRAM BREAKFAST-Room 315						
9:00-9:50	MORNING PLENARY – Kalakaua Ballroom Marcia McNutt-Welcome in the Field, Welcome in Our Field: Attracting the Best and Brightest						
Session #	71	96	12	9	34	58	65
10:00-11:00	Molecular Insights into Adaptive Microbial Physiology	New coral reef ecosystem studies from remote sensing	The Biogeochemistry of Dissolved Organic Matter	Temporal and Spatial Components Affecting Zooplankton Community Structure	Interactive effects of anthropogenic stressors across ecosystem boundaries	Environmental Drivers and Transmission of Infectious Diseases in Marine and Freshwater Systems	Groundwater-surface water interaction across the terrestrial-marine continuum
11:00-12:00	POSTER SESSION AND COFFEE BREAK						
Session #	71	96	12	9	34	58	65
12:00-13:00	Molecular Insights into Adaptive Microbial Physiology	New coral reef ecosystem studies from remote sensing	The Biogeochemistry of Dissolved Organic Matter	Temporal and Spatial Components Affecting Zooplankton Community Structure	Interactive effects of anthropogenic stressors across ecosystem boundaries	Environmental Drivers and Transmission of Infectious Diseases in Marine and Freshwater Systems	Groundwater-surface water interaction across the terrestrial-marine continuum
13:00-14:30	LUNCH-WORKSHOPS AND ANCILLARY MEETINGS Meet The ASLO Editors Luncheon-Room 315						
Session #	71	114	12	2	34	36	65
14:30-15:30	Molecular Insights into Adaptive Microbial Physiology	Physical-Biological Coupling	The Biogeochemistry of Dissolved Organic Matter	ASLOMP Student Symposium	Interactive effects of anthropogenic stressors across ecosystem boundaries	Methane Oxidation Across Ecosystems: Opening the Methane'Black Box'	Groundwater-surface water interaction across the terrestrial-marine continuum
15:30-16:30	POSTER SESSION AND COFFEE BREAK						
Session #	71	114	12	2	34	36	69
16:30-17:30	Molecular Insights into Adaptive Microbial Physiology	Physical-Biological Coupling	The Biogeochemistry of Dissolved Organic Matter	ASLOMP Student Symposium	Interactive effects of anthropogenic stressors across ecosystem boundaries	Methane Oxidation Across Ecosystems: Opening the Methane'Black Box'	Aquatic Transitions: Tracking the nature and trajectories of change using paleolimnological approaches
17:40-18:30	AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Raymond L. Lindeman Award						
18:30-19:30	ASLO Fellows and Membership Reception-Kalakaua Ballroom Foyer						
19:30 -20:30	ASLO BUSINESS MEETING-Kalakaua Ballroom						
20:30-22:00	STUDENT MIXER-HCC-3rd Floor Foyer / EARLY CAREER MIXER-Kalakaua Ballroom Foyer-4th Floor						

313 A	313 B	313 C	314	323 A	323 B	323 C	Room
ASLO MENTOR PROGRAM BREAKFAST-Room 315							7:00-8:15
MORNING PLENARY – Kalakaua Ballroom Marcia McNutt-Welcome in the Field, Welcome in Our Field: Attracting the Best and Brightest							9:00-9:50
6	81	8	14	25	122	79	Session #
New Directions in Plankton Ecology	Polar and High Latitude Research: Land, Lakes, Ice, and Ocean	Changes in Large Freshwater Ecosystems: Drivers, Responses, and Restoration	Microbial interactions in aquatic ecosystems: untangling the complex web of competition, mutualism, predation, and adaptation	Linking atmospheric deposition to the biogeochemistry of aquatic and marine systems	Geochemistry, Biogeochemistry, and Nutrient Cycling	Food Web Interactions, Trophic Linkages and Ontogenetic Niche Shifts	10:00-11:00
POSTER SESSION AND COFFEE BREAK							11:00-12:00
6	81	8	14	25	122	79	Session #
New Directions in Plankton Ecology	Polar and High Latitude Research: Land, Lakes, Ice, and Ocean	Changes in Large Freshwater Ecosystems: Drivers, Responses, and Restoration	Microbial interactions in aquatic ecosystems: untangling the complex web of competition, mutualism, predation, and adaptation	Linking atmospheric deposition to the biogeochemistry of aquatic and marine systems	Geochemistry, Biogeochemistry, and Nutrient Cycling	Food Web Interactions, Trophic Linkages and Ontogenetic Niche Shifts	12:00-13:00
LUNCH-WORKSHOPS AND ANCILLARY MEETINGS Meet The ASLO Editors Luncheon-Room 315							13:00-14:30
6	81	8	14	25	122	79	Session #
New Directions in Plankton Ecology	Polar and High Latitude Research: Land, Lakes, Ice, and Ocean	Changes in Large Freshwater Ecosystems: Drivers, Responses, and Restoration	Microbial interactions in aquatic ecosystems: untangling the complex web of competition, mutualism, predation, and adaptation	Linking atmospheric deposition to the biogeochemistry of aquatic and marine systems	Geochemistry, Biogeochemistry, and Nutrient Cycling	Food Web Interactions, Trophic Linkages and Ontogenetic Niche Shifts	14:30-15:30
POSTER SESSION AND COFFEE BREAK							15:30-16:30
6	81	8	14	25	122	79	Session #
New Directions in Plankton Ecology	Polar and High Latitude Research: Land, Lakes, Ice, and Ocean	Changes in Large Freshwater Ecosystems: Drivers, Responses, and Restoration	Microbial interactions in aquatic ecosystems: untangling the complex web of competition, mutualism, predation, and adaptation	Linking atmospheric deposition to the biogeochemistry of aquatic and marine systems	Geochemistry, Biogeochemistry, and Nutrient Cycling	Food Web Interactions, Trophic Linkages and Ontogenetic Niche Shifts	16:30-17:30
AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Raymond L. Lindeman Award							17:40-18:30
ASLO Fellows and Membership Reception-Kalakaua Ballroom Foyer							18:30-19:30
ASLO BUSINESS MEETING-Kalakaua Ballroom							19:30 -20:30
STUDENT MIXER-HCC-3rd Floor Foyer / EARLY CAREER MIXER-Kalakaua Ballroom Foyer-4th Floor							20:30-22:00

TUESDAY AT-A-GLANCE

Room	301 B	302 A/B	304 A/B	305 A/B	306 A	306 B	308 A/B
7:00-8:00	MORNING YOGA-Ala Moana Park						
9:00-9:50	MORNING PLENARY – Kalakaua Ballroom Lionel Guidi-Tara Oceans: The Biological Carbon Pump from Genes to Ecosystems						
Session #	71	69	12	68	3	63	41
10:00-11:00	Molecular Insights into Adaptive Microbial Physiology	Aquatic Transitions: Tracking the nature and trajectories of change using paleolimnological approaches	The Biogeochemistry of Dissolved Organic Matter	Spatial and Temporal Dynamics of Aquatic Microbial Communities	Phosphorus Along the Soil--Freshwater-Ocean Continuum	Microbial Ecosystem Services and Interactive Effects on Organic Matter Processing Along the Land-Sea Continuum	Sediments with Hydrodynamically Driven Flow, from Stream to Shelf
11:00-12:00	POSTER SESSION AND COFFEE BREAK						
Session #	71	69	12	68	3	63	41
12:00-13:00	Molecular Insights into Adaptive Microbial Physiology	Aquatic Transitions: Tracking the nature and trajectories of change using paleolimnological approaches	The Biogeochemistry of Dissolved Organic Matter	Spatial and Temporal Dynamics of Aquatic Microbial Communities	Phosphorus Along the Soil--Freshwater-Ocean Continuum	Microbial Ecosystem Services and Interactive Effects on Organic Matter Processing Along the Land-Sea Continuum	Sediments with Hydrodynamically Driven Flow, from Stream to Shelf
13:00-14:30	LUNCH-WORKSHOPS AND ANCILLARY MEETINGS ASLO Student Workshop: Embracing Diversity in our Scientific Community-Room 315						
Session #	27	106	12	2	3	82	41
14:30-15:30	Transitioning Ecological Forecasting Research to Operational Applications	Fish	The Biogeochemistry of Dissolved Organic Matter	ASLOMP Student Symposium	Phosphorus Along the Soil--Freshwater-Ocean Continuum	Coupling and exchange across the sediment-water interface	Sediments with Hydrodynamically Driven Flow, from Stream to Shelf
15:30-16:30	POSTER SESSION AND COFFEE BREAK						
Session #	27	106	12	2	26	82	24
16:30-17:30	Transitioning Ecological Forecasting Research to Operational Applications	Fish	The Biogeochemistry of Dissolved Organic Matter	ASLOMP Student Symposium	Undergraduate Research in the Aquatic Sciences	Coupling and exchange across the sediment-water interface	Supporting Data-intensive Freshwater and Marine Research: Integrating Informatics, Infrastructure, Databases, and Open Science
17:40-18:30	AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Ramón Margalef Award for Excellence in Education and 2017 John H. Martin Award						
18:30-19:30	Pau Hana/ Happy Hour Get Together						
18:30 -21:30	Evening Workshops, Town Halls, and Meetings-See Times / Locations Listed.						

313 A	313 B	313 C	314	323 A	323 B	323 C	Room
MORNING YOGA-Ala Moana Park							7:00-8:00
MORNING PLENARY – Kalakaua Ballroom Lionel Guidi-Tara Oceans: The Biological Carbon Pump from Genes to Ecosystems							9:00-9:50
6	81	4	17	24	8	110	Session #
New Directions in Plankton Ecology	Polar and High Latitude Research: Land, Lakes, Ice, and Ocean	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Bacterial interactions with eukaryotic plankton	Supporting Data-intensive Freshwater and Marine Research: Integrating Informatics, Infrastructure, Databases, and Open Science	Changes in Large Freshwater Ecosystems: Drivers, Responses, and Restoration	Aquatic Invasion Ecology	10:00-11:00
POSTER SESSION AND COFFEE BREAK							11:00-12:00
6	19	4	17	31	28	110	Session #
New Directions in Plankton Ecology	The Biological Carbon Pump in the Tropical Pacific Ocean	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Bacterial interactions with eukaryotic plankton	Global remote sensing of inland waters	Spatial-temporal organization of plankton communities: from observation to theory and integrated models	Aquatic Invasion Ecology	12:00-13:00
LUNCH-WORKSHOPS AND ANCILLARY MEETINGS ASLO Student Workshop: Embracing Diversity in our Scientific Community-Room 315							13:00-14:30
6	19	4	17	31	28	39	Session #
New Directions in Plankton Ecology	The Biological Carbon Pump in the Tropical Pacific Ocean	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Bacterial interactions with eukaryotic plankton	Global remote sensing of inland waters	Spatial-temporal organization of plankton communities: from observation to theory and integrated models	FUTURE WATER--Inter- and Transdisciplinarity in Metropolitan Aquatic Sciences	14:30-15:30
POSTER SESSION AND COFFEE BREAK							15:30-16:30
6	19	4	17	31	28	39	Session #
New Directions in Plankton Ecology	The Biological Carbon Pump in the Tropical Pacific Ocean	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Bacterial interactions with eukaryotic plankton	Global remote sensing of inland waters	Spatial-temporal organization of plankton communities: from observation to theory and integrated models	FUTURE WATER--Inter- and Transdisciplinarity in Metropolitan Aquatic Sciences	16:30-17:30
AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Ramón Margalef Award for Excellence in Education and 2017 John H. Martin Award							17:40-18:30
Pau Hana/ Happy Hour Get Together							18:30-19:30
Evening Workshops, Town Halls, and Meetings-See Times / Locations Listed.							18:30 -21:30

WEDNESDAY AT-A-GLANCE

Room	301 B	302 A/B	304 A/B	305 A/B	306 A	306 B	308 A/B
6:30-7:30	ASLO 2017 5K FUN RUN-Ala Moana Park						
9:00-9:50	MORNING PLENARY – Kalakaua Ballroom David M. Karl- Station Aloha: A Gathering Place for Discovery, Education and Scientific Collaboration						
Session #	23	7	13	56	62	86	18
10:00-11:00	Dynamic DON: The role of organic nitrogen in regulating aquatic ecosystem functioning from land to sea	The Power of Diatoms	Integrative Research on Organic Matter Cycling Across Aquatic Gradients	Ocean and Coastal Acidification: Synthesizing information and supporting mitigation	Tracing ecological dynamics and biogeochemical cycles via compound-specific isotope analysis (CSIA) of organic compounds	Hydrologic connectivity: linking land use changes and management to movement and transformations of resources within catchments	Vertical connectivity of the pelagic ocean: understanding the function and services of intermediate trophic levels
11:00-12:00	POSTER SESSION AND COFFEE BREAK						
Session #	23	7	13	56	62	86	18
12:00-13:00	Dynamic DON: The role of organic nitrogen in regulating aquatic ecosystem functioning from land to sea	The Power of Diatoms	Integrative Research on Organic Matter Cycling Across Aquatic Gradients	Ocean and Coastal Acidification: Synthesizing information and supporting mitigation	Tracing ecological dynamics and biogeochemical cycles via compound-specific isotope analysis (CSIA) of organic compounds	Hydrologic connectivity: linking land use changes and management to movement and transformations of resources within catchments	Vertical connectivity of the pelagic ocean: understanding the function and services of intermediate trophic levels
13:00-14:30	LUNCH-WORKSHOPS AND ANCILLARY MEETINGS ASLO Early Career Workshop: Tips for Publication-Room 315						
Session #	2	7	13	56	62	75	18
14:30-15:30	ASLOMP Student Symposium	The Power of Diatoms	Integrative Research on Organic Matter Cycling Across Aquatic Gradients	Ocean and Coastal Acidification: Synthesizing information and supporting mitigation	Tracing ecological dynamics and biogeochemical cycles via compound-specific isotope analysis (CSIA) of organic compounds	Does connectivity enhance integrity? Dependence of physical, biological, and chemical integrity of natural waters on connections to land and other waterbodies	Vertical connectivity of the pelagic ocean: understanding the function and services of intermediate trophic levels
15:30-16:30	POSTER SESSION AND COFFEE BREAK						
Session #	2	15	13	45	26	75	18
16:30-17:30	ASLOMP Student Symposium	Patterns of Biogeochemical Change in Stream and River Networks	Integrative Research on Organic Matter Cycling Across Aquatic Gradients	What's the matter of biodiversity?	Undergraduate Research in the Aquatic Sciences	Does connectivity enhance integrity? Dependence of physical, biological, and chemical integrity of natural waters on connections to land and other waterbodies	Vertical connectivity of the pelagic ocean: understanding the function and services of intermediate trophic levels
17:40-18:30	AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 G. Evelyn Hutchinson Award						
18:30-20:30	Evening Workshops, Town Halls, and Meetings-See Times / Locations Listed.						
20:00-Midnight	Nerd Nite ASLO Honolulu-Rumours (Ala Moana Hotel)						

313 A	313 B	313 C	314	323 A	323 B	323 C	Room
ASLO 2017 5K FUN RUN-Ala Moana Park							6:30-7:30
MORNING PLENARY – Kalakaua Ballroom David M. Karl- Station Aloha: A Gathering Place for Discovery, Education and Scientific Collaboration							9:00-9:50
6	73	4	40	42	21	30	Session #
New Directions in Plankton Ecology	Hitting a Moving Target-Navigating the path to the workforce	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Station ALOHA: A sentinel of open ocean change	Aquatic genomics	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Trophic Interactions as Modifiers of Carbon and Nutrient Cycles in the Ocean	10:00-11:00
POSTER SESSION AND COFFEE BREAK							11:00-12:00
6	73	4	40	42	21	30	Session #
New Directions in Plankton Ecology	Hitting a Moving Target-Navigating the path to the workforce	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Station ALOHA: A sentinel of open ocean change	Aquatic genomics	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Trophic Interactions as Modifiers of Carbon and Nutrient Cycles in the Ocean	12:00-13:00
LUNCH-WORKSHOPS AND ANCILLARY MEETINGS ASLO Early Career Workshop: Tips for Publication-Room 315							13:00-14:30
6	22	4	40	42	21	95	Session #
New Directions in Plankton Ecology	Advances in Modeling Coastal Hypoxia and Acidification: From Physics to Fish	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Station ALOHA: A sentinel of open ocean change	Aquatic genomics	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Metabolism of inland waters: patterns and drivers across multiple scales	14:30-15:30
POSTER SESSION AND COFFEE BREAK							15:30-16:30
6	22	4	72	42	21	95	Session #
New Directions in Plankton Ecology	Advances in Modeling Coastal Hypoxia and Acidification: From Physics to Fish	Biogeochemical Cycling of Trace Elements and Isotopes in the Arctic Ocean	Biotic interactions in aquatic ecosystems--implications for food webs and ecosystem functioning	Aquatic genomics	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Metabolism of inland waters: patterns and drivers across multiple scales	16:30-17:30
AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 G. Evelyn Hutchinson Award							17:40-18:30
Evening Workshops, Town Halls, and Meetings-See Times / Locations Listed.							18:30-20:30
Nerd Nite ASLO Honolulu-Rumours (Ala Moana Hotel)							20:00-Midnight

THURSDAY AT-A-GLANCE

Room	301 B	302 A/B	304 A/B	305 A/B	306 A	306 B	308 A/B
7:00-8:00	MORNING YOGA-Ala Moana Park						
9:00-9:50	MORNING PLENARY – Kalakaua Ballroom Margaret Palmer-Actionable Water Science and Effective Communication						
Session #	44	15	13	45	57	24	111
10:00-11:00	Bridging the eco-evolutionary gap: Plastic and adaptive responses to climate change	Patterns of Biogeochemical Change in Stream and River Networks	Integrative Research on Organic Matter Cycling Across Aquatic Gradients	What's the matter of biodiversity?	Sources, Transformations, and Transport of Carbon and Nutrients in Watersheds: Influences on Stream Water Quality	Supporting Data--intensive Freshwater and Marine Research: Integrating Informatics, Infrastructure, Databases, and Open Science	Climate Change
11:00-12:00	POSTER SESSION AND COFFEE BREAK						
Session #	44	15	13	45	57	93	111
12:00-13:00	Bridging the eco-evolutionary gap: Plastic and adaptive responses to climate change	Patterns of Biogeochemical Change in Stream and River Networks	Integrative Research on Organic Matter Cycling Across Aquatic Gradients	What's the matter of biodiversity?	Sources, Transformations, and Transport of Carbon and Nutrients in Watersheds: Influences on Stream Water Quality	Enough C plumbing: other biogeochemical cycles and coupled biogeochemical cycles from mountains to the sea	Climate Change
13:00-14:30	LUNCH-WORKSHOPS AND ANCILLARY MEETINGS ASLO Student Workshop: PhD, Now What?-Room 315						
Session #	44	15	13	45	57	93	111
14:30-15:30	Bridging the eco-evolutionary gap: Plastic and adaptive responses to climate change	Patterns of Biogeochemical Change in Stream and River Networks	Integrative Research on Organic Matter Cycling Across Aquatic Gradients	What's the matter of biodiversity?	Sources, Transformations, and Transport of Carbon and Nutrients in Watersheds: Influences on Stream Water Quality	Enough C plumbing: other biogeochemical cycles and coupled biogeochemical cycles from mountains to the sea	Climate Change
15:30-16:30	POSTER SESSION AND COFFEE BREAK						
Session #	52	15	68	54	26	93	66
16:30-17:30	Viruses and parasites in food web interactions	Patterns of Biogeochemical Change in Stream and River Networks	Spatial and Temporal Dynamics of Aquatic Microbial Communities	Spatial and temporal trends in marine biodiversity	Undergraduate Research in the Aquatic Sciences	Enough C plumbing: other biogeochemical cycles and coupled biogeochemical cycles from mountains to the sea	In hot water: The physics and impacts of warming lakes and reservoirs
17:40-18:30	AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Ruth Patrick Award and 2017 Yentsch-Schindler Early Career Award						
18:30-20:30	Scientific Publication Workshop-Evening with Editors in Chief of ASLO's L&O and AGU's JGR: Biogeosciences-Room 301 B						

313 A	313 B	313 C	314	323 A	323 B	323 C	Room
MORNING YOGA-Ala Moana Park							7:00-8:00
MORNING PLENARY – Kalakaua Ballroom Margaret Palmer-Actionable Water Science and Effective Communication							9:00-9:50
72	29	19	55	42	21	98	Session #
Biotic interactions in aquatic ecosystems--implications for food webs and ecosystem functioning	REE marine geochemistry in the 21st century: A tribute to the pioneering research of Henry Elderfield (1943-2016)	The Biological Carbon Pump in the Tropical Pacific Ocean	Innovations in teaching, mentoring, and outreach practices to improve education and broaden participation	Aquatic genomics	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Anthropogenic Impacts and Environmental Threats in Urban Ecosystems	10:00-11:00
POSTER SESSION AND COFFEE BREAK							11:00-12:00
72	29	19	55	67	21	98	Session #
Biotic interactions in aquatic ecosystems--implications for food webs and ecosystem functioning	REE marine geochemistry in the 21st century: A tribute to the pioneering research of Henry Elderfield (1943-2016)	The Biological Carbon Pump in the Tropical Pacific Ocean	Innovations in teaching, mentoring, and outreach practices to improve education and broaden participation	Ecological Resilience, Non--linear Community Dynamics and Reversibility of State Shifts in Aquatic Ecosystems	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Anthropogenic Impacts and Environmental Threats in Urban Ecosystems	12:00-13:00
LUNCH-WORKSHOPS AND ANCILLARY MEETINGS ASLO Student Workshop: PhD, Now What?-Room 315							13:00-14:30
72	38	74	55	67	21	92	Session #
Biotic interactions in aquatic ecosystems--implications for food webs and ecosystem functioning	Estuaries: Blue carbon sinks or greenhouse gas sources?	Characterizing 'Exploration' in the Water Column	Innovations in teaching, mentoring, and outreach practices to improve education and broaden participation	Ecological Resilience, Non--linear Community Dynamics and Reversibility of State Shifts in Aquatic Ecosystems	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Canopies in aquatic ecosystems: integrating form, function, and biophysical processes	14:30-15:30
POSTER SESSION AND COFFEE BREAK							15:30-16:30
72	38	74	55	67	21	92	Session #
Biotic interactions in aquatic ecosystems--implications for food webs and ecosystem functioning	Estuaries: Blue carbon sinks or greenhouse gas sources?	Characterizing 'Exploration' in the Water Column	Innovations in teaching, mentoring, and outreach practices to improve education and broaden participation	Ecological Resilience, Non--linear Community Dynamics and Reversibility of State Shifts in Aquatic Ecosystems	Crossing disciplinary boundaries across the freshwater--marine continuum to advance the understanding of harmful algal blooms (HABs)	Canopies in aquatic ecosystems: integrating form, function, and biophysical processes	16:30-17:30
AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Ruth Patrick Award and 2017 Yentsch-Schindler Early Career Award							17:40-18:30
Scientific Publication Workshop-Evening with Editors in Chief of ASLO's L&O and AGU's JGR: Biogeosciences-Room 301 B							18:30-20:30

FRIDAY AT-A-GLANCE

Room	301 B	302 A/B	304 A/B	305 A/B	306 A	306 B	308 A/B
9:00-9:50	MORNING PLENARY – Kalakaua Ballroom Ruth Gates-Harnessing Basic Science to Advance Solutions for Coral Reefs						
Session #	52	83	49	76	5	32	91
10:00-11:00	Viruses and parasites in food web interactions	Towards Understanding and Managing Marine Ecosystems as Complex Adaptive Systems	From the Mountains to the Sea: Fluxes, Transformations and Impacts of Land-Derived Materials in the Coastal Zone	Particles as microbial hotspots from the coast to the open ocean in the Anthropocene	Coral Microbiomes: Shallow, Mesophotic, Deep-Sea	DOM reactivity: underlying mechanisms and processes	Long-term perspectives on aquatic research
11:00-12:00	POSTER SESSION AND COFFEE BREAK						
Session #	52	83	49	76	5	32	91
12:00-13:00	Viruses and parasites in food web interactions	Towards Understanding and Managing Marine Ecosystems as Complex Adaptive Systems	From the Mountains to the Sea: Fluxes, Transformations and Impacts of Land-Derived Materials in the Coastal Zone	Particles as microbial hotspots from the coast to the open ocean in the Anthropocene	Coral Microbiomes: Shallow, Mesophotic, Deep-Sea	DOM reactivity: underlying mechanisms and processes	Long-term perspectives on aquatic research
13:00-14:30	LUNCH - WORKSHOPS AND ANCILLARY MEETINGS						
Session #	53	84	49	50	1	32	91
14:30-15:30	Tiny but mighty: The role of microzooplankton in affecting lower and upper food-web dynamics	Scales of variability in aquatic environments: are some more important than others?	From the Mountains to the Sea: Fluxes, Transformations and Impacts of Land-Derived Materials in the Coastal Zone	Currents and Material Transport at the Ocean Surface	Air-water, Sediment-water, and Microphyte-facilitated Gas Exchange in Inland and Coastal Systems	DOM reactivity: underlying mechanisms and processes	Long-term perspectives on aquatic research
15:30-16:30	POSTER SESSION AND COFFEE BREAK						
Session #	53	84	49	50	1	26	91
16:30-17:30	Tiny but mighty: The role of microzooplankton in affecting lower and upper food-web dynamics	Scales of variability in aquatic environments: are some more important than others?	From the Mountains to the Sea: Fluxes, Transformations and Impacts of Land-Derived Materials in the Coastal Zone	Currents and Material Transport at the Ocean Surface	Air-water, Sediment-water, and Microphyte-facilitated Gas Exchange in Inland and Coastal Systems	Undergraduate Research in the Aquatic Sciences	Long-term perspectives on aquatic research
17:40-18:30	AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Alfred C. Redfield Lifetime Achievement Award						
18:30-19:30	Closing Happy Hour						

313 A	313 B	313 C	314	323 A	323 B	323 C	Room
MORNING PLENARY – Kalakaua Ballroom Ruth Gates-Harnessing Basic Science to Advance Solutions for Coral Reefs							9:00-9:50
59	11	66	51	54	21	16	Session #
Ecological impacts of El Niño 2015-16	Plastic flowing from land to sea: sources, impacts and mitigation of macro- and microplastics across a spectrum of aquatic ecosystems	In hot water: The physics and impacts of warming lakes and reservoirs	Toward greater synthesis: ocean color imagery and biogeochemical/ ecosystem numerical modeling	Spatial and temporal trends in marine biodiversity	Crossing disciplinary boundaries across the freshwater-marine continuum to advance the understanding of harmful algal blooms (HABs)	Advances in Aquatic Meta-Omics: Creating Tools for More Accurate Characterization of Microbial Communities	10:00-11:00
POSTER SESSION AND COFFEE BREAK							11:00-12:00
59	11	48	51	54	21	16	Session #
Ecological impacts of El Niño 2015-16	Plastic flowing from land to sea: sources, impacts and mitigation of macro- and microplastics across a spectrum of aquatic ecosystems	Crossing the Science-Policy Bridge: Successes and challenges informing policy and management decisions	Toward greater synthesis: ocean color imagery and biogeochemical/ ecosystem numerical modeling	Spatial and temporal trends in marine biodiversity	Crossing disciplinary boundaries across the freshwater-marine continuum to advance the understanding of harmful algal blooms (HABs)	Advances in Aquatic Meta-Omics: Creating Tools for More Accurate Characterization of Microbial Communities	12:00-13:00
LUNCH - WORKSHOPS AND ANCILLARY MEETINGS							13:00-14:30
59	11	48	51	54	10	47	Session #
Ecological impacts of El Niño 2015-16	Plastic flowing from land to sea: sources, impacts and mitigation of macro- and microplastics across a spectrum of aquatic ecosystems	Crossing the Science-Policy Bridge: Successes and challenges informing policy and management decisions	Toward greater synthesis: ocean color imagery and biogeochemical/ ecosystem numerical modeling	Spatial and temporal trends in marine biodiversity	Louder than words: chemical communication structures marine ecosystems	Unraveling Deep Ocean Enigmas: Deepwater Environments as an Ocean Exploration Frontier	14:30-15:30
POSTER SESSION AND COFFEE BREAK							15:30-16:30
59	11	48	51	54	10	47	Session #
Ecological impacts of El Niño 2015-16	Plastic flowing from land to sea: sources, impacts and mitigation of macro- and microplastics across a spectrum of aquatic ecosystems	Crossing the Science-Policy Bridge: Successes and challenges informing policy and management decisions	Toward greater synthesis: ocean color imagery and biogeochemical/ ecosystem numerical modeling	Spatial and temporal trends in marine biodiversity	Louder than words: chemical communication structures marine ecosystems	Unraveling Deep Ocean Enigmas: Deepwater Environments as an Ocean Exploration Frontier	16:30-17:30
AWARD TALK SESSION – Kalakaua Ballroom Presentation of 2017 Alfred C. Redfield Lifetime Achievement Award							17:40-18:30
Closing Happy Hour							18:30-19:30

MONDAY

MONDAY ORALS

002 ASLOMP STUDENT SYMPOSIUM

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: 305 A/B

14:30 **Barreto Vélez, T.**; Heil, C. A.: DOES THE YELLOWING OF THE GULF OF MAINE BY HUMIC ACID INPUTS INTERFERE WITH ORGANIC PHOSPHORUS UTILIZATION BY THE TOXIC DINOFLAGELLATE ALEXANDRIUM FUNDYENSE? (28778)

14:45 **Cervania, A. A.**; Elmi, D.; Webster, D. R.: DIATOM MOTION IN LABORATORY SIMULATED TURBULENT FLOW (28547)

15:00 **Mile, A.**; Thondapu, S.; McKee, K.; Gomes, H.; Goes, J.: THE RISE OF THE MIXOTROPH NOCTILCUA SCINTILLANS IN THE ARABIAN SEA: DISRUPTIVE IMPACT ON THE FOOD WEB IN A WARMER WORLD? (28587)

15:15 **Bonilla, J. M.**; Testa, J. M.: MODELING THE RESPONSE TO NUTRIENT LOAD REDUCTIONS IN SHALLOW COASTAL ECOSYSTEMS (28580)

16:30 **Neave, E. F.**; Lovko, V. J.; Henry, M.; Pierce, R. H.: THE EFFECTS OF HYDRODYNAMIC SHEAR STRESS ON CELL GROWTH RATE AND RELEASE OF BREVETOXINS FROM KARENIA BREVIS, THE FLORIDA RED TIDE ORGANISM (28653)

16:45 **McCormick, A. R.**; Phillips, J. S.; Blundell, R.; Ives, A. R.; Einarsson, A.: EFFECTS OF NUTRIENT ENRICHMENT ON BENTHIC ALGAL PRODUCTIVITY AND COMMUNITY COMPOSITION IN A NATURALLY EUTROPHIC LAKE (29946)

17:00 **Franke, O. D.**; Sheldon, P.; Chen, R. F.: THE IMPACTS OF SALT MARSH RESTORATION ON MACROINVERTEBRATE COMMUNITIES IN MASSACHUSETTS (28589)

17:15 **Baughan, C. R.**; Torres, B.; Westphal, L.; Finkel, S.; Perez, I.; Amend, J.: CHARACTERIZATION OF SUBSEAFLOOR BACTERIUM *RHIZOBIUM SP.* STRAIN P007 (29189)

006 NEW DIRECTIONS IN PLANKTON ECOLOGY

Chair(s): Zoe V. Finkel, zfinkel@mta.ca
Andrew J. Irwin, airwin@mta.ca
Susanne Menden-Deuer, smenden@uri.edu

Location: 313 A

10:00 **Franks, P. J.**; Jaffe, J. S.: PLANKTON ECOLOGY: NEW TOOLS, NEW MODELS, NEW UNDERSTANDING* (29551)

10:15 **Hirst, A. G.**; Glazier, D. S.; Lilley, M. K.; Atkinson, D.: PLANKTON PROVIDE NEW PERSPECTIVES ON METABOLIC RATES (28676)

10:30 **Gallego, I.**; Venail, P.; Ibelings, B. W.: UNDERSTANDING PHYTOPLANKTON SPECIES COEXISTENCE EXPERIMENTALLY… ARE WE STILL LIVING IN A PARADOX? (28849)

10:45 **Akiba, T.**; Zhang, J.; Tanaka, Y.: FINE SCALE OBSERVATION OF ECOSYSTEM STRUCTURE IN THE OCEAN SURFACE LAYER (28826)

12:00 **McDonald, K. S.**; Thompson, P. A.; Hobday, A. J.; Fulton, E. A.: MARINE CLIMATE HOTSPOTS AS INDICATORS OF PRIMARY PRODUCTIVITY IN A CHANGING GLOBAL ENVIRONMENT (29192)

12:15 **Graff, J. R.**; Westberry, T. K.; Behrenfeld, M. J.: ASSESSING TROPHIC INTERACTIONS AND CARBON DYNAMICS OF THE SURFACE OCEAN USING RELATIONSHIPS BETWEEN PARTICULATE CARBON POOLS (29207)

12:30 **Song, H.**; Ji, R.; Li, Y.; Solow, A. R.: DERIVE CHLOROPHYLL DISTRIBUTIONAL PATTERN FROM 'GAPPY' SATELLITE DATA IN THE ARCTIC OCEAN: A STATISTICAL APPROACH (28545)

12:45 **Morelle, J.**; Schapira, M.; Pierre-Duplessix, O.; Rabiller, E.; Maheux, F.; Simon, B.; Orvain, F.; Riou, P.; Claquin, P.: ANNUAL PHYTOPLANKTON PRIMARY PRODUCTION AT HIGH FREQUENCIES IN THE SEINE ESTUARY (ENGLISH CHANNEL, FRANCE) (28352)

14:45 **Chen, B.**; Smith, S. L.: INCORPORATING PHENOTYPIC PLASTICITY INTO PLANKTON MODELING (28640)

15:00 **Kenitz, K. M.**; Andersen, K. H.; Visser, A. W.; Ohman, M. D.; Landry, M. R.; Kiørboe, T.: TRAIT-BASED APPROACH TO FOOD-WEB INTERACTIONS ACROSS ENVIRONMENTAL GRADIENTS. (29363)

15:15 **Jones, B. M.**; Halsey, K. H.; Graff, J. R.; Behrenfeld, M. J.: NEW APPROACHES FOR STUDYING PHYTOPLANKTON IN THEIR NATURAL ENVIRONMENT (29809)

16:30 **Hamm, C. E.**: FUNCTIONAL MORPHOLOGY OF PLANKTONIC ORGANSIMS - NEW METHODS, FIRST RESULTS AND TECHNICAL APPLICATIONS (29472)

16:45 **Sengupta, A.**; Carrara, F.; Stocker, R.: ESCAPING TURBULENCE? PHYTOPLANKTON USE ACTIVE SHAPE SHIFTING TO RAPIDLY ADAPT SWIMMING STRATEGIES (28351)

17:00 **Jiang, H.**; Johnson, M. D.: JUMPING AND OVERCOMING DIFFUSION LIMITATION OF NUTRIENT UPTAKE IN THE PHOTOSYNTHETIC CILIATE MESODINIUM RUBRUM (28710)

17:15 **Lorusso, N. S.**: PREDATOR-CONTINGENT EXPLOITATION OF AN INDUCIBLE DEFENSE: WHEN IS IT BEST TO SINK OR SWIM? (28370)

008 CHANGES IN LARGE FRESHWATER ECOSYSTEMS: DRIVERS, RESPONSES, AND RESTORATION

Chair(s): Masumi Yamamuro, yamamuro@k.u-tokyo.ac.jp
Lyubov Burlakova, burlakle@buffalostate.edu
Oleg Timoshkin, timole.turgenevo@gmail.com
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Marianne V. Moore, mmoore@wellesley.edu
Alexander Karatayev, karataay@buffalostate.edu
Soren Brothers, sbrother@uoguelph.ca
Paul Sibley, psibley@uoguelph.ca

Location: 313 C

10:00 **Timoshkin, O. A.**; Tomberg, I. V.; Malnik, V. V.; Yamamuro, M.; Gula, M. I.; Poberezhnaya, A. E.; Zaitseva, E. P.; Nepokrytykh, A. V.; Moore, M. V.; Shirokaya, A. A.; Luhnev, A. G.; Medvezhonkova, O. V.; Zvereva, Y. M.; Kulikova, N. N.; Volkova, E. A.: ECOCRISIS IN COASTAL ZONE OF LAKE BAIKAL (RUSSIA): AN ARGUMENT FOR COASTAL MONITORING OF LARGE LAKES[T] (29205)

10:30 **Ozersky, T.**; Volkova, K.; Bondarenko, N.; McCallum, S.; Timoshkin, O.; Malnik, V.; Tomberg, I.: NUTRIENT LIMITATION OF PERIPHYTON IN THE WORLD'S TWO LARGEST LAKES (29975)

10:45 **Malnik, V. V.**; Timoshkin, O. A.; Tomberg, I. V.; Sakirko, M. V.; Yamamuro, M.: LONG-TERM HYDROCHEMICAL AND MICROBIOLOGICAL SURVEY AT LAKE BAIKAL COASTAL ZONE (29332)

[T] REPRESENTS TUTORIAL PRESENTATIONS

12:00 **DeStasio, B. T.**; Beranek, A. E.; Schrimpf, M. B.: DIFFERING RESPONSES TO ANTHROPOGENIC STRESSORS ALONG A LAURENTIAN GREAT LAKES COASTAL GRADIENT: THE GREEN BAY, LAKE MICHIGAN EXAMPLE (28698)

12:15 **Brothers, S. M.**; Vadeboncoeur, Y.; Sibley, P. K.: COULD A DECLINE IN BENTHIC ALGAE PROMOTE HYPOXIA IN LARGE AQUATIC SYSTEMS? (28595)

12:30 **Kuczynski, A.**; Auer, M. T.; Xue, P.; Huang, C.: DEFINING A PHOSPHORUS STANDARD FOR *CLADOPHORA* MANAGEMENT IN THE GREAT LAKES (29021)

12:45 **Xue, P.**; Kuczynski, A.; Huang, C.; Auer, M. T.: HYDRODYNAMIC MODELING OF POINT SOURCE DISCHARGES AND IMPLICATIONS FOR NEARSHORE WATER QUALITY IN WESTERN LAKE ONTARIO (30032)

14:30 **Bootsma, H. A.**; Turschak, B. A.: HIGH RESOLUTION CARBON DIOXIDE DYNAMICS IN LAKE MICHIGAN OVER A 10-YEAR PERIOD (28974)

14:45 **Collingsworth, P. D.**; Kraus, R. T.; Xu, W.; Warren, G. J.: WHAT IS THE SPATIAL EXTENT OF HYPOXIA IN LAKE ERIE? (28436)

15:00 **Panizzo, V.**; Roberts, S.; Swann, G.; McGowan, S.; Mackay, A.; Vologina, E.; Pashley, V.; Horstwood, M.: LAKE-WIDE TRENDS IN CONTEMPORARY PELAGIC PHYTOPLANKTON DISTRIBUTION AND SILICON ISOTOPE GEOCHEMISTRY AT LAKE BAIKAL, SIBERIA (29356)

15:15 **Wilburn, P.**; Shchapov, K.; Pislegina, E.; Litchman, E.: TEMPERATURE AND DISSOLVED NITROGEN DRIVE INTER- AND INTRA- SPECIFIC MICROBIAL COMPOSITION AND DIVERSITY IN LAKE BAIKAL (30116)

16:30 **Rudstam, L. G.**; Holda, T. J.; Bowen, K.: COMPARATIVE LIFE HISTORY OF NORTH AMERICAN MYSIDS AND BAIKAL PELAGIC AMPHIPODS (28719)

16:45 **GIACOMAZZO, M.**; BERTOLO, A.; BRODEUR, P.; MASSICOTTE, P.; MAGNAN, P.: SUBMERGED AQUATIC VEGETATION AND YELLOW PERCH POPULATION COLLAPSE IN LAKE ST. PIERRE (ST. LAWRENCE RIVER): A SIXTY-YEAR TALE (29133)

17:00 **Yamamuro, M.**; Komuro, T.: DECREASE IN FLOATING PLANT POPULATIONS IN LAKE KASUMIGAURA, JAPAN, IS NOT A RESULT OF ANTHROPOGENIC DISTURBANCES (28485)

17:15 **Burlakova, L. E.**; Barbiero, R. P.; Karatayev, A. Y.; Daniel, S. E.: FACTORS AFFECTING SPATIAL AND TEMPORAL PATTERNS IN BENTHIC COMMUNITIES ACROSS THE LAURENTIAN GREAT LAKES (28703)

009 TEMPORAL AND SPATIAL COMPONENTS AFFECTING ZOOPLANKTON COMMUNITY STRUCTURE

Chair(s): Robert L. Wallace, wallacer@ripon.edu
Elizabeth Walsh, ewalsh@utep.edu

Location: 305 A/B

10:00 **Pinceel, T.**; Buschke, F.; Vanschoenwinkel, B.; Brendonck, L.: CLIMATE CHANGE MAY IMPACT THE PERSISTENCE OF TEMPORARY POND CRUSTACEANS BY REDUCING BOTH HABITAT SUITABILITY AND DEMOGRAPHIC RESILIENCE (28859)

10:30 Rivas, J. A.; Gill, T. E.; Wallace, R. L.; Van Pelt, S.; **Walsh, E. J.**: CONNECTEDNESS AMONG DESERT AQUATIC HABITATS VIA WIND DISPERSAL? WIND TUNNEL EXPERIMENTS AND DIAPAUSING STAGES (29588)

10:45 **Horváth, Z.**; Haileselasie, T. H.; De Meester, L.; Vad, C. F.; Ptacnik, R.: SPATIAL PROCESSES DUE TO WIND DISPERSAL DETERMINE ZOOPLANKTON METACOMMUNITY ASSEMBLY AND GENE FLOW IN TEMPORARY SALINE WATERS (29754)

12:00 Walsh, E. J.; Rios, J.; Schröder, T.; **Wallace, R. L.**: ASSESSING ROTIFER COMMUNITY STRUCTURE IN ENDORHEIC ARIDLAND WATERS (28437)

12:15 **Fridolfsson, E.**; Lindehoff, E.; Legrand, C.; Hylander, S.: EFFECTS OF FILAMENTOUS CYANOBACTERIA ON THIAMINE (VITAMIN B1) TRANSFER TO BALTIC SEA ZOOPLANKTON. (29294)

12:30 Monchamp, M. E.; Enache, I.; Turko, P.; Ri'noveanu, G.; **Spaak, P.**: ARE CHANGES IN CYANOBACTERIAL DIVERSITY DRIVING *DAPHNIA* POPULATIONS? INSIGHTS FROM LONG-TERM SEDIMENTARY RECORDS (29544)

12:45 **Yannicelli, B. E.**; Brokordt, K.; Gallardo, M. A.; Núñez, V.; Oyarce, P.; Ramos, M.; Rojas, I.; Sellanes, J.; Thiel, M.; Valladares, M.: TEMPERATURE-OXYGEN MODULATION OF PLEURONCODES MONODON REPRODUCTIVE VARIABILITY: LABORATORY AND FIELD OBSERVATIONS DURING ENSO 2015-2016 (30031)

012 THE BIOGEOCHEMISTRY OF DISSOLVED ORGANIC MATTER

Chair(s): Thorsten Dittmar, thorsten.dittmar@uol.de
Helena Osterholz, helena.osterholz@uol.de
Aron Stubbins, aron.stubbins@skio.uga.edu
Sasha Wagner, sasha.wagner@skio.uga.edu

Location: 304 A/B

10:00 **Aluwihare, L. I.**; Arakawa, N.; Simpson, A. J.; Lane, D.; Soong, R.: ABIOTIC ALTERATION OF A COMMON BIOCHEMICAL CONFERS SOME OF THE STRUCTURAL COMPLEXITY OBSERVED IN REFRACTORY DISSOLVED ORGANIC MATTER (29303)

10:15 **Lu, K.**; Wu, K.; Liu, Z.: USING ION MOBILITY QUADRUPOLE TIME OF FLIGHT (Q-TOF) LC/MS TO CHARACTERIZE MOLECULAR STRUCTURE OF RIVERINE AND COASTAL DISSOLVED ORGANIC MATTER (29926)

10:30 **Zark, M.**; Christoffers, J.; Dittmar, T.: MOLECULAR DIVERSIFICATION LEADS TO UNIVERSAL MOLECULAR PROPERTIES IN A MAJOR FRACTION OF DISSOLVED ORGANIC MATTER (29442)

10:45 **Leefmann, T.**; Geibert, W.; Geuer, J.; Rudolph, M.; Koch, B. P.: SCREENING FOR FE-COMPLEXING ORGANIC LIGANDS IN MARINE DOM USING HPLC-ICP-MS (29578)

12:00 **Geuer, J. K.**; Krock, B.; Leefmann, T.; Koch, B. P.: LIGANDS AS MOLECULAR TARGETS WITHIN DISSOLVED ORGANIC MATTER: IDENTIFICATION AND QUANTIFICATION OF DOMOIC ACID (28822)

12:15 **Del Vecchio, R.**; Gonsior, M.; Moumena, M.; Ma, J.; Cartisano, C.; Bianca, M.; Powers, L.; Blough, N. V.: OPTICAL PROPERTIES OF SARGASSUM EXUDATES: A POTENTIAL SOURCE OF CDOM IN MARINE WATERS. (29644)

12:30 **Kinsey, J. D.**; Corradino, G.; Ziervogel, K.; Schnetzer, A.; Bianchi, T. S.; Osburn, C. L.: CONTRIBUTION OF PLANKTON-DERIVED AGGREGATES TO OPEN-OCEAN CDOM (28702)

* REPRESENTS INVITED PRESENTATIONS

12:45 **Kim, J.**; Kim, G.: SOURCES OF FLUORESCENT DISSOLVED ORGANIC MATTER (FDOM) IN THE MARGINAL SEAS OF THE NORTHWESTERN PACIFIC OCEAN (28552)

14:30 **Wünsch, U. J.**; Stedmon, C. A.; Tranvik, L. J.; Guillemette, F.: LOW MOLECULAR SIZE FRACTION DRIVES DIFFERENCES IN OPTICAL PROPERTIES OF DISSOLVED ORGANIC MATTER IN LAKES (29374)

14:45 **Cartisano, C. M.**; Del Vecchio, R.; Bianca, M. R.; Blough, N. V.: OPTICAL AND CHEMICAL PROPERTIES OF CDOM FROM VARIOUS GEOGRAPHICAL LOCATIONS; IMPLICATIONS FOR CDOM SOURCE(S) AND STRUCTURE IN OPEN OCEANS (29594)

15:00 **Williams, C. J.**; Wolfanger, C. M.; Morales-Williams, A. M.; Downing, J. A.: LAND USE AND COVER ARE WEAK PREDICTORS OF DISSOLVED ORGANIC MATTER COMPOSITION IN EUTROPHIC LAKES (29877)

15:15 **Gomez-Saez, G. V.**; Pohlabeln, A. M.; Stubbins, A.; Dittmar, T.: PHOTOCHEMICAL ALTERATION OF DISSOLVED ORGANIC SULFUR (28860)

16:30 **Miller, W. L.**; Powers, L. C.: IS PHOTOCHEMISTRY A SIGNIFICANT SINK FOR DISSOLVED ORGANIC CARBON IN THE GLOBAL OCEAN? (29798)

16:45 **Li, A.**; Aubeneau, A.; King, T.; Cory, R.; Nielson, B.; Kling, G.; Bolster, D.; Packman, A.: LINKING SUNLIGHT-INDUCED MINERALIZATION OF DISSOLVED ORGANIC MATTER TO ARCTIC RIVER HYDRODYNAMICS (29887)

17:00 **Gleixner, G.**; Roth, V. N.; Malik, A. A.; Scheibe, A.; Simon, C.; Lange, M.; Hertkorn, N.; Dittmar, T.: STRUCTURAL AND ISOTOPIC CHANGES IN DISSOLVED ORGANIC MATTER PERCOLATING THROUGH SOIL HIGHLIGHT MICROBIAL IMPORTANCE (28681)

17:15 **Roebuck, Jr., J. A.**; Podgorski, D.; Wagner, S.; Jaffe, R.: PHOTODISSOLUTION OF CHARCOAL AND FIRE-IMPACTED SOIL AS A POTENTIAL SOURCE OF DISSOLVED BLACK CARBON IN AQUATIC ENVIRONMENTS (28402)

014 MICROBIAL INTERACTIONS IN AQUATIC ECOSYSTEMS: UNTANGLING THE COMPLEX WEB OF COMPETITION, MUTUALISM, PREDATION, AND ADAPTATION

Chair(s): Bennett Lambert, blambert@mit.edu
Anupam Sengupta, anupams@ethz.ch

Location: 314

10:00 **Van Mooy, B.**: SIGNALS OR SIGNATURES? BIOCHEMICAL OBSERVATIONS OF THE INFLUENCE OF MICROBIAL INTERACTIONS ON BIOGEOCHEMICAL PROCESSES IN THE OCEAN. (29643)

10:30 **Lundeen, R. A.**; Becker, J. W.; Cubillos, A. F.; Chisholm, S. W.; Ingalls, A. E.: UNCOVERING THE ROLE OF LANTHIPEPTIDE PRODUCTION IN PROCHLOROCOCCUS: METHODOLOGICAL ADVANCEMENTS AND FUNCTIONAL INSIGHTS (29901)

10:45 **Kamalanathan, M.**; Xu, C.; Sweet, J.; Beaver, M.; Whitaker, E.; Bretherton, L.; Genzer, J.; Hillhouse, J.; Simmons, J.; Zhang, S.; Sylvan, J.; Santschi, P.; Passow, U.; Quigg, A.: MICROBIAL ACTIVITY IN CHEMICALLY ENHANCED WATER ACCOMMODATED FRACTION OF SURROGATE OIL FROM BP OIL SPILL (28939)

12:00 **Palenik, B.**; Nagarkar, M.: TEMPORAL DYNAMICS OF MICROBIAL DIVERSITY AT A COASTAL PACIFIC SITE (29614)

12:15 **Fuhrman, J. A.**; Needham, D. M.; Sieradzki, E.; Ahlgren, N.; Ignacio_Espinoza, J. C.; Berdjeb, L.; Ren, J.; Lu, Y.; Sun, F.: ASSESSING POTENTIAL INTERACTIONS AMONG VIRUSES, BACTERIA, ARCHAEA, AND PROTISTS VIA 'OMICS AND HIGH RESOLUTION TIME SERIES* (29542)

12:30 **Weber, L. G.**; Santoro, A.; Gonzalez, P.; Armenteros, M.; Apprill, A.: SPECIES-SPECIFIC INFLUENCES OF CORALS ON PLANKTONIC MICROBIAL ASSEMBLAGES IN THEIR IMMEDIATE SURROUNDINGS (29010)

12:45 **Severin, T.**; Erdner, D. L.: DYNAMIC OF PHYTOPLANKTON-BACTERIA INTERACTIONS UNDER ENVIRONMENTAL STRESS – DECOUPLING OF ATTACHED AND FREE-LIVING BACTERIA (28618)

14:30 **Mojica, K. D.**; Gaube, P.; Behrenfeld, M. J.: EDDY-MEDITATED PARTITIONING OF BACTERIAL MORTALITY BETWEEN VIRAL LYSIS AND GRAZING (29072)

14:45 **Allen, A. E.**; McQuaid, J. B.; Coale, T.; Bertrand, E. M.; Hutchins, D. A.; Bronk, D. A.; Sipler, R. E.; Spackeen, J. L.: IRON BIOAVAILABILITY IN HIGH-CO2 OCEANS: NEW PERSPECTIVES ON THE INFLUENCE OF DIATOM IRON ACQUISITION MECHANISMS ON MICROBIAL INTERACTIONS* (30149)

15:00 **Menden-Deuer, S.**; Anderson, S. R.; D'souza, N. A.; Franze, G.; Kane, M. K.; Morison, F. H.; Oikonomou, A.: WHEN THE GOING GETS TOUGH: EVALUATING HERBIVORE BEHAVIOR AND POPULATION DYNAMICS UNDER SUB-OPTIMAL CONDITIONS (29714)

15:15 **Koehl, M.**: HYDRODYNAMICS OF UNICELLULAR VS. COLONIAL CHOANOFLAGELLATES: SWIMMING, FEEDING, AND HIDING (29469)

16:30 **Ghosh, A.**; Bhadury, P.: SPATIO-TEMPORAL VARIATION OF BACTERIOPLANKTON COMMUNITIES IN A MANGROVE ECOSYSTEM- IMPLICATION IN AQUATIC BIOGEOCHEMICAL CYCLING (29710)

17:00 **Zhang, L.**: HOW PRIMARY PRODUCTION DYNAMICS CHANGED MICROBIAL COMMUNITY IN ONE ALGAL BLOOM EVENT IN THE THREE GORGES RESERVOIR, CHINA (29815)

17:15 **Trautwein, K.**; Wünsch, D.; Rabus, R.: SUBSTRATE-SPECIFIC DIFFERENCES IN GROWTH AND ENERGETIC EFFICIENCY IN THE PHYTOPLANKTON-ASSOCIATED, MARINE BACTERIUM *PHAEOBACTER INHIBENS* DSM 17395 (29799)

025 LINKING ATMOSPHERIC DEPOSITION TO THE BIOGEOCHEMISTRY OF AQUATIC AND MARINE SYSTEMS

Chair(s): Clifton Buck, clifton.buck@skio.uga.edu
Rachel Shelley, rachel.shelley@univ-brest.fr

Location: 323 A

10:00 **Anderson, R. F.**: HOW WELL CAN WE QUANTIFY DUST DEPOSITION TO THE OCEAN?[T] (28378)

10:30 **Stern, J.**; Dellwig, O.; Waniek, J. J.: LONG-TERM OBSERVATION OF PARTICULATE TRACE ELEMENT FLUX IN THE SUBTROPICAL NE ATLANTIC - IS THERE AN ATMOSPHERIC SOURCE? (29353)

10:45 **Ho, T. Y.**; Liao, W. H.; Wang, B. S.; Yang, S. C.; Tu, W. C.; Hsieh, C. C.: THE FLUXES AND FATES OF AEROSOL METALS IN THE NORTHERN SOUTH CHINA SEA AND THE WESTERN PHILIPPINE SEA (29657)

[T] REPRESENTS TUTORIAL PRESENTATIONS

12:00 **Landing, W. M.**; Ebling, A. M.; Shelley, R. U.; Morton, P. L.: SOLUBILITY OF BIOACTIVE TRACE ELEMENTS FROM AEROSOLS (28384)

12:15 **Ebling, A. M.**; Westrich, J. R.; Lipp, E. K.; Buck, K.; Shelley, R. U.; Knapp, A.; Kelly, T. B.; Landing, W. M.: THE BIOGEOCHEMISTRY OF TRACE ELEMENTS IN THE SEA SURFACE MICROLAYER IN RESPONSE TO ATMOSPHERIC DEPOSITION* (28391)

12:30 **Meskhidze, N.**; Hurley, D.; Royalty, T.; Johnson, M.: EFFECT OF ATMOSPHERIC ORGANICS ON BIOAVAILABLE FE LIFETIME IN THE OCEANS (28928)

12:45 **Conway, T. M.**; Wolff, E. W.; Röthlisberger, R.; Mulvaney, R.; Elderfield, H.: CONSTRAINING A NATURAL IRON SOLUBILITY BASELINE AND SOLUBLE IRON FLUXES FROM DUST TO THE SOUTHERN OCEAN DURING GLACIAL INTERVALS (29446)

14:30 **Schulz, I. K.**: UNDERSTANDING MICROPHYTOPLANKTON COMMUNITY DYNAMICS IN THE RED SEA AFTER FERTILIZATION WITH DIFFERENT DOSES OF AEOLIAN DUST FROM THE ARABIAN PENINSULA (30136)

14:45 **Hastings, M.**: THE ISOTOPIC COMPOSITION OF ATMOSPHERIC NITRATE FROM GEOTRACES SECTIONS (29611)

15:00 **Bernhardt, P. W.**; Mulholland, M. R.; Widner, B.; Sookhdeo, C.; Sedwick, P.; St-Laurent, P.; Friedrichs, M.; Hermann, M.; Najjar, R.; Sohst, B.: THE EFFECT OF ATMOSPHERIC NITROGEN DEPOSITION ON PRIMARY PRODUCTIVITY AND NITROGEN UPTAKE IN SEASONALLY OLIGOTROPHIC WATERS OFF THE EASTERN UNITED STATES (29634)

15:15 **Bowman, K. L.**; Mason, R.; Hammerschmidt, C. R.; Lamborg, C. H.; Swarr, G.; Shelley, R. U.: AIR-SEA EXCHANGE OF MERCURY IN THE LOW LATITUDE PACIFIC AND ATLANTIC OCEANS (28727)

16:30 **Kamyshny, A.**; Boyko, V.; Blonder, B.: IMPACT OF DRY AEOLIAN DEPOSITION ON BIOGEOCHEMISTRY OF REDOX-SENSITIVE ELEMENTS IN THE SEDIMENTS OF THE GULF OF AQABA, RED SEA (28757)

16:45 **Oleksy, I. A.**; Baron, J. S.: IS THERE A HISTORY OF EUTROPHICATION PRESERVED IN THE SEDIMENTS OF THE LOCH, ROCKY MOUNTAIN NATIONAL PARK? (29196)

17:00 **Jiann, K.**; Hsu, H.: MONSOON-DERIVED VARIABILITY IN ATMOSPHERIC DEPOSITION NEAR A REMOTE ATOLL IN THE SOUTH CHINA SEA REVEALED BY SEAGRASS AS BIO-INDICATOR FOR TRACE METALS (29282)

17:15 **Summers, B. A.**; Morton, P. L.; Salters, V. J.; Landing, W. M.; Buck, C. S.; Marsay, C. M.: A COMPARISON OF EXTREMES: PB ISOTOPIC COMPOSITION IN ARCTIC AND INDIAN AEROSOLS (29865)

034 INTERACTIVE EFFECTS OF ANTHROPOGENIC STRESSORS ACROSS ECOSYSTEM BOUNDARIES

Chair(s): Mark Gessner, gessner@igb-berlin.de
Ellard Hunting, e.r.hunting@cml.leidenuniv.nl
Michiel Kraak, m.h.s.kraak@uva.nl
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Martin Solan, M.Solan@soton.ac.uk

Location: 306 A

10:00 **Jackson, M. C.**: THE IMPACT OF LOCAL AND CATCHMENT-WIDE STRESSORS IN FRESHWATERS* (28673)

10:15 **Lewington-Pearce, L.**; Parker, B.; Narwani, A.; Kratina, P.: DIVERSITY AND TEMPERATURE INDIRECTLY REDUCE CO2 CONCENTRATIONS IN EXPERIMENTAL FRESHWATER COMMUNITIES (28335)

10:30 **Lisi, P. J.**; Hogan, J. D.; Blum, M. J.; McIntyre, P. B.; Gilliam, J. F.: DIVERSITY IN THE URBAN STREAM SYNDROME: SHIFTING RESOURCES AND RESPONSES BY HAWAIIAN AMPHIDROMOUS FISH. (29228)

10:45 **Piggott, J. J.**; Magbanua, F. S.; Ward, M. R.; Townsend, C. R.; Matthaei, C. D.: MULTIPLE-STRESSOR EFFECTS ACROSS ECOSYSTEM BOUNDARIES: HOW AGRICULTURAL STRESSORS AND CLIMATE WARMING AFFECT DRIFT AND EMERGENCE OF STREAM BENTHIC INSECTS* (29079)

12:15 **Strock, K. E.**; Egener, M.: EFFECTS OF EXTREME WEATHER ON LAKE HABITAT MEDIATED BY WATERSHED LANDUSE: IMPLICATIONS FOR THE LINKAGES BETWEEN RESERVOIRS AND TERRESTRIAL SYSTEMS (30055)

12:30 **Comfort, C. M.**; McManus, M. A.; Ostrander, C. E.; Karl, D. M.: CHANGES IN POTENTIAL ENVIRONMENTAL IMPACTS OF SEAWATER AIR CONDITIONING UNDER FUTURE CLIMATE SCENARIOS (30056)

12:45 **LeRoy, C. J.**; Morley, S. A.; Duda, J. J.; Peters, R.; Paradis, R.; Johnson, R.; Eakes, T.; Foley, M.; Taylor, M.; Silva, M.; Potter, E.; Wolfe, E.: ORGANIC MATTER PROCESSING FOLLOWING LARGEST DAM REMOVAL IN US HISTORY: ELWHA RIVER, WA, USA* (29261)

14:30 **Cebrian, J.**; Anton, A.; Christiaen, B.; Gamble, R.; Stutes, J.; Alberti, J.: CHANGING SHOULDERS MAY TAKE THE BURDEN: FUNCTIONAL REDUNDANCY HELPS MAINTAIN COASTAL ECOSYSTEM SERVICES DESPITE SHIFTS IN FOUNDATIONAL COMPONENTS* (28625)

14:45 **Piovia-Scott, J.**; Yang, L. H.; Wright, A. N.; Spiller, D. A.; Schoener, T. W.: EFFECTS OF SEAWEED DEPOSITION ON ISLAND FOOD WEBS* (29997)

15:00 **Manfrin, A.**; Larsen, S.; van Grunsven, R. H.; Weiss, N.; Weiss, N. S.; Wohlfahrt, S.; Singer, G.; Monaghan, M. T.; Hoelker, F.: ARTIFICIAL LIGHT AT NIGHT AFFECTS BIOTIC LINKAGES BETWEEN AQUATIC AND RIPARIAN ECOSYSTEMS (28839)

15:15 **Barmentlo, S. H.**; Schrama, M. J.; Hunting, E. R.; van Bodegom, P. M.; Snoo, G. R.; Vijver, M. G.: INTERACTING AGRICULTURAL PRESSURES INDUCE UNPREDICATBLE SHIFTS IN AQUATIC FOOD WEBS * (29462)

16:30 **Bundschuh, M.**; Schulz, R.: CONTAMINANTS AFFECT THE SUBSIDY OF TERRESTRIAL SYSTEMS BY AQUATIC RESOURCES: SUGGESTIONS FOR EXPERIMENTAL APPROACHES * (28863)

16:45 **Tiegs, S. D.**; Wensink, S. M.: SHORELINE HARDENING IMPAIRS FRESHWATER SHORELINE ECOSYSTEMS* (28613)

17:00 **Wolf, R.**; Andersen, T.; Hessen, D. O.; Hylland, K.: FROM GENETIC DAMAGE TO POPULATION EFFECTS: HOW INTERACTIONS OF DISSOLVED ORGANIC CARBON AND ULTRAVIOLET RADIATION AFFECT *DAPHNIA MAGNA* (28713)

17:15 **Vijver, M.**; Hunting, E.; Bartmentlo, H.; Schrama, M.: CASCADING AGRICULTURAL CONSTRAINTS ON PLANT LITTER FUELED TROPHIC LINKAGES* (29371)

036 METHANE OXIDATION ACROSS ECOSYSTEMS: OPENING THE METHANE BLACK BOX

Chair(s): Bridget Deemer, bdeemer@wsu.edu
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Sigrid van Grinsven, sigrid.van.grinsven@nioz.nl

Location: 306 B

14:30 **Milucka, J.**: HOW AEROBIC METHANOTROPHIC BACTERIA REMOVE METHANE IN ANOXIC LAKE WATERS* (29319)

14:45 **Chan, E. W.**; Kessler, J. K.; Shiller, A. M.; Redmond, M. C.; Valentine, D. L.; Arrington, E. C.; Joung, D. J.: CHEMICAL AND ISOTOPIC KINETICS OF AEROBIC METHANE OXIDATION IN TWO DIFFERENT ENVIRONMENTS (29846)

15:00 **Guggenheim, C.**; Brand, A.; Buergmann, H.; Sigg, L.; Wehrli, B.: BIOAVAILABLE COPPER CONTROLS METHANE OXIDATION IN A FRESHWATER SYSTEM (29541)

15:15 **Uhlig, C.**; Kirkpatrick, J. B.; Loose, B.: CRACKING THE LID – METHANE CYCLING BENEATH THINNING SEA ICE (28376)

16:30 **Rasigraf, O.**; Egger, M.; Lenstra, W.; van Helmond, N.; Jetten, M.; Slomp, C.; Lüke, C.: ANAEROBIC METHANE OXIDATION IN THE BOTHNIAN SEA SEDIMENT (29445)

16:45 **Deemer, B. R.**; Reed, D. C.; van Grinsven, S.; Harrison, J. A.: ARE ELUSIVE ANAEROBIC PATHWAYS KEY METHANE SINKS IN EUTROPHIC LAKES AND RESERVOIRS? (28768)

17:00 **van Grinsven, S.**; Villanueva, L.; Harrison, J. A.; Sinninghe Damsté, J.: ANAEROBIC METHANE OXIDATION IN THE WATER COLUMN OF A STRATIFIED TEMPERATE ZONE LAKE (28850)

17:15 **Steinle, L.**; Maltby, J.; Bange, H. W.; Kock, A.; Schmidt, M.; Bryant, L.; Haeckel, M.; Linke, P.; Sommer, S.; Zopfi, J.; Moritz, L. F.; Treude, T.; Niemann, H.: SPATIOTEMPORAL DYNAMICS OF METHANOTROPHY IN SHELF SEAS: LINKING MICROBIAL ACTIVITY WITH SEASONAL STRATIFICATION AND HYPOXIA (29364)

058 ENVIRONMENTAL DRIVERS AND TRANSMISSION OF INFECTIOUS DISEASES IN MARINE AND FRESHWATER SYSTEMS

Chair(s): Drew Harvell, cdh5@cornell.edu
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Carla Caceres, caceres@life.illinois.edu
Kevin Lafferty, kevin.lafferty@lifesci.ucsb.edu

Location: 306 B

10:00 **Harvell, D.**; Eisenlord, M.; Dawkins, P.; Groner, M.; Burge, C.; Yoshioka, R.; Fiorenza, E.: TURNING UP THE HEAT ON SEAGRASS WASTING DISEASE (28627)

10:15 **Maynard, J. A.**; van Hooidonk, R.; Shields, J. D.; Eakin, C. M.; Heron, S.; Liu, G.; Williams, G. J.; Lamb, J.; Garren, M.; Groner, M.; Willis, B. L.; Harvell, C. D.: IMPROVING MARINE DISEASE SURVEILLANCE THROUGH SEA TEMPERATURE MONITORING, OUTLOOKS AND PROJECTIONS (28488)

10:30 **Friedman, C. S.**; Crosson, L. M.; Fuller, A.; VanBlaricom, G.; Neuman, M.; Witting, D.; Hofmann, E.; Powell, E.: MODELING TRANSMISSION OF A BACTERIAL PATHOGEN AMONG FARMED AND WILD ABALONES IN THE FACE OF CLIMATE CHANGE AND DECLINING WILD POPULATIONS* (29255)

10:45 **Burge, C. A.**; Ben-Horin, T.; Groner, M. L.; Carnegie, R.: PATHOGEN SOURCE OR SINK: THE POTENTIAL ROLE OF BIVALVE AQUACULTURE IN MITIGATING DISEASE RISK* (29953)

12:00 **Aalto, E. A.**; Sokolow, S. H.; Ben-Horin, T.; Micheli, F.; Lafferty, K. D.; De Leo, G. A.: ASYMPTOMATIC TRANSMISSION AND ENVIRONMENTAL TRIGGERS COULD EXPLAIN THE RAPID SPREAD OF LARGE-SCALE, MASS-MORTALITY OUTBREAKS IN MARINE ORGANISMS (29790)

12:15 **Caceres, C. E.**; Lee, P.; Menel, I. A.; Holmes, C. J.; Duffy, M. A.; Hall, S. R.: ECOLOGICAL AND EVOLUTIONARY DRIVERS OF DISEASE IN FRESHWATER ZOOPLANKTON (29553)

12:30 **Stewart, T. E.**; Rapti, Z.; Cáceres, C. E.: PLANKTON-PARASITE INTERACTIONS: A WINDOW INTO THE WITHIN-HOST DYNAMICS (28940)

12:45 **Lafferty, K. D.**; Siwertsson, A.; Kuhn, J. A.; Kuris, A. M.; Shaw, J. C.; Soldanova, M.; Knudsen, R.; Klemetsen, A.; Amundsen, P. A.: PARASITES PERMEATE A SUBARCTIC LAKE FOOD WEB (29816)

065 GROUNDWATER-SURFACE WATER INTERACTION ACROSS THE TERRESTRIAL - MARINE CONTINUUM

Chair(s): William C Burnett, wburnett@fsu.edu
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Isaac Santos, Isaac.Santos@scu.edu.au

Location: 308 A/B

10:00 **Bokuniewicz, H.**: STRUCTURE AND DISTRIBUTION OF SUBMARINE GROUNDWATER DISCHARGE [T](28617)

10:30 **Tommi-Morin, G.**; Chaillou, G.; Rao, A. M.; Sirois, M.; Couturier, M.: SUBARTIC SANDY BEACHES : A SOURCE OF DIC TO COASTAL OCEAN (29033)

10:45 **Lamontagne, S.**: EVALUATION OF SUBMARINE GROUNDWATER DISCHARGE ALONG THE AUSTRALIAN COASTLINE COMBINING RADON, RADIUM AND SALINITY (29229)

12:00 **Kim, G.**; Cho, H.; Kwon, E.: GLOBAL MAGNITUDE OF SUBMARINE GROUNDWATER DISCHARGE AND ASSOCIATED NUTRIENT FLUXES TO THE OCEAN* (28546)

12:15 **Weinstein, Y.**; Neumeier, Y.; Brinberg, B.; Feldman, M.: SUBMARINE GROUNDWATER DISCHARGE – IS IT UNDERESTIMATED BY USING TOO HIGH END MEMBER RADIUM ACTIVITIES? (29945)

12:30 **Zhu, A. p.**; Saito, M.; Onodera, S.; Shimizu, Y.; Chen, J. Y.: EVALUATION OF THE SPATIAL DISTRIBUTION OF SUBMARINE GROUNDWATER DISCHARGE FROM A SMALL ISLAND IN SETO INLAND SEA OF JAPAN USING 222RN AND COMPARATIVE MODELING (28394)

12:45 **Shuler, C. K.**; Amato, D.; Gibson, V.; Baker, L.; Olguin, A. N.; Dulai, H.; Smith, C. M.; Alegado, R.: ASSESSMENT OF TERRIGENOUS NUTRIENT LOADING TO COASTAL ECOSYSTEMS ON TUTUILA, AMERICAN SAMOA (29223)

14:30 **David, C. H.**; Sawyer, A. H.; Famiglietti, J. S.: CONTINENTAL PATTERNS OF SUBMARINE GROUNDWATER DISCHARGE REVEAL COASTAL VULNERABILITIES* (28337)

14:45 **Li, H.**; Wang, X.; Zheng, C.: ESTIMATING FRESH AND TOTAL SUBMARINE GROUNDWATER DISCHARGES INTO LAIZHOU BAY, CHINA BY RADIUM QUARTET (28903)

[T] REPRESENTS TUTORIAL PRESENTATIONS

15:00 **Breier, J. A.**; Peterson, R.; Bailey, J.; Gomez-Ibanez, D.: A SUBMERSIBLE DISSOLVED RADON DETECTION SYSTEM FOR SUBMARINE GROUNDWATER DISCHARGE STUDIES (29827)

15:15 **Wiegner, T. N.**; Abaya, L. M.; Beets, J.; Colbert, S.; Carlson, K. M.; Kramer, K. L.: SPATIAL DISTRIBUTION OF SEWAGE POLLUTION ON A HAWAIIAN CORAL REEF (29026)

069 AQUATIC TRANSITIONS: TRACKING THE NATURE AND TRAJECTORIES OF CHANGE USING PALEOLIMNOLOGICAL APPROACHES

Chair(s): Jennifer Adams, jennifer.adams.13@ucl.ac.uk
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Lucy Roberts, lucy.roberts@qmul.ac.uk
Peter Gell, p.gell@federation.edu.au
Martin Thoms, mthoms2@une.edu.au

Location: 308 A/B

16:30 **McGowan, S.**; Briddon, C.; Engels, S.; Leng, M.; Mills, K.; Panizzo, V.; Idris, M.; Shafiq, M.: ECOSYSTEM CHANGES IN A FLOOD PULSE WETLAND FROM MALAYSIA OVER RECENT DECADES ASSOCIATED WITH RAPID DEVELOPMENT (29421)

16:45 **Gell, P. A.**: THE IMPACT OF EUROPEAN SETTLEMENT ON THE WETLANDS OF SOUTH-EAST AUSTRALIA: TIMING, RATES AND MAGNITUDE. (28657)

17:00 **Pospelova, V.**; Genest, M.; Williams, J. R.; Dellapenna, T.; Mertens, K. N.; Kuehl, S. A.: EFFECTS OF OIL POLLUTION ON PHYTOPLANKTON IN COASTAL WATERS: ASSESSING SEDIMENTARY RECORDS OF DINOFLAGELLATES AFTER THE 1989 EXXON VALDEZ SPILL IN ALASKA (USA) (29043)

17:15 **Bishop, I. J.**; Bennion, H.; Patmore, I. R.; Sayer, C. D.; Zawisza, E.: THE CHANGING STATUS OF THE RARE FRESHWATER MACROPHYTE N. FLEXILIS IN THE UK: INSIGHTS FROM THE SEDIMENT RECORD (29613)

071 MOLECULAR INSIGHTS INTO ADAPTIVE MICROBIAL PHYSIOLOGY

Chair(s): Harriet Alexander, harriet.xander@gmail.com
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Winifred Johnson, wjohnson@whoi.edu
Elizabeth Kujawinski , ekujawinski@whoi.edu

Location: 301 B

10:00 Wördenweber, R.; **Rokitta, S. D.**; Heidenreich, E.; Corona, K.; Kirschhöfer, F.; Fahl, K.; Klocke, J. L.; Kottke, T.; Brenner-Weiß, G.; Rost, B.; Mussgnug, J. H.; Kruse, O.: MULTI-LEVEL 'OMICS' ON NUTRIENT-STARVED *EMILIANIA HUXLEYI* (28560)

10:15 **Mayers, K. M.**; Fredricks, H. F.; Poulton, A. J.; Van Mooy, B.: COMPARATIVE LIPIDOMICS OF PRYMNESIOPHYTE ALGAE AND THEIR ADAPTIVE RESPONSE TO NUTRIENT LIMITATION (29579)

10:30 **Harke, M. J.**; Frischkorn, K. R.; Haley, S. T.; Dyhrman, S. T.: CONSERVED DIATOM RESPONSES TO RESOURCES IN THE OLIGOTROPHIC OCEAN (28913)

10:45 **Lampe, R. H.**; Cohen, N. R.; Ellis, K. A.; Bruland, K. W.; Maldonado, M. T.; Brzezinski, M. A.; Thamatrakoln, K.; Twining, B. S.; Marchetti, A.: DIVERGENT GENE EXPRESSION AMONG PHYTOPLANKTON TAXA IN RESPONSE TO UPWELLING (28344)

12:00 **Smith, S. R.**; Gillard, J. T.; Kustka, A. B.; McCrow, J. P.; Badger, J. H.; Zheng, H.; Dupont, C. L.; Obata, T.; Fernie, A. R.; Allen, A. E.: TRANSCRIPTIONAL ORCHESTRATION OF THE GLOBAL CELLULAR RESPONSE OF A MODEL PENNATE DIATOM TO DIEL LIGHT CYCLING UNDER FE LIMITATION (29647)

12:15 **Cohen, N. R.**; Lampe, R. H.; McNair, H.; Ellis, K. A.; Kuzminov, F. I.; Brzezinski, M. A.; Thamatrakoln, K.; Maldonado, M. T.; Till, C. P.; Bruland, K. W.; Twining, B. S.; Marchetti, A.: COUPLING NUTRIENT DYNAMICS WITH METATRANSCRIPTOMICS TO ELUCIDATE THE RESPONSES OF DIATOMS TO CHANGING IRON AVAILABILITY ACROSS OCEAN PROVINCES (28515)

12:30 **Liang, Y.**; Koester, J.; Irwin, A. J.; Finkel, Z. V.: TRANSCRIPTOME-WIDE RESPONSES TO TEMPERATURE IN DIATOMS (29746)

12:45 **Chen, G.**; Rynearson, T. A.: GENOMIC INSIGHTS INTO POPULATION GENETIC VARIATION AND PHYSIOLOGICAL ADAPTATION OF THE MARINE DIATOM, *THALASSIOSIRA ROTULA* (29511)

14:30 **Durham, B. P.**; Boysen, A.; Carlson, L. T.; Ingalls, A. E.; Armbrust, E. V.: SULFONATE CYCLING AND SIGNALING BETWEEN MARINE PHYTOPLANKTON AND HETEROTROPHIC BACTERIA* (29483)

14:45 **Frischkorn, K. R.**; Rouco, M.; Van Mooy, B.; Dyhrman, S. T.: MICROBIOME QUORUM SENSING INFLUENCES NITROGEN FIXATION IN *TRICHODESMIUM* (28722)

15:00 **Orellana, M. V.**; López-García de Lomana, A.; Jennings, M. K.; Lee, A.; Hansman, R. L.; Thompson, A. W.; Bercovici, S.; Bochdansky, A. B.; Baliga, N. S.; Hansell, D. A.: ON THE INFLUENCE OF DIATOM PROGRAMMED CELL DEATH ON CARBON EXPORT IN THE ROSS SEA (28817)

15:15 **Heal, K. R.**; Carlson, L. T.; Boysen, A. K.; Lionheart, R. M.; Kellogg, N. A.; Ingalls, A. E.: METABOLIC CONSEQUENCES OF COBALAMIN STARVATION IN MARINE MICROBES REVEALED THROUGH METABOLOMICS (28612)

16:30 **Hawco, N. J.**; McIlvin, M. R.; Moran, D. M.; Tagliabue, A.; Saito, M. A.: COBALT METABOLISM IN PROCHLOROCOCCUS: POTENTIAL FOR LIMITATION AND INTERFERENCE BY OTHER METALS (29850)

16:45 **Gauglitz, J. M.**; McLean, C.; Boiteau, R. M.; McIlvin, M. R.; Moran, D. M.; Repeta, D. J.; Saito, M. A.: BIOAVAILABILITY OF DESFERRIOXAMINE SIDEROPHORES AND THE PROTEOMIC RESPONSES OF A MARINE VIBRIO TO LOW IRON (29530)

17:00 **Manck, L. E.**; Barbeau, K. A.; Dupont, C. L.: IRON ACQUISITION STRATEGIES EMPLOYED BY COPIOTROPHIC MARINE BACTERIA AND DOWNSTREAM EFFECTS ON IRON REMINERALIZATION PROCESSES (29810)

17:15 **Shilova, I. N.**; Mills, M. M.; Robidart, J. C.; Turk-Kubo, K. A.; Björkman, K. M.; Kolber, Z. S.; Rapp, I.; van Dijken, G. L.; Church, M. J.; Achterberg, E. P.; Arrigo, K. R.; Zehr, J. P.: DIVERSITY MATTERS: THE NUTRIENT STATUS AND RESPONSE TO NITROGEN AND IRON AVAILABILITY VARY AMONG PHYTOPLANKTON SUB-POPULATIONS IN THE NORTH PACIFIC (29965)

079 FOOD WEB INTERACTIONS, TROPHIC LINKAGES AND ONTOGENETIC NICHE SHIFTS

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Location: 323 C

10:00 **van Someren Gréve, H.**; Almeda, R.; Kiørboe, T.: MATING, FEEDING AND NOT BEING EATEN: SEX-SPECIFIC TRADE-OFFS IN COPEPODS (28920)

10:15 **Herstoff, E. M.**; Boersma, M.; Meunier, C. L.; Baines, S. B.: DOES PREY STOICHIOMETRY INFLUENCE COPEPOD SWIMMING BEHAVIORS ACROSS ITS ONTOGENY? (28942)

10:30 **Faithfull, C. L.**; Mathews, L.; Nelson, C.: HOW DOES FOOD QUALITY AFFECT ONTOGENETIC NICHE SHIFTS IN COPEPODS? (28507)

10:45 **Meunier, C. L.**; Geisen, C.; Boersma, M.: ONTOGENETIC VARIATION IN COPEPODS' FEEDING BEHAVIOR AND CONSEQUENCES FOR NUTRIENT CYCLES (28561)

12:00 **Hemraj, D. A.**; Hossain, A.; Qin, J.; Ye, Q.; Leterme, S.: ANTHROPOGENIC SHIFT OF PLANKTON FOOD WEB STRUCTURE IN A COASTAL LAGOON BY FRESHWATER FLOW REGULATION (28544)

12:15 **Jankowska, E.**; Wlodarska-Kowalczuk, M.; Michel, L. N.; De Troch, M.: RESOLVING TROPHIC LINKS IN COMPLEX FOOD WEBS BY BIOCHEMICAL PROFILING (28511)

12:30 **Hean, J. W.**; McQuaid, C.: BOTTOM-UP VS. TOP-DOWN FORCING IN INTERTIDAL COMMUNITIES: WHICH HAS GREATER INFLUENCE ON EPIPHYTE SUCCESSION? (30164)

12:45 **Parrish, C. C.**; Connelly, T. L.; Carreón-Palau, L.: TROPHIC TRANSFER OF ESSENTIAL POLYUNSATURATED FATTY ACIDS IN MARINE FOOD WEBS (29383)

14:30 **Bowlin, N. M.**; Thompson, A. R.; Watson, W.; Hastings, P. A.: ONTOGENETIC VERTICAL DISTRIBUTION OF MESOPELAGIC FISHES AND THE DEVELOPMENT OF DIEL MIGRATION (29902)

14:45 **Byström, P.**: RECIPROCAL INTRA GUILD PREDATION EFFECTS IN COASTAL FISH COMMUNITIES (28668)

15:00 **Chaguaceda, F.**; Scharnweber, K.; Eklöv, P.: ONTOGENETIC CHANGES IN FATTY ACID COMPOSITION OF EURASIAN PERCH: THE ROLE OF NICHE SHIFTS (29506)

15:15 **Anderson, M. R.**; Koen Alonso, M.: TEMPORAL CHANGES IN THE TROPHIC POSITION OF NORTHWEST ATLANTIC COD (29968)

16:30 **Foret, M.**; Barbier, P.; Tremblay, R.; Neumeier, U.; Duvieilbourg, E.; Olivier, F.: ACTIVE BEHAVIOR OF BIVALVE POST-LARVAE CONTROL THE SECONDARY MIGRATIONS IN HIGHLY DYNAMIC COASTAL SYSTEMS (28451)

16:45 **Turcotte, F.**; Olivier, F.; Tremblay, R.: THE LINK BETWEEN METABOLISM, STRUCTURE AND AGING IN MARINE BIVALVES FROM POLAR, TEMPERATE AND TROPICAL CLIMATES. (29636)

17:00 **Montgomery, E.**; Hamel, J. F.; Mercier, A.: PHOTOTAXIS AND SWIMMING CAPACITY VARY WITH ONTOGENY IN ECHINODERM PROPAGULES (29110)

17:15 **Jarrett, J. N.**; Dean, N.: THE INFLUENCE OF DEFENSIVE PLASTICITY AND PREDATION ON THE NORTHERN RANGE LIMIT OF CHTHAMALUS FISSUS (29512)

081 POLAR AND HIGH LATITUDE RESEARCH: LAND, LAKES, ICE, AND OCEAN

Chair(s): Deborah A. Bronk, bronk@vims.edu
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Jodi Young, youngjn@uw.edu

Location: 313 B

10:00 **Tremblay, J. E.**: THE MULTIPLE FACETS OF CHANGING ARCTIC MARINE ECOSYSTEMS* (29378)

10:15 **Juranek, L. W.**; Goni, M.; Hales, B.; Sipler, R.; Bronk, D.: LATE SEASON COMMUNITY PRODUCTIVITY IN THE PACIFIC ARCTIC: A NUTRIENT, CARBON, AND DISSOLVED GAS PERSPECTIVE (29562)

10:30 **DeGrandpre, M.**; Beatty, C.; Evans, W.; Krishfield, R.; Williams, B.: INTERANNUAL VARIABILITY IN SEA SURFACE PCO2 DURING THE ARCTIC OCEAN LOW-ICE PERIOD (29498)

10:45 **Wissel, B.**; Bateson, D.; Nanayakkara, L.; Quiñones-Rivera, Z. J.: IMPORTANCE OF METABOLISM AND HYDROLOGY FOR UNDER-ICE COUPLING OF DISSOLVED OXYGEN (DO) AND DISSOLVED INORGANIC CARBON (DIC) IN NORTHERN PRAIRIE LAKES (29986)

12:00 **Hales, B.**; Lambert, S.; Jones, A.; Weekes, C.; Welch, K.; Craig, K.; Goni, M.; Juranek, L.; Sipler, R.; Bronk, D.: CARBON AND NUTRIENT-BASED EVIDENCE FOR LATE-SEASON EXPORT PRODUCTIVITY IN THE CHUKCHI SEA (29740)

12:30 **Spackeen, J. L.**; Sipler, R. E.; Roberts, Q. N.; Baer, S. E.; Bronk, D. A.: PHOSPHORUS SCAVENGING IN THE COASTAL ARCTIC (29690)

12:45 **Koziorowska, K.**; Kulinski, K.; Pempkowiak, J.: INORGANIC AND ORGANIC CARBON BUDGET IN SEDIMENTS OF HIGH ARCTIC FJORDS (28879)

14:30 **Ledesma, J. J.**; Kothawala, D. N.; Bastviken, P.; Bishop, K. H.; Futter, M. N.: EVALUATING STREAM AND SOIL SOLUTION AUTUMN DOC QUALITY AND QUANTITATIVE CHANGES THROUGH WINTER IN A BOREAL CATCHMENT (28461)

14:45 **Denfeld, B. A.**; Baulch, H.; Del Giorgio, P.; Hampton, S.; Karlsson, J.: WINTER CARBON DYNAMICS IN NORTHERN LAKES: IMPLICATIONS OF A CHANGING ICE-COVER (28508)

15:00 **Pasche, N.**; Hofmann, H.; Sobek, S.; Schubert, C.; Lozovik, P.; Life Under Ice Scientific Team, L.: PRONONCED VARIABILITY ACROSS SPATIAL AND TEMPORAL SCALES IN UNDER-ICE CO2 AND CH4 IN LARGE LAKE ONEGO (29369)

15:15 **Dufresne, C.**; Dutkiewicz, S.; Maps, F.: NUMERICAL MODELLING OF PLANKTON COMMUNITIES IN A CHANGING ARCTIC OCEAN (29171)

16:30 **Morata, N.**; Bourgeois, S.; Kedra, M.; Kerhervé, P.; Lalande, C.; Michaud, E.; Renaud, P. E.: SPATIO-TEMPORAL VARIATIONS IN BENTHIC FUNCTION IN A HIGH ARCTIC FJORD (KONGSFJORDEN, SVALBARD) (29402)

16:45 **Sommaruga, R.**; Peter, H.: WHEN GLACIERS AND ICE-SHEETS MELT: CONSEQUENCES FOR LAKES AND THEIR BACTERIAL COMMUNITY (28675)

17:00 **Damm, E.**; Bauch, D.; Uhlig, C.; Verdugo, J.; Liira, M.; Vinogradova, E.; Bussmann, I.; Noormets, R.; Fritz, M.; Krumpen, T.: DELTA 13C VALUES OF METHANE IN SEA ICE – SOURCE OR PROCESS TRIGGERED? (28929)

17:15 **Fritz, M.**; Tanski, G.; Gonçalves-Araujo, R.; Heim, B.; Koch, B. P.; Lantuit, H.: TRACING MARINE AND TERRESTRIAL SOURCES OF DISSOLVED ORGANIC MATTER IN THE ARCTIC NEARSHORE ZONE (CANADIAN BEAUFORT SEA) (29299)

096 NEW CORAL REEF ECOSYSTEM STUDIES FROM REMOTE SENSING

Chair(s): Steven G. Ackleson, steve.ackleson@nrl.navy.mil
Eric J. Hochberg, eric.hochberg@bios.edu
Chris Roelfsema, c.roelfsema@uq.edu.au

Location: 302 A/B

10:00 **Hochberg, E. J.**: CORAL REEF AIRBORNE LABORATORY: AUSTRALIA CAMPAIGN (29974)

10:15 **Ackleson, S. G.**; Moses, W. J.; Freeman, L. A.; Freeman, S.; Trembanis, A.: TOWARDS AUTONOMOUS CORAL REEF SENSING AND MONITORING: PRESENT AND FUTURE (29725)

10:30 **Freeman, L. A.**; Ackleson, S. G.; Moses, W. J.: DETECTING SHIFTS IN HAWAIIAN CORAL REEF ECOLOGICAL STATE FROM SPACE WITH HICO IMAGERY (29543)

10:45 **Roelfema, C. M.**; Kovacs, E.; Phinn, S. R.; Ortiz, j. c.; Mumby, P.; Callaghan, D.; Ronan, M.; Hammylton, S.: WHERE ARE THE CORALS ON THE GREAT BARRIER REEF (GBR)? AN ECOLOGICAL MODELLING AND REMOTE SENSING JOURNEY (29284)

12:00 **Garcia, R. A.**; Lee, Z. P.: BREAKING THE SHALLOW WATER PARADOX (29424)

12:15 **Lee, Z.**; Garcia, R.; Wei, J.: AN INTEGRATED SYSTEM TO MEASURE WATER COLOR AND BOTTOM PROPERTIES FOR CORAL REEF STUDIES (30009)

12:30 **Peltier, S. A.**; Hochberg, E. J.; Dollar, S. J.: USING HIGH-RESOLUTION PHOTOMOSAICKING TECHNIQUES TO VALIDATE BENTHIC COVER DATA FROM REMOTE SENSING TECHNOLOGIES (30029)

114 PHYSICAL-BIOLOGICAL COUPLING

Chair(s): Stephan Zeeman, szeeman@une.edu

Location: 302 A/B

14:30 **Cherif, M.**; Portalier, S. M.; Fussmann, G. F.; Loreau, M.; Wain, D. J.: THE MECHANICS OF ECOLOGICAL INTERACTIONS IN AQUATIC SYSTEMS (29305)

14:45 **Millar, R. V.**; Elsaesser, B.; Houghton, J.; Kregting, L.: THE INFLUENCE OF WAVE AND CURRENT MOTION ON THE GROWTH AND EROSION RATES OF THE KELP *LAMINARIA DIGITATA* (29147)

15:00 **Ladah, L. B.**: ECOLOGICAL CONSEQUENCES OF THE INTERNAL TIDE AND HIGH FREQUENCY INTERNAL WAVES ON THE MEXICAN COAST (28529)

15:15 **Zeeman, S. I.**; Lutes, J.: ATMOSPHERIC INFLUENCES ON PRIMARY PRODUCTION IN THE INDONESIAN THROUGHFLOW (ITF) REGION (30024)

16:30 **Fernández Aldecoa, R. G.**; Ladah, L. B.; Morgan, S. G.; Largier, J. l.; Dibble, C. D.: SUPPLY OF MEROPLANKTONIC LARVAE TO THE ROCKY INTERTIDAL, WITH A FOCUS ON BARNACLES AND BIVALVES, FORCED BY THE INTERNAL TIDE IN BAJA CALIFORNIA (29089)

16:45 **Podemski, C. L.**; Zhang, J.; Otu, M. K.; Raper, J. D.; Wlasichuk, C. A.: BIOGEOCHEMISTRY AND BENTHIC INVERTEBRATE COMMUNITY COMPOSITION IN RELATION TO DEPOSITION OF ORGANIC WASTE AT A FRESHWATER FINFISH AQUACULTURE FARM (29777)

17:00 **Murphy, E. A.**; Barros, J. M.; Schultz, M. P.; Flack, K. A.; Steppe, C. N.; Reidenbach, M. A.: EFFECTS OF ALGAL BIOFILM PATCHINESS ON BOUNDARY LAYER HYDRODYNAMICS (29848)

17:15 **Saldías, G. S.**; Shearman, K.; Barth, J.: STRUCTURE AND VARIABILITY OF THE OFFSHORE COLUMBIA RIVER PLUME BASED ON LONG-TERM GLIDER OBSERVATIONS (30076)

122 GEOCHEMISTRY, BIOGEOCHEMISTRY, AND NUTRIENT CYCLING

Chair(s): Louis Legendre, legendre@obs-vlfr.fr
Andreas F. Haas, andreas.florian.haas@gmail.com

Location: 323 B

10:00 Calhoun, S.; **Haas, A. F.**; Kelly, L. W.; Nelson, C. E.; Smith, J. E.; Rohwer, F.: NIGHTTIME DISSOLVED OXYGEN SPIKES – TIME TO RETHINK? (29587)

10:30 **Kunza, L. A.**; Madinger, H. L.; Haueter, J. Z.: SCALING COUPLED CARBON AND NITROGEN GAS FLUXES IN STREAMS (30016)

10:45 Wu, Z.; **Liu, Y.**: INTERNAL CYCLING, NOT EXTERNAL LOADING, DECIDES THE NUTRIENTS LIMITATION IN EUTROPHIC LAKE: A DYNAMIC MODELING WITH TEMPORAL BAYESIAN HIERARCHICAL INFERENCE (28558)

12:00 **Saito, H.**; Umezawa, Y.; Hashihama, F.; Fukuda, H.; Ogawa, H.; Obata, H.: GEOGRAPHY OF BIOGENIC ELEMENTS IN THE NORTH PACIFIC OCEAN (29291)

12:15 **Takano, S.**; Tanimizu, M.; Hirata, T.; Shin, K.; Fukami, Y.; Suzuki, K.; Sohrin, Y.: NICKEL, COPPER AND ZINC ISOTOPES IN THE PACIFIC OCEAN (28502)

12:30 **Ho, P.**; Shiller, A.: THE BEHAVIOR OF DISSOLVED TRACE METALS (V, MO AND NI) IN THE EASTERN TROPICAL PACIFIC OCEAN. (28815)

12:45 **Gharamti, M. E.**: BIOLOGICAL REANALYSIS WITH ONLINE PARAMETER ESTIMATION IN THE NORTH ATLANTIC AND THE ARCTIC (29534)

14:30 **Legendre, L.**; Mari, X.; Passow, U.; Migon, C.; Burd, A. B.: TRANSPARENT EXOPOLYMER PARTICLES: EFFECTS ON CARBON CYCLING IN THE OCEAN (28444)

14:45 **Kawahata, H.**: DIFFERENT RESPONSES TO OCEAN ACIDIFICATION (28936)

15:00 **Prouty, N. G.**; Yates, K. K.; Smiley, N.; Gallagher, C.: CARBONATE SYSTEM PARAMETERS OF AN ALGAL-DOMINATED REEF ALONG WEST MAUI (29992)

15:15 **Heathcote, A. J.**; Anderson, N. J.; Engstrom, D. R.: GLOBAL TRENDS IN CARBON BURIAL BY LAKES (29564)

16:30 **Keohane, I. P.**; Gawde, R.; Tay, J.; North, E.; Hood, R.: VARIATION IN OYSTER INFLUENCED WATER QUALITY SIMULATIONS IN RESPONSE TO DIFFERENT FILTRATION RATE FUNCTIONS (29254)

17:00 **Call, M.**; Schulz, K. G.; Carvalho, M. C.; Santos, I. R.; Maher, D. T.: COUPLING INFRARED GAS ANALYSIS AND CAVITY RING-DOWN SPECTROSCOPY FOR AUTONOMOUS MEASUREMENTS OF DIC AND $d^{13}C$-DIC (29164)

17:15 **Miranda, M.**; Pacheco, F. S.; Magalhães, L.; Noyma, N.; Pinto, E.; Santos, S.; Soares, M. A.; Huszar, V. L.; Lürling, M.; Marinho, M. M.: THE EFFICIENCY OF COMBINED COAGULANT AND BALLAST TO REMOVE HARMFUL CYANOBACTERIAL BLOOMS IN A TROPICAL SHALLOW SYSTEM. (29479)

MONDAY POSTERS

006 NEW DIRECTIONS IN PLANKTON ECOLOGY

Chair(s): Zoe V. Finkel, zfinkel@mta.ca
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Susanne Menden-Deuer, smenden@uri.edu

Location: Kamehameha Exhibit Hall

87 **Dursun, F.**; Unlu, S.; Tas, S.; Yurdun, T.: SEASONAL VARIATIONS OF THE MARINE TOXIN DOMOIC ACID IN THE GOLDEN HORN ESTUARY, TURKEY (28674)

88 **Schlimm, H. C.**; Strock, K. E.; Wigdahl-Perry, C. R.; Saros, J. E.: LONG-TERM RECORDS OF CLIMATE-INDUCED CHANGES IN THE ZOOPLANKTON OF WEST GREENLAND LAKES (28695)

89 **Lopez, J. S.**; Mackey, K. R.: COPPER TOXICITY THRESHOLDS AMONG DIAZOTROPHIC MICROALGAE (29015)

90 Antuna-Castillo, L.; Ortíz-Zayas, J.; Meléndez-Díaz, J.; Vélez-Villamil, S.; Rosa-Alfonso, B.; **Sastre-Wirshing, M. P.**: CHANGES IN THE PLANKTONIC COMPOSITION OF LAGUNA GRANDE, PUERTO RICO, FOLLOWING THE 2014-15 *SARGASSUM* SPECIES BLOOM (29092)

91 **Fujiki, T.**; Sasaoka, K.; Inoue, R.; Honda, M. C.; Wakita, M.; Mino, Y.: TIME-SERIES OBSERVATION OF BIOGEOCHEMICAL PARAMETERS IN THE SUBTROPICAL NORTH PACIFIC BY AN UNDERWATER PROFILING BUOY SYSTEM (29154)

92 **Jaeyeon Park, J.**; Eun Young Yoon, E.; Seung Joo Moon, S.; Yeong Du Yoo, Y.; Hae Jin Jeong, H.: LIPID CONTENT OF MARINE DINOFLAGELLATES DETERMINED BY FLOW CYTOMETRY AND MICRO-COLORIMETRIC METHOD (29330)

93 **Mayorga Adame, C. G.**; Polton, J. A.; Henry, L. A.; Ferris, J.; McClellan, F.; McCabe, C.; Roberts, M.: MEROPLANKTON CONNECTIVITY AMONG NORTH SEA OIL AND GAS PLATFORMS (29347)

94 **Dunker, S.**; Harpole, S.: IMAGE-BASED FLOW CYTOMETRY AS MISSING LINK IN PHYTOPLANKTON BIODIVERSITY RESEARCH (29355)

95 **Kawachi, M.**; Yamaguchi, H.; Tsuboi, S.; Fuchida, S.; Yamagishi, H.; Koshikawa, H.: POSSIBLE IMPACT OF SEAFLOOR MINING ON SURFACE MICROBIAL DIVERSITY AT OKINAWA TROUGH, JAPAN (29455)

96 **Irwin, A. J.**; Mutshinda, C. M.; Widdicombe, C. E.: PHYTOPLANKTON TRAITS FROM LONG-TERM OCEANOGRAPHIC TIME-SERIES (29538)

97 **Izaguirre, I.**; O´Farrell, I.; Sánchez, M. L.; Cueto, G.; Schiaffino, M. R.; Huber, P.; Zunino, J.: PATTERNS OF PHYTOPLANKTON DIVERSITY IN A GRADIENT OF PAMPEAN SHALLOW LAKES (ARGENTINA) INFLUENCED BY HUMAN ACTIVITIES (29568)

98 **Dominguez, K.**; Gaiser, E. E.; Nodine, E.; Swain, H. M.: INFLUENCE OF THERMAL DYNAMICS ON PHYTOPLANKTON STRUCTURE DURING THE ONSET OF STRATIFICATION (29642)

99 **Escribano, R.**; Zamora, S.; Valdes, V.; Frederick, L.; Hidalgo, P.: C AND N CONTENTS OF PELAGIC COPEPODS AS INDICATORS OF UPWELLING VARIABILITY IN AN EASTERN BOUNDARY UPWELLING SYSTEM (29675)

100 **Finkel, Z. V.**; Follows, M. J.; Irwin, A. J.: INFLUENCE OF CELL SIZE AND PHYLOGENY ON THE MACROMOLECULAR COMPOSITION OF EUKARYOTIC MICROALGAE (29692)

101 Heu, L. I.; **Adolf, J. E.**: EFFECTS OF NUTRIENT ENRICHMENT ON PHYTOPLANKTON BIOMASS AND COMPOSITION IN GROUNDWATER-FED OLIGOTROPHIC WATERS OFF WEST HAWAI'I ISLAND (29863)

102 Jungbluth, M.; Lenz, P. H.; Hanson, K. M.; **Selph, K. E.**; Goetze, E.: COPEPOD EARLY-LIFE HISTORY RESPONSES TO EVENT-SCALE PERTURBATIONS IN THE COASTAL ZONE (29868)

104 **Rivest, E. B.**; Hill, T. M.; Gaylord, B. P.; Sanford, E.; Fehrenbacher, J. S.: CONDITION OF JUVENILE CALIFORNIA MUSSELS IS INFLUENCED BY LARVAL EXPOSURE TO COASTAL UPWELLING (29923)

105 **Kaur, P.**; Ganguli, P. M.; Lamborg, C.; Mackey, K. R.: A FRAMEWORK FOR INTERPRETATING PHYTOPLANKTON- MERCURY INTERACTIONS AT THE LAND-SEA MARGIN: THE EFFECT OF CELL SIZE AND SALINITY GRADIENTS (29977)

106 **Serrano, A.**; Ganguli, P. M.; Lamborg, C. H.; Gibson, D.; Nussbaum, B.; Mackey, K. R.: EVALUATING THE EFFECTS OF PHYTOPLANKTON SIZE AND COMMUNITY STRUCTURE ON MERCURY BIOACCUMULATION IN A SOUTHERN CALIFORNIA COASTAL LAGOON SYSTEM (30037)

107 **Lopes, R. M.**; Strickler, J. R.; Dabiri, J. O.; Costello, J. H.: PROTISTAN MICROCURRENTS AFFECT NUTRIENT FLUXES IN THE PLANKTON (30107)

108 **Wartman, M.**; Cook, P.; Beardall, J.: VERTICAL MIGRATION OF PHYTOPLANKTON IN THE GIPPSLAND LAKE, VICTORIA, AUSTRALIA (30125)

174 **Corradino, G.**; Kinsey, J.; Osburn, C.; Schnetzer, A.: PREDATORY FLAGELLATES: TROPHIC INTERACTIONS IN THE MICROBIAL LOOP (29055)

009 TEMPORAL AND SPATIAL COMPONENTS AFFECTING ZOOPLANKTON COMMUNITY STRUCTURE

Chair(s): Robert L. Wallace, wallacer@ripon.edu
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Location: Kamehameha Exhibit Hall

126 **Shapiro, J. R.**; Kaufmann, R. S.: ZOOPLANKTON DISTRIBUTION IN RELATION TO ENVIRONMENTAL PARAMETERS ON DIEL TIME SCALES IN MISSION BAY, SAN DIEGO, CALIFORNIA. (28432)

127 **Du, P.**; Wang, K.; Zeng, J. N.; Xu, X. Q.; Zhang, D. M.: RESPONSES OF MESOZOOPLANKTON COMMUNITIES TO DIFFERENT ANTHROPOGENIC ACTIVITIES IN A SUBTROPICAL SEMI-ENCLOSED BAY (28694)

128 Martin, B.; **Koppelmann, R.**; Kassatov, P.: ECOLOGICAL RELEVANCE OF SALPS AND DOLIOLIDS IN THE NORTHERN BENGUELA UPWELLING SYSTEM (28848)

129 **Martin, M.**; Walsh, E. J.: UV RADIATION RESISTANCE IN BDELLOID ROTIFERS FROM DIVERSE HABITATS (29082)

130 **Riquelme-Bugueño, R.**; Escribano, R.; Jorquera, E.; Navarro, E.; Toledo, D.; Schneider, W.: KRILL DISTRIBUTION AND ABUNDANCE ALONG A MESO-OLIGOTROPHIC GRADIENT (CALDERA – EASTER ISLAND) IN THE EASTERN SOUTH PACIFIC (29105)

131 **Fierro, P. A.**; Hidalgo, P.; Escribano, R.; Hormazabal, S.: COMMUNITY STRUCTURE OF PELAGIC COPEPODS ASSOCIATED WITH THE SEAMOUNTS OF THE JUAN FERNÁNDEZ RIDGE (32 – 34 ° S) IN THE SOUTH EASTERN PACIFIC (29225)

* REPRESENTS INVITED PRESENTATIONS

132 **Fernandez de Puelles, M. L.**: ZOOPLANKTON ABUNDANCE INCREASING DURING THE TAGORO SUBMARINE VOLCANO POSTERUPTIVE PROCESS AT EL HIERRO (CANARY ISLANDS,SUBTROPICAL NORTH ATLANTIC OCEAN) (29410)

133 **Rodriguez, A. E.**: ZOOPLANKTON COMPOSITION IN HAMPTON ROADS, VA: SPATIO-TEMPORAL VARIABILITY AND DNA BARCODING (29458)

134 **Hidalgo, P.**; Escribano, R.: COPEPODS COMMUNITY STRUCTURE IN TWO COASTAL UPWELLING SITES IN THE HUMBOLDT CURRENT SYSTEM OF THE EASTERN SOUTH PACIFIC OCEAN (29656)

135 **Yanez, S.**; Hidalgo, P.; De la Iglesia, R.; Glud, R.: THE DEGRADATION OF SINKING COPEPODS: EXPLORING THEIR IMPORTANCE FOR N AND C CYCLING IN OXYGEN DEPLETED WATER (29884)

136 **Chiaverano, L. M.**; Greer, A. T.; Pliru, A.; Hernandez, F. J.; Graham, W. M.: HIGH RESOLUTION SAMPLING OF EARLY STAGE AURELIA MEDUSAE AND ASSOCIATED WATER COLUMN PROPERTIES IN THE NORTHERN GULF OF MEXICO (29937)

012 THE BIOGEOCHEMISTRY OF DISSOLVED ORGANIC MATTER

Chair(s): Thorsten Dittmar, thorsten.dittmar@uol.de
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Sasha Wagner, sasha.wagner@skio.uga.edu

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146 **Peri, F.**; Schiebel, H. N.; Chen, R. F.: DISSOLVED ORGANIC CARBON STORAGE CAPACITY IN A NEW ENGLAND SALT MARSH (28487)

147 **Luzius, C. R.**; Guillemette, F.; Podgorski, D. C.; Spencer, R. G.: DELINEATING DRIVERS OF DISSOLVED ORGANIC MATTER COMPOSITION IN A MAJOR FRESHWATER SPRING (28614)

148 **Martias, C.**; Tedetti, M.; Jamet, L.; Goutx, M.; Röttgers, R.; Dupouy, C.: SPATIAL DISTRIBUTION OF CHROMOPHORIC DISSOLVED ORGANIC MATTER AND TRACE METALS IN THE NEW CALEDONIA TROPICAL LAGOON (SOUTH PACIFIC OCEAN) (28793)

149 **Ding, L.**; Ge, T. T.; Xue, Y. J.; Wang, X. C.: DISTRIBUTION OF DISSOLVED ORGANIC CARBON IN THE SOUTH CHINA SEA (28852)

150 **Yuthawong, V.**; Kasuga, I.; Kurisu, F.; Furumai, H.: APPLICATION OF ORBITRAP MASS SPECTROMETRY TO REVEAL LOW MOLECULAR WEIGHT DISSOLVED ORGANIC MATTER RESPONSIBLE FOR COD IN A EUTROPHIC LAKE (28959)

151 **Granzow, B. N.**; Meseck, S. L.; Bif, M. B.; Hansell, D. A.; Brand, L. E.: THE EFFECTS OF OCEAN ACIDIFICATION ON THE GROWTH RATES OF *SKELETONEMA MARINOI* (29114)

152 **Logozzo, L. A.**; Tzortziou, M. A.; Neale, P. J.: DISSOLVED ORGANIC MATTER FATE IN ESTUARIES: SPATIAL VARIATIONS IN BIOAVAILABILITY AND PHOTOREACTIVITY (29123)

153 **Jeon, H. D.**; Otosaka, S.; Yamashita, Y.; Ogawa, H.: MEASUREMENT OF RADIOCARBON IN MARINE DISSOLVED ORGANIC CARBON BY UV OXIDATION USING GRID LAMPS OF LOW PRESSURE MERCURY (29168)

154 **Naruoka, C.**; Senga, Y.: TRACING THE TRANSFORMATION OF AQUATIC HUMIC SUBSTANCES IN BOG WATER USING EEM-PARAFAC (29184)

155 **Quinlan, Z. A.**; Remple, K.; Donahue, M.; Fox, M.; Oliver, T.; Putnam, H.; Sevilla, J.; Lager, C.; Silbiger, N.; Nelson, C. E.: CORAL PRODUCES PROTEINACEOUS DISSOLVED ORGANIC MATTER IN RESPONSE TO NUTRIENTS (29199)

156 **Lee, Y.**; Lee, H.; Noh, J. H.; Kim, M. S.; Shin, K. H.: SPATIAL DISTRIBUTION AND FLUORESCENCE PROPERTIES OF DISSOLVED ORGANIC MATTER IN CHUKCHI AND BEAUFORT SEAS (29263)

157 **Tucker, J. P.**; Santos, I. R.: SUBMARINE GROUNDWATER DISCHARGE AS A DIVER OF SURF ZONE PRODUCTIVITY (COFFS HARBOUR, AUSTRALIA) (29288)

159 **Bolduc, G. M.**; Roesler, C. S.; Deeds, J.; Camill, P. C.; Lea, P.: DISSOLVED ORGANIC CARBON IN LAKES OF MAINE: AN ANALYSIS OF THE PRIMARY SOURCES OF DOC (29565)

160 **Bianca, M. R.**; Gonsior, M.; Schmitt-Kopplin, P.; Cartisano, C. M.; Del Vecchio, R.; Blough, N. V.: EVALUATING THE CHANGES IN THE MOLECULAR COMPOSITION AND OPTICAL PROPERTIES OF DISSOLVED ORGANIC MATTER IN THE OPEN OCEANS CAUSED BY BORODEUTERIDE REDUCTION (29593)

161 **Walsh, I. D.**; Orrico, C. M.; Murphy, D. J.; Koch, C.: INVESTIGATING CDOM AND FDOM COHERENCE AND VARIANCE IN AN ESTUARY ACROSS THE ULTRAVIOLET AND VISIBLE SPECTRUM (30012)

014 MICROBIAL INTERACTIONS IN AQUATIC ECOSYSTEMS: UNTANGLING THE COMPLEX WEB OF COMPETITION, MUTUALISM, PREDATION, AND ADAPTATION

Chair(s): Bennett Lambert, blambert@mit.edu
Anupam Sengupta, anupams@ethz.ch

Location: Kamehameha Exhibit Hall

175 **Yoo, Y. D.**; Seong, K. A.; Yih, W.; Kim, H. S.; Rho, J. R.: FEEDING BY THE SAND-DWELLING DINOFLAGELLATE THECADINIUM KOFOIDII (28663)

176 **Lin, Y. C.**: DIEL CYCLES OF COMMUNITY COMPOSITION OF PHOTOSYNTHETIC PICOEUKARYOTES IN A SUBTROPICAL COASTAL ECOSYSTEM OF NORTHEAST TAIWAN (28854)

177 **Kempnich, M. W.**; Sison-Mangus, M. P.: THE PRESENCE AND ABUNDANCE OF PREDATORY BACTERIA WITH TYPE VI SECRETION SYSTEM IN THE COASTAL OCEAN. (28961)

178 **Sison-Mangus, M. P.**; Kempnich, M.; Kudela, R.; Mehic, S.: THE PSEUDO-NITZSCHIA METABOLITE, DOMOIC ACID, CAN STRUCTURE BACTERIAL COMMUNITIES IN THE COASTAL OCEAN (29044)

179 **Djurhuus, A.**; Kavanaugh, M.; Leigh, B.; Breitbart, M.: SEASCAPE-INFORMED ANALYSIS OF MICROBIAL AND VIRAL COMMUNITIES ON THE WEST FLORIDA SHELF (29650)

180 **Cheng, B.**; Ziebis, W.: UNCHARTED MICROBIAL COMMUNITIES IN SEDIMENT POREWATER: HOW ABUNDANT, DIVERSE AND ACTIVE ARE THEY? (29795)

181 **LI, Q.**; Verspagen, J.; Stomp, M.; Huisman, J.: LIGHT COLORS DETERMINE PHYTOPLANKTON COMPETITION FOR LIGHT AND NUTRIENTS (29999)

182 **Remple, K. L.**; Donahue, M. J.; Fox, M. D.; Lagger, C.; Putnam, H. M.; Quinlan, Z. A.; Sevilla, J.; Silbigger, N. J.; Nelson, C. E.: THE IMPACTS ON MARINE BIOFILMS RESULTING FROM NUTRIENT STIMULATION OF DOMINANT REEF PRODUCERS (30061)

183 **Naliboff, D. S.**; Green, K.; Brainard, R.; Rohwer, F.; Kelly, L. W.: REGIONAL PATTERNS IN CORAL REEF MICROBIAL COMMUNITY STRUCTURE (30074)

184 **Andersson, A.**; Ahlinder, J.; Mathisen, P.; Hammarström, M.; Thelaus, J.: AQUATIC ECOSYSTEMS AT RISK FOR OCCURRENCE OF PATHOGENIC BACTERIA (30145)

025 LINKING ATMOSPHERIC DEPOSITION TO THE BIOGEOCHEMISTRY OF AQUATIC AND MARINE SYSTEMS

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244 **Boyko, V.**; Blonder, B.; Kamyshny, A.: ASSESSMENT OF IRON INPUTS TO THE SEDIMENTS OF THE GULF OF AQABA (RED SEA) BY AEOLIAN AND ALLUVIAL SOURCES (28837)

245 **Gao, Y.**; Anderson, J.; Yu, S.: AEROSOL COMPOSITION AND ITS POTENTIAL EFFECTS ON ATMOSPHERIC FE SPECIATION OVER WEST ANTARCTIC PENINSULA (29616)

246 **Tu, W. C.**; Hsieh, C. C.; Ho, T. Y.: AEROSOL FE FLUXES IN THE NORTHERN SOUTH CHINA SEA (30117)

247 **Hsieh, C.**; Tu, W.; Ho, T.: THE IMPACT OF TYPHOONS ON AEROSOL METAL DEPOSITION IN THE NORTHERN SOUTH CHINA SEA (30121)

034 INTERACTIVE EFFECTS OF ANTHROPOGENIC STRESSORS ACROSS ECOSYSTEM BOUNDARIES

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Maarten Schrama, maarten.schrama@manchester.ac.uk
Martin Solan, M.Solan@soton.ac.uk

Location: Kamehameha Exhibit Hall

323 **Griffith, A. W.**; Gobler, C. J.: TRANSGENERATIONAL RESPONSES TO ACIDIFICATION IN TWO SPECIES OF NORTHEAST US BIVALVE MOLLUSCS, *MERCENARIA MERCENARIA* AND *ARGOPECTEN IRRADIANS* (28934)

324 **Gaynus, C. J.**; Fong, P.; Fong, C.; Barber, P.: HOW DOES COMMUNITY CONTEXT IMPACT TURF ALGAL SEDIMENT TOLERANCE? (28977)

325 **Brock, M. L.**; Richardson, R.; de la Torre, E.; Ederington-Hagy, M.; Snyder, R. A.; Jeffrey, W. H.: SEASONAL VARIABILITY OF MICROBIAL RESPONSE TO CRUDE OIL WATER ACCOMMODATED FRACTIONS (29247)

326 **Sugie, K.**; Fujiwara, A.; Kameyama, S.; Harada, N.; Nishino, S.: EFFECTS OF TEMPERATURE, CO2 AND SALINITY ON THE GROWTH DYNAMICS OF ARCTIC PHYTOPLANKTON COMMUNITY (29265)

327 **Tanaka, K.**; Androulakakis, A.; Bowring, S.; Canning, A.; Hastie, A.; Horgby, Å.; Ignatova, A.; Lacroix, F.; Louchard, D.; Maier, M.; Marescaux, A.; Nakhavali, M.; Nydahl, A.; Pika, P.; Puglini, M.; Roobaert, A.; Schwab, M.; Segatto, P.; Stegehuis, A.; Terhaar, J.; Uhlbäck, J.; Verlet-Banide, A.; Laruelle, G. G.; Lauerwald, R.; Friedlingstein, P.; Regnier, P.; Mackenzie, F. T.: TOWARD A REGIONALIZED TERRESTRIAL-OCEAN-ATMOSPHERE ECOSYSTEM MODEL (TOTEM): LAND-OCEAN AQUATIC CONTINUUM (LOAC) CARBON CYCLE (29359)

328 **Seoane Rocha, C.**; Schiaffino, M. R.; Fermani, P.; Llames, M. E.; Lagomarsino, L.; Huber, P.; Castro-Berman, M.; Torremorell, A.: BACTERIOPLANKTON STRUCTURE FROM SHALLOW LAKES LOCATED AT THE UPPER AND LOWER SALADO RIVER BASIN (ARGENTINA) INFLUENCED BY DIFFERENT LAND USES (29683)

329 **Kirwan, M. L.**; Schieder, N.; Walters, D. C.; Reay, W.; Carr, J. A.: ANTHROPOGENIC BARRIERS TO ECOSYSTEM CONNECTIVITY REVERSE SEA-LEVEL DRIVEN MARSH EXPANSION (29742)

330 **Boersma, M.**; Lesniowski, T. J.; Meunier, C. L.; Algueró-Muñiz, M.; Inoue, H.; Álvarez, S.; Torres, G.: MULTIPLE STRESSORS: ARE WINDOWS OF OPPORTUNITY CLOSING? (29885)

331 **Schrama, M. J.**; Barmentlo, S. H.; Hunting, E. R.; Vijver, M.: LIVING LAB: A NOVEL RESEARCH FACILITY TO STUDY ANTHROPOGENIC PRESSURES ACROSS ECOSYSTEM BOUNDARIES (29919)

332 **Contreras, L. M.**; Fierro-Cabo, A.; Cintra Buenrostro, C. E.; Hicks, D. W.; Martinez, C.; Tamez, C.; Marquez, M. A.: ECOSYSTEM FUNCTIONAL AND STRUCTURAL CHARACTERISTICS AFFECTED BY FRESHWATER INFLOW IN NEGATIVE ESTUARIES (29954)

036 METHANE OXIDATION ACROSS ECOSYSTEMS: OPENING THE METHANE BLACK BOX

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333 **Tittel, J.**; Hüls, M.; Koschorreck, M.: YOUNG TERRESTRIAL CARBON IS A DISTINCT SOURCE FOR METHANE PRODUCTION IN TWO RESERVOIRS (28388)

334 **Wilson, S. T.**; Ferrón, S.; Karl, D. M.: SEASONAL AND INTERANNUAL CONCENTRATIONS OF METHANE AND NITROUS OXIDE IN THE SURFACE WATERS OF THE OLIGOTROPHIC NORTH PACIFIC SUBTROPICAL GYRE FROM 2008-2016 (28523)

335 **Kaneko, M.**; Takano, Y.; Sakata, S.; Ohkouchi, N.: COENZYME F430: A NOVEL BIOMARKER FOR METHANE CYCLE (28844)

336 **Clayer, F.**; Gélinas, Y.; Gobeil, C.; Tessier, A.: MODELING THE ISOTOPIC SIGNATURE OF METHANE AND DISSOLVED INORGANIC CARBON TO UNRAVEL METHANOGENIC AND OTHER FERMENTATION PATHWAYS IN BOREAL LAKE SEDIMENTS (28968)

337 **de Jong, A.**; Vaksmaa, A.; Lueke, C.; Jetten, M.; Rasigraf, O.: ANAEROBIC OXIDATION OF METHANE IN VARIOUS FRESH WATER AND MARINE ECOSYSTEMS (29450)

338 **Wang, Q.**; Dore, J. E.; McDermott, T. R.: METHYLPHOSPHONATE METABOLISM CONTRIBUTES TO THE METHANE OVERSATURATION PARADOX IN AN OXIC FRESHWATER LAKE (29635)

339 **Beman, J. M.**; Perez-Coronel, E.; Reynolds, M. C.: BIOGEOCHEMISTRY, ECOLOGY, AND METAGENOMICS OF METHANE OXIDATION AND PRODUCTION IN HIGH ALTITUDE FRESHWATER LAKES (29875)

058 ENVIRONMENTAL DRIVERS AND TRANSMISSION OF INFECTIOUS DISEASES IN MARINE AND FRESHWATER SYSTEMS

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482 **Shore-Maggio, A.**; Aeby, G. S.; Callahan, S. M.: TRADE-OFFS IN DISEASE AND BLEACHING SUSCEPTIBILITY AMONG TWO COLOR MORPHS OF THE HAWAIIAN REEF CORAL, *MONTIPORA CAPITATA* (28518)

483 Flowers, E. M.; Johnson, A. F.; Aguilar, R.; **Schott, E. J.**: DISEASE PREVALENCE IN PROXIMITY TO FLOW THROUGH CRUSTACEAN AQUACULTURE IN A NORTH AMERICAN ATLANTIC ESTUARY (29432)

484 **Jakobsson, S.**; Brakel, J.; Toth, G.; Pavia, H.: TO WIN OR LOSE: WASTING DISEASE IN SEAGRASS (29504)

485 **Brakel, J.**; Jakobsson, S.; Bockelmann, A. C.; Reusch, T. B.: AT THE EDGE - EELGRASS AND ITS ENDOPHYTE LABYRINTHULA ZOSTERAE IN STRESSFUL ENVIRONMENTS (29581)

486 **Williamson, C. E.**; Madronich, S.; Lal, A.; Zepp, R.; Lucas, R.; Overholt, E.; Rose, K.; Schladow, G.: IS BROWNER SICKER? CLIMATE-CHANGE-INDUCED REDUCTION IN THE SOLAR UV INACTIVATION POTENTIAL FOR WATER-BORNE PARASITES AND PATHOGENS (29595)

488 **Fiorenza, E. A.**; Tolimieri, N.; Samhouri, J. F.; Harvell, C. D.: EELGRASS WASTING DISEASE ALONG AN URBAN GRADIENT IN PUGET SOUND, WA (29890)

065 GROUNDWATER-SURFACE WATER INTERACTION ACROSS THE TERRESTRIAL - MARINE CONTINUUM

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510 **Stewart, B. T.**; Bryan, K. R.; Pilditch, C. A.; Santos, I. R.: SUBMARINE GROUNDWATER DISCHARGE ESTIMATES USING RADIUM ISOTOPES PROVIDE INSIGHT INTO NUTRIENT SOURCES (TAURANGA HARBOUR, NEW ZEALAND) (28387)

511 **Kelly, C. L.**; McCorkle, D. C.: DRIVERS OF SEASONAL AND INTERANNUAL VARIATIONS IN WAQUOIT BAY CARBONATE CHEMISTRY (28490)

512 **Kwon, H.**; Kang, H.; Kim, G.: THE INFLUENCE OF SUBMARINE GROUNDWATER DISCHARGE ON THE OCCURRENCE OF MASSIVE GREEN TIDE IN A COASTAL HARBOR (28551)

513 **Lee, J.**; Kim, G.; Ko, J.; Kim, Y.: A RAPID AND ACCURATE METHOD FOR CONTINUOUS MONITORING OF RADON IN WATER USING A PULSED IONIZATION CHAMBER (28559)

514 **Kohler, B. S.**; Hall, R. O.; Carr, B. J.: SMALL STREAM, BIG HYPORHEIC ZONE: MEASURING SOLUTE TURNOVER IN THE HYPORHEIC ZONE WITH GEOPHYSICAL IMAGING (29786)

515 **Zhang, Y.**; Li, H.: SEASONAL VARIATIONS IN SUBMARINE GROUNDWATER DISCHARGE AND ASSOCIATED NUTRIENTS INPUT INTO JIAOZHOU BAY, CHINA (28907)

516 **An, A.**; Li, H.; Wang, X.; Zhang, Y.: SEASONAL VARIATIONS IN GROUNDWATER DISCHARGE ESTIMATED BY CONTINUOUS RADON MEASUREMENTS IN DAYA BAY, CHINA (28911)

517 **Bitterwolf, K. K.**; Horner, T. J.; Auro, M. E.; Peucker-Ehrenbrink, B.; Paytan, A.: NON-TRADITIONAL STABLE ISOTOPES IN SUBMARINE GROUNDWATER (28954)

518 **McKenzie, T.**; Dulai, H.: GROUNDWATER INPUTS AND THEIR EFFECT ON WATER QUALITY IN THE KAHALU'U STREAM COMPLEX (29070)

519 **McMahon, A. W.**; Santos, I.: NITRATE ENRICHMENT IN A CORAL REEF LAGOON DRIVEN BY GROUNDWATER INPUTS OF BIRD GUANO (29148)

520 **Dulai, H.**: SGD DISTRIBUTION ON THE HAWAIIAN ISLANDS – SPATIAL AND LONG-TERM TRENDS AND THEIR BIOGEOCHEMICAL IMPLICATIONS (29152)

521 **Lopez, C. V.**; Douglas, A. R.; Spalt, N.; Murgulet, D.: USING RADIUM ISOTOPES TO DETERMINE RESIDENCE TIMES IN BAFFIN BAY, TEXAS (29197)

522 **Hudson, C. Y.**; Dulai, H.: VARIABILITY OF SALINITY OF SUBMARINE GROUNDWATER DISCHARGE ON THE KONA COAST, HAWAII (29208)

523 **Kreyns, P.**; Koneshloo, M.; Yu, X.; Michael, H. A.: THE INFLUENCE OF PREFERENTIAL FLOW ON LAND-SEA WATER EXCHANGE IN A HAWAIIAN AQUIFER (29734)

524 Holitzki, T.; **Johnson, E.**; Wiegner, T. N.: SUBMARINE GROUNDWATER IMPACTS ON BENTHIC MACROALGAE C:N:P IN HAWAIIAN MARINE WATERS (29924)

525 **Murray, J.**; Prouty, N. G.; Paytan, A.: TRACING HISTORIC NUTRIENT LOADING FROM SUBMARINE GROUNDWATER DISCHARGE THROUGH CORAL SKELETAL NITROGEN ISOTOPES (30036)

069 AQUATIC TRANSITIONS: TRACKING THE NATURE AND TRAJECTORIES OF CHANGE USING PALEOLIMNOLOGICAL APPROACHES

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534 **Filipkowska, A.**; Lubecki, L.; Szymczak-Zyla, M.; Ciesielski, T. M.; Mazur-Marzec, H.; Torunska-Sitarz, A.; Witak, M.; Breedveld, G. D.; Oen, A. M.; Ardelan, M. V.; Jenssen, B. M.; Kowalewska, G.: MULTI-PROXY INVESTIGATION OF RECENT SEDIMENTS IN TWO DIFFERENT EUROPEAN COASTAL AREAS (POLAND, NORWAY) – ANTHROPOGENIC IMPACT ON ECOSYSTEM HEALTH (28563)

535 **Lafratta, A.**; Lavery, P. S.; Masqué, P.; Mateo, M. A.; Fernandes, M.; Gaylard, S.; Serrano, O.: A LONG TERM PERSPECTIVE OF LEAD POLLUTION IN PORT PIRIE (SOUTH AUSTRALIA) REVEALED BY SEAGRASS SEDIMENTARY ARCHIVES. (28821)

536 **Price, A. M.**; Baustian, M. M.; Turner, R. E.; Rabalais, N. N.; Chmura, G. L.: DINOFLAGELLATE CYSTS TRACK EUTROPHICATION IN THE NORTHERN GULF OF MEXICO (28926)

537 **Cintra Buenrostro, C. E.**; Flessa, K. W.; Dettman, D.; Rowell, K.: A CALL FROM THE DEAD: THIRSTY CLAMS AND THIRSTY FISH NEED FRESHWATER INFLOW TO THE COLORADO RIVER DELTA (28958)

538 **Werne, J. P.**; Brown, E. T.; Halbur, J.; Schouten, S.; Sinninghe Damste, J. S.: THE SEDIMENTARY RECORD OF ANTHROPOGENIC IMPACTS ON LAKE MALAWI (28982)

539 **Scott, C. A.**; Skeen, O. K.; May, E. B.: THE DISTRIBUTION AND BIOACCUMULATION OF ORGANIC CONTAMINANTS IN ELASMOBRANCHS (29552)

540 **Rice, J. C.**; May, E. B.; Waring, G. T.: ACCUMULATION OF ORGANIC CONTAMINANTS IN GRAY SEALS *HALICHOERUS GRYPUS* AND THE UTILITY OF NON-INVASIVE METHODS AS A MEANS OF DETERMINING EXPOSURE (29570)

541 **McCarthy, E. K.**; O'Donnell, P.; Loh, A. N.; Scharf, F.; Halls, J.: ASSESSING THE PRE-RESTORATION IMPACTS OF SOUTHWEST FLORIDA ESTUARIES USING TROPHIC TRANSFER AND HABITAT USE (29641)

542 **Mikomägi, A.**; Martma, T.: ANTHROPOGENIC TRANSFORMATION OF THE ECOLOGICAL FUNCTIONING OF SMALL HARD-WATER LAKES: ANALYSIS OF SEDIMENTARY PIGMENTS AND STABLE ISOTOPES (29652)

543 **Angeles Gallego, A.**: MECHANISMS OF FUTURE PCO2 SEASONAL CYCLE (30051)

071 MOLECULAR INSIGHTS INTO ADAPTIVE MICROBIAL PHYSIOLOGY

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544 **Hu, S. K.**; Liu, Z.; Mesrop, L.; Connell, P.; Alexander, H.; Dyhrman, S.; Heidelberg, K. B.; Caron, D. A.: ALOHA & SPOT: A METATRANSCRIPTOMIC COMPARISON OF KEY PROTISTAN TAXONOMIC GROUPS AND PROCESSES WITHIN AND BELOW THE EUPHOTIC ZONE (28592)

545 **Button, D.**: CONCENTRATIONS OF RATE-LIMITING DISSOLVED SUBSTRATE FROM INHIBITION OF ADDED RADIOISOTOPE UPTAKE BY AMBIENT AND ADDED UNLABELED SUBSTRATE IN COMBINATION (28938)

546 **Bibby, T. S.**; Hitchcock, A.; Polyviou, D.; Moore, C. M.: PHOSPHITE UTILIZATION BY THE GLOBALLY IMPORTANT MARINE DIAZOTROPH TRICHODESMIUM (29045)

547 **Chang, J.**; Liu, W. C.; Shih, C. Y.; Kang, L. K.; Kuo, T. H.; Wang, H. F.: SEASONAL VARIATIONS IN THE EXPRESSION OF A NITRATE TRANSPORTER GENE DETECTED IN THE DIATOM *CHAETOCEROS* LIVING IN COASTAL WATERS OFF NORTHERN TAIWAN (29209)

548 **Ducluzeau, A.**; Hassett, B. T.; Herriott, I. C.; Collins, R. E.: THE GENOME OF THE SEA ICE FLAVOBACTERIUM POLARIBACTER SP. 11 EMPHASIZES THE BIOENERGETIC DIVERSITY OF THE POLARIBACTER GENUS (29233)

549 **Waidner, L.**; Matallana-Surget, S.; Nigro, L.; LeBaron, P.; Ederington0Hagy, M.; Brock, M. L.; Daniel, C.; Valek, J.; Jeffrey, W. H.: AEROBIC ANOXYGENIC PHOTOTROPHIC BACTERIA IN COASTAL GULF OF MEXICO COMMUNITY SHIFTS UPON EXPOSURE TO MC 252 WATER ACCOMMODATED FRACTION AND DISPERSANT (29256)

550 **Meador, T. B.**; Schoffelen, N.; Könneke, M.; Ferdelman, T. G.: BIOGEOCHEMICAL FLUXES, STOICHIOMETRY, AND PHOSPHATE AFFINITY OF MARINE AMMONIA OXIDIZING ARCHAEA (29558)

551 **Lee, P. A.**; Bearden, D. W.; Casu, F.; Pound, H.; Janech, M. G.: SHORT-TERM IMPACT OF VITAMIN B12 AND NITRATE DEPRIVATION ON INTRACELLULAR DMSP LEVELS AND DMSP PRODUCTION IN MARINE DIATOMS (29704)

552 **Coale, T. H.**; McCrow, J. P.; Allen, A. E.: IRON/LIGHT CO-LIMITATION IN THE PELAGOPHYTE *PELAGOMONAS CALCEOLATA* (29904)

553 **Boysen, A. K.**; Carlson, L. T.; Wied, A. L.; Lionheart, R. M.; Ingalls, A. E.: DIEL PATTERNS IN CELLULAR METABOLITES REFLECT MARINE MICROBIAL INTERACTIONS (29943)

554 **Kellogg, M.**; Moran, D. M.; McIlvin, M.; Moosburner, M.; Allen, A. E.; Saito, M. A.: IDENTIFICATION OF THE HIGH-AFFINITY ZINC TRANSPORTER AND POTENTIAL FOR USE AS A BIOMARKER DETECTED BY PROTEOMICS IN THE MARINE DIATOM THALASSIOSIRA PSEUDONANA (29967)

555 **Moreno, C. M.**; Marchetti, A.: COMPARATIVE TRANSCRIPTOMICS AND DEVELOPMENT OF MOLECULAR INDICATORS OF IRON AND LIGHT LIMITATION IN THE DIATOM, *FRAGILARIOPSIS KERGUELENSIS* (30063)

079 FOOD WEB INTERACTIONS, TROPHIC LINKAGES AND ONTOGENETIC NICHE SHIFTS

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576 **Nguyen, Q.**; Ueda, R.; Shimanaga, M.; Kim, D.; Wada, M.: RESPONSE OF NEMATODE COMMUNITY STRUCTURES TO HYPOXIA IN AN ENCLOSED COASTAL SEA, OMURA BAY FOR 3 CONSECUTIVE YEARS (28342)

577 **Keen, E. M.**; Qualls, K. M.; Thompson, K. L.; Wray, J.; Picard, C. R.: NOVEL SPATIAL ANALYTICS TO IDENTIFY CANDIDATE ENVIRONMENTAL CUES FOR FORAGING WHALES (28358)

578 **Cheng, T. W.**; Akiba, T.; Tanaka, Y.: SEXUAL DIFFERENCES IN THE SWIMMING AND FEEDING BEHAVIOR OF A CYCLOPOID COPEPOD *OITHONA DAVISAE* (28406)

579 **Sonier, R.**; Tremblay, R.; Olivier, F.; Meziane, T.; Comeau, L. A.: STABLE ISOTOPES AND FATTY ACIDS PROFILING: THE PERFECT COUPLE FOR NUTRITIONAL DISCRIMINATION OF OYSTERS, CRASSOSTREA VIRGINICA (28449)

580 **Wiegand, M. D.**; Johnston, T. A.; Penner, Z. K.; Szmadyla, R. L.; Porteus, L. R.: FATTY ACID PROFILES IN OVA OF LAKE NIPSSING WALLEYE: MORE QUESTIONS THAN ANSWERS (28787)

581 **Mori, K.**; Kanaya, G.; Seo, E.; Itoh, H.; Kojima, S.: BIOACCUMULATION OF MERCURY ON FISHES IN MINAMATA BAY, BASED ON FOOD WEB ANALYSIS AND CARBON AND NITROGEN ISOTOPE ANALYSIS (28846)

582 **Parzanini, C.**; Parrish, C. C.; Hamel, J. F.; Mercier, A.: TROPHODYNAMICS OF COLD-WATER CORALS AND SPONGES OF THE NORTHWEST ATLANTIC ELUCIDATED BY STABLE ISOTOPE (d15N, d13C), ELEMENTAL N AND C, AND LIPID BIOMARKERS (28889)

583 **Bromilow, A. M.**; Lipcius, R. N.: PREDATION ON JUVENILE BLUE CRABS (CALLINECTES SAPIDUS) IN THE YORK RIVER, VIRGINIA (29046)

584 **Petursdottir, H.**: TROPHIC RELATIONSHIPS AND THE ROLE OF CALANUS IN THE OCEANIC ECOSYSTEMS SOUTH AND NORTH OF ICELAND (29357)

585 **ALMEDA, R.**; van Someren Gréve, H.; Kiørboe, T.: RISK, COST AND BENEFIT OF THE MAIN FEEDING BEHAVIOURS IN ZOOPLANKTON (29361)

586 **Maillot, M. J.**; Charles, F.; Gravel, D.; Nozais, C.: HOW DO SPECIES COME TOGETHER AROUND LEAF LITTER IN A BOREAL LAKE? (29748)

587 **Venn, C.**; Dunbar, R.; Mucciarone, D.: OXYGEN ISOTOPE AND TEMPERATURE CORRELATION IN SHELLS OF LEPAS ANATIFERA (CIRRIPEDIA: LEPADIDAE) FROM THE TROPICAL PACIFIC IN ORDER TO DETERMINE GROWTH RATE (30028)

588 **Zill, J.**; Schlieman, C.; Donahue, M. J.: MESOPREDATOR RELEASE: MORAY EELS INCONSPICUOUSLY PREDOMINATE HEAVILY FISHED REEFS (30039)

081 POLAR AND HIGH LATITUDE RESEARCH: LAND, LAKES, ICE, AND OCEAN

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589 **Saito, H.**; Hattori, H.; Takahashi, K. T.; Kudoh, S.; Imura, S.: VERTICAL DISTRIBUTION OF COPEPOD AND NEMATODE ASSEMBLAGES AT LAKE NURUME-IKE, AN ANTARCTIC MEROMICTIC LAKE (28442)

590 **Nowotarski, M. S.**; Morton, P. L.; Neeley, A. R.; Hatta, M.; Landing, W. M.; Measures, C. I.; Grand, M. M.: PROXIES OF DIATOM ABUNDANCE AND OPTIMUM NUTRIENT CONDITIONS ALONG THE 2011 CLIVAR S04P TRANSECT (28981)

593 **Hassett, B. T.**; Ducluzeau, A.; Collins, R. E.; Gradinger, R.: AQUATIC FUNGI: A MISSING LINK TO ARCTIC MARINE CARBON CYCLING (29238)

594 **Yager, P. L.**; St.Laurent, P.; Sherrell, R. M.; Oliver, H.; Dinniman, M.; Hofmann, E.; Stammerjohn, S. E.: MELTING ICE SHEET ENHANCES COASTAL BIOLOGICAL PRODUCTIVITY (29478)

595 **Showalter, G. M.**; Elkholy, M.; Nadeau, J.; Lindensmith, C.; Deming, J. W.: MOTILITY AND CHEMOTAXIS OF A MODEL MARINE PSYCHROPHILE AT SUBZERO TEMPERATURES (29686)

596 **Sipler, R. E.**; Bronk, D. A.; Juranek, L.; Goni, M.; Hales, B.; Spackeen, J. L.; Welch, K. A.; Stanley, B. C.: IMPACTS OF LATE SEASON DRIFTING SEA ICE ON WATER COLUMN PHYSIOCHEMISTRY (29705)

597 Schanke, N.; Snyder, J. S.; Lee, P. A.; **DiTullio, G. R.**: UVB AND TEMPERATURE INDUCED OXIDATIVE STRESS IMPACTS ON THE PHYSIOLOGY OF THE SEA ICE DIATOM FRAGILARIOPSIS CYLINDRUS (29757)

598 **Smoot, C. A.**; Hopcroft, R. R.: GATEWAY TO THE ARCTIC: SUMMER ZOOPLANKTON COMMUNITIES OF THE CHUKCHI SEA 2008-15 (29761)

599 **Dore, J. E.**; Feyhl-Buska, J.; Gammons, C. H.; Hamilton, T. L.; Parker, S. R.; Poudel, S.; Boyd, E. S.: PHYSICAL AND CHEMICAL CONTROLS ON THE ASSEMBLY OF A WATER COLUMN MICROBIAL COMMUNITY UNDER SEASONAL ICE COVER (30001)

600 **Bravo, G.**; Ciancio, J. E.; Witte, U.; Kazanidis, G.; Bourgeois, S.; Archambault, P.; Nozais, C.: SHORT-TERM RESPONSES OF ARCTIC DEEP-SEA BENTHIC MACROFAUNA TO PULSES OF PHYTODETRITUS: PRELIMINARY RESULTS (30091)

601 **Bernard, K. S.**; Gunther, L. A.; Mahaffey, S. H.; Qualls, K. M.; Sugla, M.; Dietrich, K. S.; Driscoll, R. M.; Reiss, C.: THE CONTRIBUTION OF AN ALGAL DIET TO THE WINTER ENERGY BUDGET OF ANTARCTIC KRILL IN THE NORTHERN SECTOR OF WESTERN ANTARCTIC PENINSULA (30127)

096 NEW CORAL REEF ECOSYSTEM STUDIES FROM REMOTE SENSING

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648 **Pelletier, R. C.**; Ghoneim, E.; Gamble, D. W.: MEASURING CARIBBEAN CORAL REEF DAMAGE AFTER A HURRICANE USING LANDSAT AND WORLDVIEW-2 (29106)

649 **Giardino, C.**; Brando, V. E.; Bresciani, M.; Hedley, J. D.; Koetz, B.; Kutser, T.; La Porte, J.; Martin-Lauzer, F. R.; Mumby, P. J.; Phinn, S. R.; Roelfsema, C. M.: CORAL REEF MAPPING FROM SENTINEL-2 (29326)

122 GEOCHEMISTRY, BIOGEOCHEMISTRY, AND NUTRIENT CYCLING

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688 **Shinohara, R.**; Iwata, T.; Ikarashi, Y.; Sano, T.; Kohzu, A.: ANALYSIS OF PHOSPHORUS COMPOUNDS BY USING 2D(1H 31P)–NUCLEAR MAGNETIC RESONANCE (NMR) SPECTROSCOPY IN AN OLIGOTROPHIC ENVIRONMENT. (28398)

689 **Jones-Williams, K. R.**; Manno, C.; Tarling, G.; Upstill-Goddard, R.; Cutroneo, L.; Capello, M.: PTEROPOD CONTRIBUTION TO CARBONATE FLUX IN THE WESTERN ROSS SEA (ANTARCTICA): IMPLICATIONS IN A HIGH CO2 OCEAN (28600)

690 **Takeda, S.**: DISTRIBUTIONS OF DISSOLVED TRACE METALS ALONG A 170°W SECTION IN THE PACIFIC OCEAN (28670)

691 **Weiss, G. A.**; Measures, C. I.; Ruzicka, J.: A MINIATURIZED PLATFORM FOR THE DETERMINATION OF DISSOLVED IRON IN SEAWATER (28785)

692 **Ren, Z.**; Wang, F.; Qu, D. X.; Elser, J. J.: MICROBIAL DIVERSITY AND COMMUNITY COMPOSITION IN HETEROGENEOUS OLIGOTROPHIC LAKES IN THE QINGHAI LAKE AREA, CHINA (28953)

693 **Peoples, A. J.**; Reed, L.; Wirth, E.; White, N.; Crawford, M. K.: ANALYSIS OF INORGANIC CONTAMINANTS AND CYTOTOXICITY OF BOTTLENOSE DOLPHINS (*TURSIOPS TRUNCATUS*) FROM MARYLAND (29042)

694 **Harmon, N. D.**: TOWARDS DEVELOPMENT OF A TRACE ELEMENT SAMPLING SYSTEM: IN SITU PRE-CONCENTRATION USING A BI-DIRECTIONAL PUMP (29122)

695 **Murgulet, V.**; Trevino, M.; Hu, X.; Murgulet, D.: ALKALINITY VARIATION IN A SEMI-ARID AND SECONDARY BAY OF SOUTH TEXAS (29213)

696 Park, Y.; Lee, J.; Kim, S.; Cho, S.; Cha, J.; **An, S.**: MICROBIAL COMMUNITY STRUCTURE AND ACTIVITY CHANGES IN RESPONSE TO THE HYPOXIA DEVELOPMENT IN A SHALLOW ESTUARY (29329)

697 **Capps, R. E.**; Caffrey, J. M.: NITROGEN CYCLING IN SEAGRASS BEDS (29419)

698 **Larson, R. A.**; Brooks, G. R.; Schwing, P. T.; Holmes, C. W.; Hollander, D.: SEDIMENTATION IN THE NE GULF OF MEXICO FOLLOWING THE DEEPWATER HORIZON OIL SPILL: A 6-YEAR OVERVIEW (29668)

699 **Babcock-Adams, L.**; Repeta, D.; Boiteau, R.; Waterbury, J.; Moffett, J.: TRACE METAL LIGAND PRODUCTION BY THE MARINE CYANOBACTERIUM SYNECHOCOCCUS SP. WH 7803 (29708)

700 **Ciesielski, T. M.**; Jenssen, B. M.; Kowalewska, G.; Szymczak-Zyla, M.; Filipkowska, A.; Lubecki, L.; Oen, A. M.; Breedveld, G. D.; Ardelan, M. V.: ELEMENTS AND ELEMENTAL SPECIES IN SEDIMENT CORE AS PROXY OF THE CLIMATE VARIABILITY AND MARINE BIOGEOCHEMICAL PROCESSES. (29741)

701 **Marquez, M.**; Jagoe, C.; Bricker, S.; Dwyer, C.; Brooke, S.; Yoskowitz, D.: EASTERN OYSTER (CRASSOSTREA VIRGINICA) AQUACULTURE AS AN ECOSYSTEM SERVICE IN OYSTER BAY, FLORIDA (29832)

702 **Chmiel, R. J.**; Mondschein, Z.; Irish, E.; Berger, E.; King, D. W.; Bruesewitz, D. A.: RAPID DETERMINATION OF NITROGEN ISOTOPE RATIOS OF AMMONIUM AND NITRATE WITH ELECTROSPRAY IONIZATION MASS SPECTROMETRY (29880)

703 **Juhl, A. R.**; Subramaniam, A.; Montoya, J. P.: INTERACTIONS BETWEEN BACTERIAL BREAKDOWN OF OIL, OXYGEN CONSUMPTION, AND MACRONUTRIENT AVAILABILITY IN THE OFFSHORE GULF OF MEXICO. (29897)

704 **Kim, B. S.**; Bruesewitz, D. A.: PATTERNS OF DISSOLVED N2 GASES IN EPILIMNETIC AND HYPOLIMNETIC LAKE WATER: A PRELIMINARY STUDY TO ESTIMATE N FIXATION RATES (30068)

705 **Stickney, E. K.**; Kunza, L. A.: DISTRIBUTION OF PHOSPHOROUS & NITRATE IN THE KOOTENAI RIVER & KOOCANUSA RESERVOIR (30077)

TUESDAY ORALS

002 ASLOMP STUDENT SYMPOSIUM

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: 305 A/B

14:30 **Bennett, B. S.**; Bird, C. E.: DEVELOPMENT OF A SINGLE-SPECIES ASSESSMENT MODEL TO ASSIST IN SUSTAINABLE MANAGEMENT OF A HAWAIIAN FISHERY (28650)

14:45 **Berglund, M. K.**; Zemeckis, D.; Jensen, O. P.; Clarke, P.: PRIORITY EFFECTS IN TRAPS USED TO SURVEY COMMUNITY COMPOSITION AT ARTIFICAL REEFS (28654)

15:00 **Rodriguez-Vargas, A.**; Renoux, L.; Jacobson, C. K.: TROPHICALLY-TRANSMITTED PARASITES OF JUVENILE SOCKEYE SALMON (*ONCORHYNCHUS NERKA*) CAUGHT OFF THE COLUMBIA RIVER (28823)

15:15 **Kitiona, F. D.**; Sabater, M.; Spalding, S.: THE IMPACTS OF CLIMATE CHANGE ON COASTAL FISHERIES OF AMERICAN SĀMOA (28900)

16:30 **Freed, J. C.**: LIFE HISTORY AND ECOSYSTEM INTERACTION OF THE KING-OF-THE-SALMON RIBBON FISH, TRACHIPTERUS ALTIVELIS, IN THE CA CURRENT (28956)

16:45 **Freeman, D.**; Kaltenberg, A.: TEMPORAL PATTERNS OF THE PREY COMMUNITY IN COUNTRY CLUB CREEK IN SAVANNAH, GEORGIA (30152)

17:00 **Locklear, Z. D.**; Huntington, B.: NEARSHORE GROUNDFISH HABITAT SUITABILITY MODELING NEAR REDFISH ROCKS MARINE RESERVE, OREGON (28825)

17:15 **Harris, C. R.**; Leon-Zayas, R. I.; Drew, J. A.; Biddle, J. F.: IDENTIFYING HINDGUT MICROBES IN CTENOCHAETUS STRIATUS AND CALOTOMUS SPINIDENS: COMPARING COMMUNITY COMPOSITION, FUNCTION, AND IDENTIFYING GENOMES (29242)

003 PHOSPHORUS ALONG THE SOIL-FRESHWATER-OCEAN CONTINUUM

Chair(s): Barbara Cade-Menun, barbara.cade-menun@agr.gc.ca
Adina Paytan, apaytan@ucsc.edu

Location: 306 A

10:00 **Haygarth, P. M.**: PHOSPHORUS IN THE LAND-WATER CONTINUUM [T] (28891)

10:30 **Powers, S. M.**; Beusen, A. H.; Bouwman, A. F.; Chowdhury, R. B.; Macdonald, G. K.; Macintosh, K. A.; McCrackin, M.; Metson, G.; Vaccari, D. A.; Hampton, S. E.: GLOBAL CO-DISTRIBUTION OF HUMAN POPULATION DENSITY AND AGRICULTURAL LANDS: WHERE ARE THE HOT SPOTS FOR PHOSPHORUS RECYCLING POTENTIAL? (29577)

10:45 **Cade-Menun, B. J.**; Hodder, K.; Iwaasa, A.; Lardner, H.; McConkey, B.; McMartin, D.; Wilson, H.; Wu, K.: PHOSPHORUS FORMS AND CONCENTRATIONS IN SNOWMELT RUNOFF FROM SASKATCHEWAN PASTURES WITH DIFFERENT MANURE MANAGEMENT PRACTICES (28730)

12:00 **Heil, C. A.**; Glibert, P. M.; Murasko, S.; Alexander, J.: TERRESTRIALLY DERIVED DOC ALTERS COASTAL PHOSPHORUS BIOAVAILABILITY: REPRESSION OF ALKALINE PHOSPHATASE ACTIVITY BY HUMIC MATERIAL IN FLORIDA BAY, USA (28988)

12:15 **Kominoski, J. S.**; Casteñada-Moya, E.; Davis, S. E.; Gaiser, E. E.; Marazzi, L.; Rivera-Monroy, V. H.; Sola, A.; Surratt, D.: SHIFTING LONG-TERM BIOGEOCHEMICAL BASELINES: ENHANCED MARINE CONNECTIVITY INCREASES NUTRIENT AVAILABILITY IN COASTAL WETLAND ECOSYSTEMS (28687)

12:30 **Ferrera, C. M.**; Miyajima, T.; Watanabe, A.; Umezawa, Y.; Morimoto, N.; San Diego-McGlone, M. L.; Nadaoka, K.: EVALUATION OF PHOSPHATE SOURCES AND CYCLING IN A TROPICAL COASTAL ECOSYSTEM USING PHOSPHATE OXYGEN ISOTOPES (30094)

12:45 **Watson, S. J.**; Needoba, J. A.; Peterson, T. D.: CHARACTERIZING PHOSPHORUS FORMS IN LATERAL BAY SEDIMENTS OF THE COLUMBIA RIVER ESTUARY USING ^{31}P – NUCLEAR MAGNETIC RESONANCE (P-NMR) (29609)

14:30 **Cotner, J. B.**; Godwin, C. M.; Whitaker, E. A.: RELATIVITY TRUMPS ABSOLUTISM: P POOLS IN MICROBES AND THEIR EFFECTS ON STOICHIOMETRY (29376)

14:45 **Ingall, E. D.**; Saad, E. M.; Chambers, L. R.: UNDERSTANDING MARINE DISSOLVED ORGANIC PHOSPHORUS COMPOSITION: INSIGHTS FROM AXENIC CULTURES (29274)

15:00 **Braun, P.**; Vogts, A.; Schulz-Vogt, H.; Nausch, M.: DYNAMIC OF POLYPHOSPHATE ACCUMULATION IN THE CYANOBACTERIUM *NODULARIA SPUMIGENA* (29381)

15:15 **Sosa, O. A.**; Ferrón, S.; DeLong, E. F.; Repeta, D. J.; Karl, D. M.: DEGRADATION OF DISSOLVED ORGANIC PHOSPHORUS BY HETEROTROPHIC BACTRERIA IN THE OLIGOTROPHIC OCEAN (29011)

004 BIOGEOCHEMICAL CYCLING OF TRACE ELEMENTS AND ISOTOPES IN THE ARCTIC OCEAN

Chair(s): Greg Cutter, gcutter@odu.edu
Roger Francois, rfrancoi@eos.ubc.ca
David Kadko, dkadko@fiu.edu
William Landing, wlanding@fsu.edu
Michiel Rutgers Van der Loeff, Mloeff@awi.de

Location: 313 C

10:00 **Kadko, D. C.**: US GEOTRACES ARCTIC SECTION: DETERMINING THE PATHWAYS, FATE, AND FLUX OF ATMOSPHERICALLY DERIVED TRACE ELEMENTS IN THE OCEAN/ICE SYSTEM (28357)

10:15 **Buck, C. S.**; Marsay, C.; Ebling, A.; Morton, P.; Summers, B.; Landing, W.: AEROSOL CONCENTRATION, COMPOSITION, AND FRACTIONAL SOLUBILITY ON THE US GEOTRACES WESTERN ARCTIC CRUISE (29841)

10:30 **Marsay, C. M.**; Landing, W. M.; Morton, P. L.; Summers, B.; Rauschenberg, S.; Twining, B. S.; Buck, C. S.: DISSOLVED AND PARTICULATE TRACE ELEMENTS IN ARCTIC MELT PONDS* (28475)

10:45 **Hatta, M.**; Measures, C. I.; Jensen, L. T.; Fitzsimmons, J. N.: GEOTRACES ARCTIC SECTION: SHIPBOARD DETERMINATION OF DISSOLVED FE AND MN CONCENTRATIONS* (29013)

[T] REPRESENTS TUTORIAL PRESENTATIONS

12:00 **Fitzsimmons, J. N.**; Jensen, L. T.; Sherrell, R. S.: DISSOLVED MICRONUTRIENT METALS FE, MN, ZN, CU, CD, AND NI ALONG THE U.S. GEOTRACES GN01 WESTERN ARCTIC SECTION: EFFECTS OF WATER MASSES & FRESHWATER INPUTS* (29925)

12:15 **Measures, C. I.**; Hatta, M.: DISSOLVED AL IN THE ARCTIC OCEAN DURING THE US GEOTRACES 2015 CRUISE (29160)

12:30 **Jackson, S. L.**; Purdon, K.; Janssen, D. J.; Cullen, J. T.: THE DISTRIBUTION OF BIOACTIVE METALS MEASURED BY CANADIAN GEOTRACES (29068)

12:45 **Bundy, R. M.**; Saito, M. A.; Hawco, N. J.; Tagliabue, A.: WIDESPREAD DISTRIBUTION OF ELEVATED SURFACE COBALT IN THE ARCTIC OCEAN (29120)

14:30 **Jensen, L. T.**; Sherrell, R. M.; Fitzsimmons, J. N.: SIZE PARTITIONING OF DISSOLVED TRACE METALS INTO SOLUBLE AND COLLOIDAL PHASES IN THE WESTERN ARCTIC OCEAN: COMPARISON TO ATLANTIC & PACIFIC (29597)

14:45 Zurbrick, C. M.; **Rember, R. D.**; Boyle, E. A.: LEAD CONCENTRATIONS AND STABLE ISOTOPE RATIOS IN THE WESTERN ARCTIC OCEAN BASINS (29728)

15:00 **Zhang, R.**; John, S. G.: DISSOLVED AND PARTICULATE TRACE METALS STABLE ISOTOPES (IRON, ZINC, AND CADMIUM) IN THE ARCTIC OCEAN (30017)

15:15 **Twining, B. S.**; Rauschenberg, S.; Morton, P. L.: TRACE METAL CONTENTS OF BIOGENIC PARTICLES AND PHYTOPLANKTON IN THE UPPER ARCTIC OCEAN AND ARCTIC SEA ICE (29529)

16:30 **Morton, P. L.**; Twining, B. S.; Rauschenberg, S.; Weisend, R. E.: GEOCHEMICAL CYCLING OF SHELF-DERIVED PARTICLES IN THE WESTERN ARCTIC OCEAN (29751)

16:45 **Casacuberta, N.**; Christl, M.; Vockenhuber, C.; Castrillejo, M.; Masqué, P.; Rutgers van der Loeff, M.: DISTRIBUTION AND FATE OF ^{129}I AND ^{236}U IN THE GERMAN GEOTRACES EXPEDITION TO THE ARCTIC OCEAN IN 2015 (28707)

17:00 **Smith, J. N.**; Cornett, J.; Guilderson, T.; Kenna, T.: TRACER I-129 MEASUREMENTS ON US AND CANADIAN 2015 ARCTIC OCEAN GEOTRACES MISSIONS (29437)

17:15 **Grenier, M.**; Francois, R.; Rutgers van der Loeff, M.; Yu, X.; Soon, M.; Moran, S. B.; Edwards, R. L.; Lu, Y.; Lepore, K.; Allen, S. E.: CIRCULATION CHANGES IN THE ATLANTIC LAYER OF THE ARCTIC OCEAN INFERRED FROM VERTICAL PROFILES OF DISSOLVED 230-TH MEASURED OVER THE LAST THREE DECADES (29097)

006 NEW DIRECTIONS IN PLANKTON ECOLOGY

Chair(s): Zoe V. Finkel, zfinkel@mta.ca
Andrew J. Irwin, airwin@mta.ca
Susanne Menden-Deuer, smenden@uri.edu

Location: 313 A

10:00 **Alexander, H.**; Molina, M. R.; Haley, S. T.; Dyhrman, S. T.: STRAIN VARIATION AND TRANSCRIPTIONAL RESPONSE OF THE *EMILIANIA HUXLEYI* SPECIES COMPLEX UNDER CHANGING NUTRIENT ENVIRONMENTS* (28626)

10:15 **Harvey, J. B.**; Johnson, S. B.; Fisher, J. L.; Peterson, W. T.; Vrijenhoek, R. C.; Ryan, J. P.: ADVANCING ZOOPLANKTON ECOLOGY WITH NEXT GENERATION DNA SEQUENCING (29831)

10:30 **Ismar, S. M.**; Li, S.; Kottmann, J.; Sommer, U.: ADOPTING GENETIC QUANTIFICATION TOOLS FOR THE PRIMARY PRODUCER-CONSUMER INTERFACE IN MARINE PELAGIC FOOD-WEBS (28868)

10:45 **Gutierrez Rodriguez, A.**; Stukel, M. R.; Lopes dos Santos, A.; Biard, T.; Vaulot, D.; Landry, M. R.; Not, F.: PROTISTAN PLANKTON DIVERSITY AND SPECIES-SPECIFIC CONTRIBUTION TO OCEANIC CARBON EXPORT IN THE CALIFORNIA CURRENT ECOSYSTEM REVEALED BY DNA METABARCODING (29216)

12:00 **D'souza, N. A.**; Anderson, S. R.; Rynearson, T. A.; Menden-Deuer, S.: CHANGES IN INTRACELLULAR LIPID CONCENTRATIONS IN THE HETEROTROPHIC DINOFLAGELLATE *OXYRRHIS MARINA* DURING STARVATION AND GRAZING (29052)

12:15 **Garcia, C. A.**; Garcia, N. S.; Baer, S. E.; Rauschenberg, S.; Twining, B. S.; Lomas, M. W.; Martiny, A. C.: REGIONAL DIFFERENCES AND DIEL RHYTHM OF PARTICULATE ELEMENTAL CONCENTRATIONS AND RATIOS IN THE EASTERN INDIAN OCEAN (29131)

12:30 **Matheson, J. R.**; Johnson, R. J.; Bates, N. R.; Lomas, M. W.; Montgomery, Q.: AN EVALUATION OF CHEMTAX AT THE BERMUDA ATLANTIC TIME SERIES STUDY SITE IN THE SARGASSO SEA. (28680)

12:45 **Liefer, J. D.**; Garg, A.; Brown, C. M.; Benner, I.; Fyfe, M. H.; Campbell, D. A.; Follows, M. J.; Irwin, A. J.; Finkel, Z. V.: INTERACTIONS OF CELL SIZE AND PHYLOGENENY IN THE RESPONSE OF PHYTOPLANKTON MACROMOLECULAR COMPOSITION TO NITROGEN STARVATION (29436)

14:30 **Caron, D. A.**: PHOTOSYMBIOSIS, MIXOTROPHY, PARASITISM: NEGLECTED PROTISTAN TROPHIC MODES IN OCEAN BIOLOGY (29585)

14:45 **Blossom, H. E.**; Hansen, P. J.: THE LOSS OF MIXOTROPHY IN THE DINOFLAGELLATE ALEXANDRIUM PSEUDOGONYAULAX: IMPLICATIONS FOR TRADE-OFFS BETWEEN MUCUS TRAP PRODUCTION, TOXICITY AND PHAGOTROPHY (29049)

15:00 **Bittar, T.**; Bulski, K.; Parsons, R.; Giovannoni, S.; Carlson, C.; Harvey, E.: GROWTH, GRAZING AND VIRUS-INDUCED MORTALITY OF BACTERIOPLANKTON IN THE SARGASSO SEA (29898)

16:30 **O'Malley, B. P.**; Stockwell, J. D.: PARTIAL DIEL VERTICAL MIGRATION IN MYSIS: SPECIALIZED FEEDING STRATEGY OR A NIGHT OFF? (29950)

16:45 **Jaspers, C.**; Huwer, B.; Hinrichsen, H. H.; Biastoch, A.: REVEALING THE ROLE OF OCEAN CURRENTS FOR SECONDARY INVASIONS IN A HOLOPLANKTONIC SPECIES (29029)

17:00 **Roncalli, V.**; Hartline, D. K.; Cieslak, M. C.; Lenz, P. H.: *SAXITOXIN* RESISTANCE IN THE COPEPOD *CALANUS FINMARCHICUS* (28753)

17:15 **Nihongi, A.**; Wahlig, S.; Rubio, J.; Strickler, J. R.: FEEDING BEHAVIORS OF MYSIDS SPECIES: OBSERVATIONS, EXPERIMENTS, AND ENVIRONMENTAL IMPACT (29834)

TUESDAY

TUESDAY

008 CHANGES IN LARGE FRESHWATER ECOSYSTEMS: DRIVERS, RESPONSES, AND RESTORATION

Chair(s): Masumi Yamamuro, yamamuro@k.u-tokyo.ac.jp
Lyubov Burlakova, burlakle@buffalostate.edu
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Soren Brothers, sbrother@uoguelph.ca
Paul Sibley, psibley@uoguelph.ca

Location: 323 B

10:00 Sokolow, S. H.; **Jones, I. J.**; Jocque, M.; La, D.; Cords, O.; Knight, A.; Lund, A.; Wood, C. L.; Lafferty, K. D.; Hoover, C. M.; Collender, P. A.; Remais, J.; Lopez-Carr, D.; Fisk, J.; Kuris, A. M.; De Leo, G. A.: NEARLY 400 MILLION PEOPLE ARE AT HIGHER RISK OF SCHISTOSOMIASIS BECAUSE DAMS BLOCK THE MIGRATION OF SNAIL-EATING RIVER PRAWNS (28771)

10:15 **Karatayev, V. A.**; Nalepa, T. F.; Karatayev, A. Y.; Weidel, B.; Rudstam, L. G.; Burlakova, L. E.: LIVING FAST OR SLOW: HABITAT-SPECIFIC DEMOGRAPHY OF INVASIVES REGULATES THEIR LARGE-SCALE FOOD WEB IMPACTS (29980)

10:30 **Karatayev, A. Y.**; Burlakova, L. E.; Mehler, K.; Karatayev, V. A.; Nalepa, T.; Elgin, A.; Hinchey, E.: UNDERWATER VIDEO IS AN EFFECTIVE TOOL TO REVEAL DREISSENA SPATIAL DISTRIBUTION (28452)

10:45 **Silow, E. A.**; Krashchuk, L. S.; Onuchin, K. A.; Pislegina, E. V.; Rusanovskaya, O. O.; Shimaraeva, S. V.; Timofeyev, M. A.: DETECTING CHANGES IN LAKE BAIKAL PLANKTON: POSSIBLE DRIVERS (29571)

012 THE BIOGEOCHEMISTRY OF DISSOLVED ORGANIC MATTER

Chair(s): Thorsten Dittmar, thorsten.dittmar@uol.de
Helena Osterholz, helena.osterholz@uol.de
Aron Stubbins, aron.stubbins@skio.uga.edu
Sasha Wagner, sasha.wagner@skio.uga.edu

Location: 304 A/B

10:00 **Schiebel, H. N.**; Wang, X.; Gardner, G. B.; Peri, F.; Chen, R. F.: SEASONAL EXPORT OF DISSOLVED ORGANIC MATTER FROM A NEW ENGLAND SALT MARSH (28447)

10:15 **Kasuga, I.**; Yuthawong, V.; Kurisu, F.; Furumai, H.: MOLECULAR SOURCE TRACKING OF DISSOLVED ORGANIC MATTER IN A HYPEREUTROPHIC LAKE BY ORBITRAP MASS SPECTROMETRY (28459)

10:30 **Seidel, M.**; Manecki, M.; Herlemann, D. P.; Schulz-Bull, D.; Jürgens, K.; Dittmar, T.: COMPOSITION AND TRANSFORMATION OF DISSOLVED ORGANIC MATTER IN THE BALTIC SEA (29316)

10:45 **Foreman, R. K.**; Karl, D. M.: ADVANCING A NEW METHOD FOR THE DIRECT DETERMINATION OF DISSOLVED ORGANIC NITROGEN (DON) IN SEAWATER (29146)

12:00 **Letscher, R. T.**; Primeau, F.; Moore, J. K.: LATERAL TRANSPORT AND UTILIZATION OF DON AND DOP: THE FINAL PIECE IN CLOSING THE SUBTROPICAL OCEAN NUTRIENT BUDGETS (29162)

12:15 **Teisserenc, R.**; Le Dantec, T.; Myers-Pigg, A.; Louchouarn, P.; Tananaev, N.; Gandois, L.; Probst, J.: CHARACTERIZATION AND DYNAMIC OF DISSOLVED ORGANIC MATTER IN THE YENISEI RIVER. (29484)

12:30 **Hutchins, R. H.**; Aukes, P.; Schiff, S. L.; Dittmar, T.; Prairie, Y. T.; del Giorgio, P. A.: CARBON DIOXIDE AND DISSOLVED ORGANIC MATTER COMPOSITION LINKAGES IN A BOREAL STREAM CONTINUUM (29633)

12:45 **Catalan, N.**; Peter, H.; Rofner, C.; Drewes, F.; Dittmar, T.; Tranvik, L.; Somaruga, R.; Pérez, M. T.: EFFECTS OF TREE-LINE CHANGES ON LAKE DOM COMPOSITION AND BIODEGRADATION (29713)

14:30 **Spencer, R. G.**; Mann, P. J.; Powers, L.; Bittar, T. B.; Dittmar, T.; McIntyre, C.; Eglinton, T. I.; Zimov, N.; Stubbins, A.: ANCIENT PERMAFROST CARBON RESISTS DEGRADATION BY SUNLIGHT (29130)

14:45 **Fowler, R. A.**; Saros, J. E.; Osburn, C. L.: SHIFTING DOC CONCENTRATION AND QUALITY IN ARCTIC LAKES OF SOUTHWEST GREENLAND: EXPERIMENTAL ASSESSMENT OF POSSIBLE MECHANISMS (29563)

15:00 **Neumann, R. B.**; Pracht, L. E.; Tfaily, M. M.; Ardissono, R.: MOLECULAR CHARACTERIZATION OF DISSOLVED ORGANIC MATTER MOBILIZED FROM BANGLADESHI AQUIFER SEDIMENT: TRACKING COMPOSITIONAL CHANGE DURING MICROBIAL UTILIZATION (28413)

15:15 **Kamjunke, N.**; Hertkorn, N.; Harir, M.; Schmitt-Kopplin, P.; Norf, H.; von Tümpling, W.; Weitere, M.; Herzsprung, P.: A NEW APPROACH TO RELATE MOLECULAR CHARACTERIZATION OF DISSOLVED ORGANIC MATTER (DOM) WITH DEGRADATION AND BACTERIAL ACTIVITY IN STREAMS (28470)

16:30 **Graeber, D.**; Poulsen, J. R.; Heinz, M.; Rasmussen, J. J.; Zak, D.; Gücker, B.; Kronvang, B.; Kamjunke, N.: ARE PLANKTONIC BACTERIA KEY ORGANISMS FOR DOC PROCESSING IN SMALL STREAMS? (28838)

16:45 **Harfmann, J. L.**; Hernes, P. J.; Chuang, C. Y.: LIGNIN LABILITY: QUANTIFYING THE ACCESSIBILITY OF LIGNIN TO THE MICROBIAL FOOD WEB (29709)

17:00 Srain, B. M.; **Pantoja, S.**: FERMENTATION OF ORGANIC MATTER IN THE WATER COLUMN OF THE OXYGEN MINIMUM ZONE OFF CHILE (29759)

17:15 **Talmy, D.**; Follett, C. L.; Follows, M. J.: DOES VIRAL LYSIS INFLUENCE DISSOLVED ORGANIC MATTER ELEMENTAL COMPOSITION? (29920)

017 BACTERIAL INTERACTIONS WITH EUKARYOTIC PLANKTON

Chair(s): Xavier Mayali, mayali1@llnl.gov
Marilou Sison-Mangus, msisonma@ucsc.edu

Location: 314

10:00 **Smriga, S.**; Juarez, G.; Fernandez, V.; Carrara, F.; Stocker, R.: MICROSCALE RESOURCE PATCHES AMONG STRESSED PHYTOPLANKTON CELLS PRESENT GROWTH OPPORTUNITIES FOR BACTERIA (30109)

10:15 **Harvey, E. L.**; Kirby, C.; Mincer, T.; Moore, B.; Whalen, K. E.: A WHITE WALKER? TETRABROMOPYRROLE CAUSES RAPID PHYTOPLANKTON MORTALITY (29646)

10:30 **Hattenrath-Lehmann, T. K.**; Gobler, C. J.: HARMFUL DINOFLAGELLATE BLOOMS CAUSED BY ALEXANDRIUM FUNDYENSE AND DINOPHYSIS ACUMINATA HARBOR UNIQUE MICROBIOMES: EVIDENCE FROM HIGH-THROUGHPUT SEQUENCING (29081)

10:45 **Diner, R. E.**; Dupont, C. L.; Allen, A. E.; Weyman, P. D.: HORIZONTAL TRANSFER OF FOREIGN DNA FROM BACTERIA TO DIATOMS AND AUTONOMOUS MAINTENANCE BASED ON GC CONTENT (30065)

T REPRESENTS TUTORIAL PRESENTATIONS

12:00 Bizic-Ionescu, M.; Ionescu, D.; **Grossart, H. P.**: MICROBIAL INTERACTIONS ON PHYTOPLANKTON AGGREGATES (29886)

12:15 **Whalen, K. E.**; Kirby, C. J.; Nicholson, R. M.; Harvey, E. L.: BATTLE IN THE BLOOM: BACTERIAL REGULATION OF ALGAL COMMUNITY STRUCTURE IN THE OCEAN (28393)

12:30 **Landa, M.**; Moran, M. A.: BACTERIAL RESPONSE DURING GROWTH WITH TWO PHYTOPLANKTON SPECIES AS REVEALED BY TIME COURSE TRANSCRIPTOMICS (28608)

12:45 **Zeigler Allen, L. A.**; Rabines, A.; McCrow, J. P.; Goodwin, K.; Allen, A. E.: PELAGIC MICROBIAL LINKAGES IN THE SOUTHERN CALIFORNIA CURRENT ECOSYSTEM (29976)

14:30 **Muñoz-Marin, M.**; Shilova, I.; Farnelid, H.; Zehr, J. P.: THE SYMBIOTIC N2 FIXING CYANOBACTERIUM UCYN-A GENES HAVE UNIQUE DIEL TRANSCRIPTION PATTERNS (29857)

14:45 Basu, S.; Gledhill, M.; **Shaked, Y.**: FOES OR FRIENDS - MUTUALISM OR COMPETITION FOR DUST-IRON BETWEEN TRICHODESMIUM AND ITS ASSOCIATED BACTERIA? (28514)

15:00 **Caputo, A.**; Pernice, M. C.; Foster, R. A.: MOLECULAR AND MORPHOLOGICAL CHARACTERIZATION OF MARINE DIATOM-DIAZOTROPHS ASSOCIATIONS (DDAS) (28870)

15:15 **Gradoville, M. R.**; Crump, B. C.; Letelier, R. M.; Church, M. J.; White, A. E.: THE DIVERSITY AND FUNCTIONAL POTENTIAL OF MICROBIAL COMMUNITIES ASSOCIATED WITH THE COLONIAL, N_2-FIXING CYANOBACTERIUM *TRICHODESMIUM* (29687)

16:30 **Alegado, R. A.**: BACTERIAL LIPIDS REGULATE MULTICELLULAR DEVELOPMENT IN THE CLOSEST LIVING RELATIVES OF ANIMALS (28645)

16:45 **Datta, M. S.**; Almada, A. A.; Baumgartner, M.; Mincer, T. J.; Tarrant, A. M.; Polz, M. F.: INTER-INDIVIDUAL VARIABILITY IN COPEPOD MICROBIOMES REVEALS BACTERIAL NETWORKS LINKED TO HOST PHYSIOLOGY (29034)

17:00 **De Corte, D.**; Srivastava, A.; Koski, M.; Garcia, A. J.; Sintes, E.; Herndl, G. J.: PHYLOGENETIC AND METAGENOMIC ANALYSIS OF ZOOPLANKTON-ASSOCIATED BACTERIAL COMMUNITY (29476)

17:15 **Shoemaker, K. M.**; Daley, M. C.; Duhamel, S.; Altabet, M. A.; Moisander, P. H.: SEAWATER BACTERIAL COMMUNITY CHANGE INDUCED BY PRESENCE OF COPEPODS (29971)

019 THE BIOLOGICAL CARBON PUMP IN THE TROPICAL PACIFIC OCEAN

Chair(s): Sophie Bonnet, sophie.bonnet@mio.osupytheas.fr
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Angela Knapp, anknapp@fsu.edu
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Thierry Moutin, thierry.moutin@mio.osupytheas.fr
Kelvin Richards, rkelvin@hawaii.edu

Location: 313 B

12:00 **Capone, D. G.**: THE BIOLOGICAL PUMP IN THE TROPICAL PACIFIC OCEAN BIOME: AN OVERVIEW* (28884)

12:15 **Moutin, T.**: PHOSPHATE AVAILABILITY AND THE ULTIMATE CONTROL OF THE BIOLOGICAL PUMP IN THE SOUTH TROPICAL PACIFIC OCEAN (28365)

12:30 Qiu, Y.; Liu, X.; **Huang, B.**: BIOLOGICAL CARBON PUMP IN SUBTROPICAL CHINA SEAS (28814)

12:45 **Rousselet, L.**; De Verneil, A.; Doglioli, A. M.; Petrenko, A. A.; Maes, C.; Blanke, B.: CHARACTERIZATION OF THE MESOSCALE CIRCULATION DURING THE OUTPACE CRUISE (SOUTHWEST PACIFIC) (28382)

14:30 **Bonnet, S.**; Caffin, M.; Berthelot, H.; Grosso, O.; Moutin, T.: A HOT SPOT OF N2 FIXATION IN THE WESTERN TROPICAL SOUTH PACIFIC PLEADS FOR A SPATIAL DECOUPLING BETWEEN N2 FIXATION AND DENITRIFICATION IN THE SOUTH PACIFIC (29346)

14:45 **CAFFIN, M.**; MOUTIN, T.; BOURUET-AUBERTOT, P.; DOGLIOLI, A. M.; GROSSO, O.; HELIAS-NUNIGE, S.; LEBLOND, N.; GIMENEZ, A.; de VERNEIL, A.; BONNET, S.: N_2 FIXATION AND N-BUDGET IN THE PHOTIC LAYER OF THREE STATIONS REPRESENTATIVE OF THE SW PACIFIC OCEAN (OUTPACE CRUISE, 2015) (28379)

15:00 **Berman-Frank, I. R.**; Spungin, D. R.; Belkin, N. R.; Van-Wambeke, F.; Gimenez, A.; Caffin, M.; Stengren, M.; Foster, R. A.; Knapp, A.; Moutin, T.; Bonnet, S.: PROGRAMMED CELL DEATH IN DIAZOTROPHS AND THE FATE OF C AND N IN THE SOUTHWESTERN SUBTROPICAL PACIFIC (29140)

15:15 **Garcia-Robledo, E.**; Padilla, C. C.; Aldunate, M.; Stewart, F. J.; Ulloa, O.; Paulmier, A.; Gregori, G.; Revsbech, N. P.: PHOTOSYNTHESIS BELOW THE OXIC-ANOXIC INTERFACE: MICROBIAL ACTIVITY IN THE SECONDARY CHLOROPHYLL MAXIMUM OF PACIFIC OXYGEN MINIMUM ZONES (28503)

16:30 **Selden, C. R.**; Mulholland, M. R.; Widner, B.; Bernhardt, P. W.; Macías Tapia, A.; Jayakumar, A.: SIGNIFICANCE OF ANOXIC AND APHOTIC DIAZOTROPHY IN THE EASTERN TROPICAL NORTH PACIFIC OXYGEN DEFICIENT ZONE (28747)

16:45 **Jayakumar, A.**; Chang, B. X.; Mulholland, M. R.; Ward, B. B.: ABUNDANCE, DIVERSITY AND ACTIVITIES OF DIAZOTROPHS IN OXYGEN DEFICIENT WATERS (29546)

17:00 Kienast, M.; **Lehmann, N.**; Granger, J.; Martinez-Mendez, G.; Mohtadi, M.: NITRATE ISOTOPE EVIDENCE OF THE ORIGIN OF SUBSURFACE NITRATE IN THE WESTERN EQUATORIAL PACIFIC, NORTH VERSUS SOUTH OF THE EQUATOR (29503)

17:15 **Knapp, A. N.**; Grosso, O.; Leblond, N.; Moutin, T.; Bonnet, S.; Caffin, M.: QUANTIFYING DI-NITROGEN FIXATION AND ITS CONTRIBUTION TO EXPORT PRODUCTION USING D15N BUDGETS ALONG UNIQUE GEOCHEMICAL GRADIENTS IN THE SOUTHWEST PACIFIC OCEAN (28593)

024 SUPPORTING DATA-INTENSIVE FRESHWATER AND MARINE RESEARCH: INTEGRATING INFORMATICS, INFRASTRUCTURE, DATABASES AND OPEN SCIENCE

Chair(s): Helen Glaves, hmg@bgs.ac.uk
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Emily H. Stanley, ehstanley@wisc.edu
Angelicque White, awhite@coas.oregonstate.edu

Location: 323 A

10:00 **Dahlan, K. R.**: INFORMATION PRACTICES IN OCEANOGRAPHY (29524)

10:15 **Law, E.**: WATERTREK: A SCALABLE AQUATIC DATA ANALYTIC FRAMEWORK (30144)

10:30 Del Rio, J.; Jirka, S.; Toma, D.; Martinez, E.; **Pearlman, J.**; O'Reilly, T.: NEXOS CONTRIBUTIONS TO END-TO-END DATA FLOW AND ACCESS TO MARINE SENSOR SYSTEMS (28776)

10:45 **Ramamurthy, M.**: UNIDATA: A CORNERSTONE CYBERINFRSTRUCTURE FACILITY FOR THE GEOSCIENCES (28605)

Location: 308 A/B

16:30 **Lohrenz, S. E.**; Sosik, H. M.: SATELLITE, RADIOMETER, AND IN SITU TIME-SERIES OBSERVATIONS OF PHYTOPLANKTON COMMUNITY DYNAMICS AT THE MARTHA'S VINEYARD COASTAL OBSERVATORY (29028)

16:45 **Stockwell, J. D.**; Anneville, O.; Patel, V.; Looi, A.; Carey, C.; Dur, G.; Ibelings, B.; MacIntyre, S.; Morabito, G.; Noges, P.; Pierson, D.; Rusak, J.; Souissi, S.; Straile, D.; Thackeray, S.: GLOBAL EVALUATION OF THE IMPACTS OF STORMS ON FRESHWATER HABITAT AND STRUCTURE OF PHYTOPLANKTON ASSEMBLAGES (GEISHA) (28644)

17:00 **Stanley, E. H.**; Webster, K. E.; Soranno, P. A.; Oliver, S. K.; Lottig, N. R.; Collins, S. M.; Cheruvelil, K. S.: DATA ACCUMULATION PATTERNS FOR LAKES IN NORTHEASTERN AND MIDWESTERN U.S. STATES (30108)

17:15 **Saminsky, M. W.**; Gallager, S.; Microsoft Azure Machine Learning Team, a.: STREAMING, PROCESSING, AND PROVIDING ON-DEMAND BIOLOGICAL OCEANOGRAPHIC DATA USING CLOUD COMPUTING TO TRANSFORM OUR UNDERSTANDING OF PLANKTON BIODIVERSITY (30000)

026 UNDERGRADUATE RESEARCH IN THE AQUATIC SCIENCES

Chair(s): David Fields, dfields@bigelow.org
Elizabeth Rom, elrom@nsf.gov

Location: 306 A

16:30 Churches, N.; Hall, M.; Foley, B.; **Cheung, E.**; Abbasi, M.: A NEW BEHAVIORAL PHENOTYPING STRATEGY FOR PACIFIC OYSTER (CRASSOSTREA GIGAS) LARVAE REVEALS COHORT-LEVEL EFFECTS ON COPPER TOXICITY SWIMMING RESPONSE. (28809)

16:45 **Peart, S. G.**; Matrai, P. A.: PHYTOPLANKTON GROWTH IN THE PRESENCE OF MICROPLASTICS (28353)

17:00 **Frazier, A. J.**; Klein, A.; Sweet, S.: CONTAMINATION IN THE BENTHIC MARINE ECOSYSTEM: MCMURDO STATION, ANTARCTICA (29206)

17:15 **Herzog, A. N.**; Aeppli, C.: LINKING CHEMICAL COMPOSITION TO TOXICITY OF FRESH AND WEATHERED OIL SAMPLES COLLECTED FROM THE 2010 GULF OF MEXICO OIL SPILL (28354)

027 TRANSITIONING ECOLOGICAL FORECASTING RESEARCH TO OPERATIONAL APPLICATIONS

Chair(s): Becky Baltes, becky.baltes@noaa.gov
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Woody Turner, woody.turner@nasa.gov

Location: 301 B

14:30 **Sheldon, P. D.**; Chen, B.; Schaaf, C.; Lee, Z.; Wei, J.; Shang, Z.; Pahlevan, N.: WATER QUALITY MONITORING OF THE BOSTON HARBOR RECOVERY FROM SPACE: IMPLICATIONS FOR ESTUARINE MANAGEMENT (29903)

14:45 **Luettich, R. A.**; Baltes, R. E.; Nichols, C. R.: US IOOS® COASTAL AND OCEAN MODELING TESTBED AS AN ECOLOGICAL FORECASTING TRANSITION PLATFORM (29781)

15:00 **Perry, R. L.**: PUBLIC-PRIVATE OCEAN OBSERVING COLLABORATIONS IN THE GULF OF MEXICO (30096)

15:15 **Ortiz, I.**; Aydin, K.; Hermann, A.: FROM ZERO TO OPERATIONAL DYNAMIC DOWNSCALING FOR HINDCASTS, FORECASTS, AND BEYOND (30129)

16:30 **Li, Y.**; Stumpf, R. P.; McGillicuddy, D. J.; He, R.: POPULATION DYNAMICS OF ALEXANDRIUM FUNDYENSE IN THE GULF OF MAINE DURING AN INTENSE RED TIDE: MERIS OBSERVATIONS AND MODEL SIMULATIONS (29373)

16:45 **Anderson, C. R.**; Kudela, R. M.; Anderson, D. M.; Bahr, F. L.; Chao, Y.; Robinson, D. H.; Stumpf, R. P.: CROSSING THE "VALLEY OF DEATH" WITH THE CALIFORNIA HARMFUL ALGAE RISK MAPPING (C-HARM) SYSTEM (29658)

17:00 **Ishikawa, Y.**; Igarashi, H.; Wakamatsu, T.; Tanaka, Y.; Nishikawa, H.; Nishikawa, S.; Kamachi, M.: NUMERICAL FORECASTING SYSTEM OF OCEAN ENVIRONMENTS FOR SQUID FISHERIES (29251)

17:15 **Brodie, S.**; Hobday, A. J.; Smith, J. A.; Spillman, C. M.; Hartog, J. R.; Everett, J. D.; Taylor, M. D.; Gray, C. A.; Suthers, I. M.: SEASONAL FORECASTING OF MAHI MAHI DISTRIBUTION IN EASTERN AUSTRALIA TO AID RECREATIONAL FISHERS AND MANAGERS (28836)

028 SPATIAL-TEMPORAL ORGANIZATION OF PLANKTON COMMUNITIES: FROM OBSERVATION TO THEORY AND INTEGRATED MODELS

Chair(s): Ilia Ostrovski, ostrovsky@ocean.org.il
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Location: 323 B

12:00 **Yamazaki, H.**; Tanaka, M.; Doubell, M.: OCEANIC TURBULENCE AND MICRO-SCALE PHYTOPLANKTON DISTRIBUTION* (28498)

12:15 **Homma, H.**; Griffiths, M. P.; Priyadarshi, A.; Yamazaki, H.: APPLICATION OF THE NPZ CLOSURE ECOSYSTEM MODEL TO 1D PHYSICAL MODEL (29218)

12:30 **Mandal, S.**; Smith, S. L.; Yamazaki, H.: THE IMPACT OF HIGHLY INTERMITTENT PHYTOPLANKTON DISTRIBUTIONS OF DIFFERENT SIZE CLASSES: A MODELLING APPROACH* (29375)

T REPRESENTS TUTORIAL PRESENTATIONS

12:45 **Wentzky, V.**; Jäger, C.; Rinke, K.: SEASONAL AND VERTICAL TRAIT DYNAMICS IN PHYTOPLANKTON COMMUNITIES DURING OLIGOTROPHICATION – RESULTS FROM OVER 50 YEARS OF OBSERVATION (29322)

14:30 **Clayton, S.**; Ribalet, F.; Swalwell, J.; Lévy, M.; Armbrust, E. V.: SUBMESOSCALE FRONTS STRUCTURE AND ENHANCE THE BIODIVERSITY OF PICOPHYTOPLANKTON COMMUNITIES (29698)

14:45 **Vislova, A.**; Aylward, F. O.; Romano, A.; Sosa, O. A.; Den Uyl II, P. A.; DeLong, E. F.: A DEPTH PROFILE OF DIEL PERIODICITY IN MARINE PICOPLANKTON YIELDS INSIGHT INTO ECOSYSTEM STRUCTURE AND FUNCTION (30006)

15:00 **Kubiszyn, A. M.**; Wiktor, J. M.; Wiktor, J. M.; Kristiansen, S.; Gabrielsen, T.: SEASONAL DEVELOPMENT OF PLANKTONIC PROTIST COMMUNITIES OF ADVENTFJORDEN WATERS (WEST SPITSBERGEN) IN TERMS OF THE ENVIRONMENTAL CONDITIONS (28395)

15:15 **Scofield, A. E.**; Rudstam, L. G.; Watkins, J. M.; Hoffman, J.; Carrick, H.: ZOOPLANKTON SPATIAL DISTRIBUTION IN SOUTHERN LAKE MICHIGAN: DRIVERS OF VERTICAL MIGRATION (29510)

16:30 **Tanaka, M.**; Yamazaki, H.; Endo, Y.; Murashige, R.; Gallager, S. M.: FLOW-LIMITED DIURNAL VERTICAL MIGRATION (29334)

16:45 **Whitmore, B. M.**; Ohman, M. D.; Sherman, J. T.; Davis, R. E.: DIEL CHANGES IN MESOZOOPLANKTON VERTICAL MICROSTRUCTURE AND IMPLICATIONS FOR PREDATION AND CARBON CYCLING: VIEWS FROM A ZOOGLIDER (28773)

17:00 **Shahrestani, S.**; Bi, H.; Liang, D.; Zhang, L.: SPATIAL AND TEMPORAL DISTRIBUTION OF THE ATLANTIC SEA-NETTLE IN CHESAPEAKE BAY; NOVEL USAGE OF A SONAR IMAGING SYSTEM AND HIGH-DIMENSIONAL SPATIAL MODELS. (29758)

17:15 **Nickels, C. F.**: EUPHAUSIID SPATIAL DISTRIBUTION ACROSS A STEEP BATHYMETRIC FEATURE AND IMPLICATIONS FOR WHALE PREDATION (28801)

031 GLOBAL REMOTE SENSING OF INLAND WATERS

Chair(s): Claudia Giardino, giardino.c@irea.cnr.it
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Location: 323 A

12:00 **Spyrakos, E. K.**; Hunter, P. D.; Simis, S.; O'Donnell, R.; Miller, C.; Scott, M.; Tyler, A. N.: DIVERSITY OF OPTICAL PROPERTIES AND WATER TYPES IN THE LIMNADES DATABASE (29460)

12:15 **Tyler, A. N.**; Hunter, P. D.; Spyrakos, E.; Neil, C.; Simis, S. G.; Groom, S.; Martinez-Vicente, V.; Merchant, C. M.; O'Donnel, R.; Miller, C.; Scott, E. M.; Brockmann, C.: GLOBOLAKES: SELECTION OF ALGORITHMS FOR GLOBAL REMOTE SENSING OF LAKE BIOGEOCHEMICAL PROPERTIES (30148)

12:30 **Schalles, J. F.**; Hladik, C. M.; Yacobi, Y. Z.; Olley, J. T.; O'Donnell, J. P.: CHLOROPHYLL RETRIEVAL ALGORITHMS AND EFFECTS OF HIGHLY VARIABLE TSS AND CDOM USING A LARGE SPECTRAL LIBRARY OF INLAND AND COASTAL OBSERVATIONS (30103)

12:45 **Olmanson, L. G.**; Brezonik, P. L.; Finlay, J. C.; Bauer, M. E.; Griffin, C. G.; Allen, B.; Hozalski, R. M.: USING LANDSAT 8 AND SENTINEL 2 DATA FOR REGIONAL WATER QUALITY MEASUREMENTS IN OPTICALLY COMPLEX INLAND WATERS (29527)

14:30 Giardino, C.; **Bresciani, M.**; Cazzaniga, I.; Vaiciute, D.; Toth, V.: QUALIFICATION OF WATER QUALITY RETRIEVAL FROM OLI-MSI-OLCI FOR EUROPEAN INLAND WATERS (28876)

14:45 **Lehmann, M. K.**; Allan, M.; Nguyen, U.; Hamilton, D. P.: NEW ZEALAND-WIDE LAKE COLOUR STATISTICS FROM SPACEBORNE SENSORS (29340)

15:00 **Urquhart, E. A.**; Schaeffer, B. A.; Werdell, J.; Loftin, K. A.; Stumpf, R. P.: A METHOD FOR MONITORING CYANOBACTERIA HARMFUL ALGAL BLOOM SPATIAL EXTENT USING SATELLITE REMOTE SENSING DATA (28986)

15:15 **Ogashawara, I.**; Li, L.: IMPROVEMENT OF PHYCOCYANIN ESTIMATION BY ELIMINATING THE EFFECT OF CHLOROPHYLL-*A* AND COLORED DISSOLVED MATTER (29995)

16:30 **Zhang, Y.**: MONITORING THE RIVER PLUME INDUCED BY HEAVY RAINFALL EVENTS IN LARGE, SHALLOW, LAKE TAIHU USING MODIS 250 M IMAGERY (28808)

16:45 **Silsbe, G. M.**: TRACKING ECOLOGICAL CHANGE IN LAKE VICTORIA (EAST AFRICA) FROM SPACE: CHALLENGES AND PERSPECTIVE. (29003)

17:00 **Kutser, T.**; Rohtla, L.; Verpoorter, C.; Seekell, D.; Tranvik, L.: ESTIMATING GLOBAL LAKE VOLUME FROM REMOTE SENSING DATA (29763)

17:15 **Simis, S. G.**; Matthews, M. W.; Vaiciute, D.; Hunter, P. D.; Spyrakos, E.: MIXED SIGNALS: DERIVING VERTICAL MIXING STATE FROM HYPERSPECTRAL REFLECTANCE (28506)

039 FUTURE WATER - INTER- AND TRANSDISCIPLINARITY IN METROPOLITAN AQUATIC SCIENCES

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Julia Kristina Nuy, julia.nuy@uni-due.de

Location: 323 C

14:30 **Freimuth, C.**; Nuy, J. K.; Euler, J.: INTER- AND TRANSDISCIPLINARY RESEARCH: COMPLETE NONSENSE OR FASCINATING OPPORTUNITY?[T] (29516)

15:00 **Nuy, J. K.**; Jensen, M.; Grossmann, L.; Bock, C.; Wodniok, S.; Beisser, D.; Riemenschneider, M.; Heider, D.; Psenner, R.; Denecke, M.; Bayer, P.; Boenigk, J.: POTENTIALS OF METATRANSCRIPTOMICS FOR FRESHWATER MONITORING (28672)

15:15 **Schertzinger, G.**; Sures, B.: METAL IMMISIONS FROM COMBINED SEWER OVERFLOWS INTO SURFACE WATERS (LESSONS LEARNED FOR WATER MANAGEMENT) (28683)

16:30 **Itzel, F.**; Jewell, K.; Ternes, T.; Schmidt, T.; Tuerk, J.; Gehrmann, L.: ANTAGONISTIC EFFECTS DURING HOSPITAL WASTEWATER TREATMENT – COMBINATION OF CHEMICAL AND EFFECT BASED ANALYTICS (28565)

16:45 **Knoop, O.**; Itzel, F.; Tuerk, J.; Schmidt, T. C.: IDENTIFYING THE RISK – MONITORING OF WATER QUALITY NEEDS MORE THAN CONVENTIONAL CHEMICAL ANALYSIS (28914)

17:00 **Kosse, P.**; Lübken, M.; Schmidt, T. C.; Lange, R. L.; Wichern, M.: SALT-INDUCED EFFECTS ON STRIPPING OF NITROUS OXIDE DURING WASTEWATER TREATMENT (28659)

17:15 **Euler, J.**: ON WATER CONFLICTS AND THE POTENTIALS OF SELF-ORGANIZATION AND COMMONING (29365)

041 SEDIMENTS WITH HYDRODYNAMICALLY DRIVEN FLOW, FROM STREAM TO SHELF

Chair(s): Jud Harvey, jwharvey@usgs.gov
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Location: 308 A/B

10:00 **Gomez-Velez, J. D.**: RIVERINE EXCHANGE FLUXES FROM MOUNTAINS TO THE SEA: PAST, PRESENT, AND FUTURE * (29852)

10:15 **Michael, H. A.**; Duque, C.; Heiss, J. W.; Kim, K. H.; Scott, K. C.; Russoniello, C. J.; Brooks, T. W.; Ullman, W. J.: PHYSICAL-BIOGEOCHEMICAL LINKAGES CONTROLLING LAND-SEA SOLUTE FLUXES FROM BEACH TO SHELF[T] (29776)

10:45 **Harvey, J. W.**: FLOOD DISTURBANCE AS A REGULATOR OF STREAM METABOLISM AND CHEMICAL REACTIVITY AT THE STREAMBED (29062)

12:00 **Arnon, S.**; De Falco, N.; Fox, A.: HYPORHEIC EXCHANGE AND CARBON UPTAKE IN STREAMBEDS: EFFECTS OF LOSING AND GAINING FLOW CONDITIONS (28366)

12:15 **Eyre, B. D.**; Cyronak, T.; Drupp, P.; De Carlo, E.; Andersson, A.; Kessler, A.; Cook, P.: CARBON AND NITROGEN CYCLING IN PERMEABLE CORAL REEF CARBONATE SEDIMENTS (28792)

12:30 Drupp, P. S.; **De Carlo, E. H.**; Mackenzie, F. T.: BIOGEOCHEMICAL AND PHYSICAL CONTROLS ON THE INORGANIC CARBON CHEMISTRY IN POREWATER OF CORAL REEFS, OAHU, HAWAII (29186)

12:45 **Fogaren, K. E.**; Merrifield, M. A.; Sansone, F. J.; Hannides, A. K.; Glazer, B. T.; Pawlak, G.; Fram, J. P.: QUANTIFYING POREWATER VELOCITIES IN PERMEABLE MARINE SEDIMENTS FROM TEMPERATURE TIME SERIES (30120)

14:30 **Holtappels, M.**; Ahmerkamp, S.; Neumann, A.; Marchant, H.; Winter, C.; Kuypers, M. M.: SCALING OF BENTHIC FLUXES IN PERMEABLE SEDIMENTS (28883)

14:45 **Ahmerkamp, S.**; Winter, C.; Krämer, K.; de Beer, D.; Janssen, F.; Friedrich, J.; Marchant, H.; Kuypers, M.; Holtappels, M.: MEASURED OXYGEN DYNAMICS IN PERMEABLE SEDIMENTS (29343)

15:00 **Kessler, A. J.**; Bourke, M. F.; Koh, S.; Glud, R. N.; Greening, C.; Cook, P. L.: FERMENTATIVE HYDROGEN PRODUCTION BY ALGAE IN PERMEABLE SEDIMENTS (28796)

15:15 **Packman, A. I.**; Roche, K. R.; Xie, M.; Alsina, M. A.; Aubeneau, A. F.; Aquino, T.; Bolster, D.; Gaillard, J. F.: INTERACTIONS BETWEEN FLOW AND BIOTURBATION CONTROL SEDIMENT MIXING, DIAGENESIS, AND METALS EFFLUX (29972)

063 MICROBIAL ECOSYSTEM SERVICES AND INTERACTIVE EFFECTS ON ORGANIC MATTER PROCESSING ALONG THE LAND-SEA CONTINUUM

Chair(s): Allison A. Fong, allison.fong@awi.de
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Anne Kellerman, akellerman@fsu.edu

Location: 306 B

10:00 **Steen, A. D.**; Quigley, L. M.; Spencer, R. G.; Stubbins, A.; Buchan, A.: TOWARDS A MORE MECHANISTIC UNDERSTANDING OF THE PRIMING EFFECT IN AQUATIC ECOSYSTEMS (29788)

10:15 **Sanches, L. F.**; Guenet, B.; Esteves, F. A.: EXPLORING THE DRIVERS CONTROLLING THE OCCURRENCE OR ABSENCE OF PRIMING EFFECT IN AQUATIC SYSTEM (29141)

10:30 **Yeh, T. C.**; Krennmayr, K.; Liao, C. S.; Huang, J. C.; Zehetner, F.; Hein, T.: AQUATIC MICROBIAL PROCESSING ON TERRESTRIAL-DERIVED DISSOLVED ORGANIC MATTER (29166)

10:45 **Piñeiro-Juncal, N.**; Mateo, M. A.; Martínez-Cortizas, A.: A SEMI-QUANTITATIVE METHOD TO STUDY MICROBIAL FUNCTIONAL ACTIVITY DISTRIBUTION ALONG POSIDONIA SOIL PROFILES. (28886)

12:00 **Bulseco-McKim, A.**; Giblin, A. E.; Tucker, J.; Sanderman, J.; Spivak, A.; Hiller, K.; Bowen, J. L.: LINKING MICROBIAL COMMUNITY STRUCTURE TO DECOMPOSITION OF SALT MARSH SEDIMENT ORGANIC MATTER IN RESPONSE TO NITRATE EXPOSURE (29494)

12:15 Arfken, A.; **Song, B. K.**: IMPORTANCE OF ATYPICAL DENITRIFIERS IN OYSTER N_2 PRODUCTION (29727)

12:30 **Broman, E.**; Sjöstedt, J.; Sachpazidou, V.; Hylander, S.; Pinhassi, J.; Dopson, M.: SHIFTS IN BALTIC SEA COASTAL 'DEAD ZONE' SEDIMENT OXYGEN LEVELS REGULATE MICROBIAL COMMUNITY STRUCTURE AND CYCLING OF SULFUR, METHANE AND ORGANIC MATTER (28500)

12:45 **Hiller, K.**; Foreman, K.; Benoit, J.; Bulseco-McKim, A.: EFFECTS OF MERCURY ADDITION ON MICROBIAL COMMUNITY COMPOSITION AND MERCURY METHYLATION INSIDE PERMEABLE REACTIVE BARRIERS (29559)

068 SPATIAL AND TEMPORAL DYNAMICS OF AQUATIC MICROBIAL COMMUNITIES

Chair(s): Sophie Clayton, sclayton@uw.edu
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Nicolas Tromas, nicolas.tromas@umontreal.ca

Location: 305 A/B

10:00 **Teittinen, A.**; Wang, J.; Strömgård, S.; Soininen, J.: LOCAL AND GEOGRAPHICAL FACTORS JOINTLY DRIVE ELEVATIONAL PATTERNS IN POND MICROBES (28858)

10:15 **Siemering, B.**; Inall, M.; Bresnan, E.; Davidson, K.: THE ADVECTIVE TRANSPORT OF HARMFUL PHYTOPLANKTON IN NORTH WEST EUROPEAN SHELF SEAS (28405)

[T] REPRESENTS TUTORIAL PRESENTATIONS

10:30 **Hamdan, L. J.**; Damour, M.; Salerno, J. L.: THE INFLUENCE OF SHIPWRECKS ON BIOGEOGRAPHY AND DISPERSAL OF SEDIMENT MICROBIOMES IN THE GULF OF MEXICO (29572)

10:45 Balch, W. M.; **Drapeau, D. T.**; Bowler, B. C.; Lubelczyk, L. C.; Mitchell, C. M.; Lyczkowski, E. R.: BIOGEOGRAPHY, BIOGEOCHEMISTRY, TRANSPORT AND FATE OF PARTICULATE CARBON ASSOCIATED WITH THE GREAT CALCITE BELT (29655)

12:15 **Tolar, B. B.**; Reji, L.; Smith, J. M.; Chavez, F. P.; Francis, C. A.: SPATIOTEMPORAL COMMUNITY DYNAMICS OF NITROGEN-CYCLING ARCHAEA AND BACTERIA IN MONTEREY BAY, CA (29717)

12:30 **Preheim, S. P.**; Arora-Williams, K.; Gnanadesikan, A.; Holder, C.; Alm, A.; Olesen, S. W.; Hemond, H.; Scandella, B.; Delwiche, K. B.: USING A BIOGEOCHEMICAL MODEL TO INTERPRET THE SPATIAL AND TEMPORAL DYNAMICS OF MICROORGANISMS IN SEASONALLY STRATIFIED LAKE* (30050)

12:45 **Herren, C. M.**; McMahon, K. D.: SMALL SUBSETS OF HIGHLY CONNECTED TAXA PREDICT COMPOSITIONAL TURNOVER IN MICROBIAL COMMUNITIES (29459)

069 AQUATIC TRANSITIONS: TRACKING THE NATURE AND TRAJECTORIES OF CHANGE USING PALEOLIMNOLOGICAL APPROACHES

Chair(s): Jennifer Adams, jennifer.adams.13@ucl.ac.uk
Isabel Bishop, i.bishop.11@ucl.ac.uk
Lucy Roberts, lucy.roberts@qmul.ac.uk
Peter Gell, p.gell@federation.edu.au
Martin Thoms, mthoms2@une.edu.au

Location: 302 A/B

10:00 **Reid, M. A.**: DO BILLABONG MORPHOMETRY AND LANDSCAPE POSITION CONTROL ECOSYSTEM STATE AND RESILIENCE TO THE EFFECTS OF LAND USE AND HYDROLOGICAL CHANGE? (29121)

10:15 **Adams, J. K.**; Mackay, A. W.; Rose, N. L.; Swann, G. E.; Martins, C. C.; Vologina, E.: SENSITIVITY OF SHALLOW LAKE ECOSYSTEMS OF THE SELENGA DELTA, LAKE BAIKAL, SIBERIA TO ENVIRONMENTAL VARIABILITY AND ANTHROPOGENIC STRESSORS (28486)

10:30 **Garcés-Pastor, S.**; Cañellas-Boltà, N.; Clavaguera, A.; Calero, M. A.; Vegas-Vilarrúbia, T.: ENVIRONMENTAL SHIFTS OF BASSA NERA POND DURING THE LAST MILLENNIUM, A MULTIPROXY STUDY IN CENTRAL PYRENEES (SPAIN) (28537)

10:45 **Roberts, L. R.**; Holmes, J. A.; Horne, D. J.: A MULTI-PROXY APPROACH TO UNDERSTANDING ANTHROPOGENICALLY FORCED SALINE INTRUSION AND EUTROPHICATION IN COASTAL LAKES AND WETLANDS (28856)

12:00 **Wachnicka, A.**; Wingard, L.: MULTIPLE ECOLOGICAL REGIME SHIFTS IN THE SOUTH FLORIDA ESTUARIES AS A RESULT OF CLIMATE CHANGE AND 20TH CENTURY WATER MANAGEMENT OF THE EVERGLADES WETLANDS (28412)

12:15 **Salgado, J.**; Velez, M. I.; Rose, N.; Gonzalez, C.; Handong, Y.; O´Dea, A.: FROM THE SEA TO THE RIVER: LIMNOLOGICAL HISTORY OF THE PANAMA CANAL (28941)

12:30 **Luszczek, C. E.**; Medieros, A. S.; Wolfe, B. B.; Quinlan, R.: RECENT SHIFTS IN TEMPERATURE AND NUTRIENT REGIME IN A NORTHERN BOREAL FOREST LAKE INFERRED FROM CHIRONOMIDS, &DELTA 13C, AND &DELTA 15N (29766)

12:45 **Wang, R.**: THE DYNAMICS OF MULTIPLE POSITIVE FEEDBACKS LOOPS IN AN AQUATIC SYSTEM PRIOR TO A CRITICAL TRANSITION (29360)

071 MOLECULAR INSIGHTS INTO ADAPTIVE MICROBIAL PHYSIOLOGY

Chair(s): Harriet Alexander, harriet.xander@gmail.com
Sonya Dyhrman, sdyhrman@ldeo.columbia.edu
Winifred Johnson, wjohnson@whoi.edu
Elizabeth Kujawinski , ekujawinski@whoi.edu

Location: 301 B

10:00 **Saito, M. A.**; McIlvin, M. R.; Moran, D. M.; Hawco, N. J.; Matheson, J.; Sedwick, P. N.; Noble, A. E.; Bates, N. R.; Lomas, M. W.; Johnson, R.: LAYERING OF ADAPTIVE NUTRIENT RESPONSES IN THE NORTH ATLANTIC SUBTROPICAL GYRE AS DETECTED BY METAPROTEOMICS (29808)

10:15 **Becker, K. W.**; Collins, J. R.; Fredricks, H. F.; Ossolinski, J. E.; White, A. E.; Repeta, D. J.; Van Mooy, B.: THE MICROBIAL LIPIDOME OF THE OLIGOTROPHIC NORTH PACIFIC SUBTROPICAL GYRE (29689)

10:30 **Morris, R. M.**; Marshall, K. T.; Dupont, C. L.; Iverson, V.; Armbrust, V. E.; Morales, R. L.; Berthiaume, C. T.; Durham, B.; Moran, M. A.: MICROBIAL ADAPTATION TO OXYGEN IN SEAWATER (29661)

10:45 **Held, N. A.**; Saito, M. A.; McIlvin, M. R.; Moran, D. M.: SENSING AND SIGNALING: TWO-COMPONENT SYSTEMS IN MARINE MICROBES (29775)

12:00 **Polyviou, D.**; Baylay, A.; Hitchcock, A.; Robidart, J.; Moore, C. M.; Bibby, T.: DESERT DUST AS A SOURCE OF IRON TO THE GLOBALLY IMPORTANT DIAZOTROPH TRICHODESMIUM. A PHYSIOLOGICAL AND TRANSCRIPTOMIC STUDY (29181)

12:15 Walworth, N. G.; Hutchins, D. A.; Fu, F.; Lee, M. D.; Saito, M. A.; **Webb, E. A.**: TRANSCRIPTOMIC AND PROTEOMIC ANALYSES OF *TRICHODESMIUM* UNDER IRON AND PHOSPHORUS CO-LIMITATION IN THE PRESENT AND FUTURE OCEAN (30019)

12:30 Murphy, C. D.; Bonisteel, E. M.; Xu, K.; Melanson, J.; Campbell, D. A.; **Cockshutt, A. M.**: STRAIN SPECIFIC DIFFERENCES IN CAPACITY TO REPAIR PHOTOSYSTEM II IN PICOCYANOBACTERIA (28951)

12:45 **Liu, S.**; Halim, K.; Liu, Z.: COMPARING CAPABILITIES OF DIFFERENT BACTERIA STRAINS ON PEPTIDE DECOMPOSITION IN SEAWATER (28832)

081 POLAR AND HIGH LATITUDE RESEARCH: LAND, LAKES, ICE, AND OCEAN

Chair(s): Deborah A. Bronk, bronk@vims.edu
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Rachel E. Sipler, sipler@vims.edu
Kimberly Wickland, kpwick@usgs.gov
Jodi Young, youngjn@uw.edu

Location: 313 B

TUESDAY

10:00 **Ratnarajah, L.**; Lannuzel, D.; Bowie, A. R.; Meiners, K. M.; Nicol, S.; Townsend, A. T.; Kawaguchi, S.: NATURAL IRON FERTILISATION BY BALEEN WHALES IN THE SOUTHERN OCEAN (29139)

10:15 **Bowman, J. S.**; Kavanaugh, M.; Doney, S.; Ducklow, H. W.: CHARACTERIZING TEMPORAL AND SPATIAL ECOSYSTEM VARIABILITY WITH OBJECTIVELY DEFINED BIOMES IN A TWENTY-PLUS YEAR TIME SERIES FROM THE WEST ANTARCTIC PENINSULA (29297)

10:30 **Lee, Y.**; Yang, E. J.; Park, J.; Jung, J.; Ko, E. H.; Kim, T. W.; Kim, C. S.; Lee, S.: THE INFLUENCE OF REDUCED LIGHT ON THE PHYTOPLANKTON BIOMASS AND COMMUNITY STRUCTURE DURING SPRING BLOOM IN THE AMUNDSEN SEA POLYNYA, ANTARCTICA.* (28843)

10:45 **Sherrell, R. M.**; Fitzsimmons, J. N.; Annett, A. L.; Roccanova, V. J.; Schofield, O.; Meredith, M. P.: DISSOLVED FE (AND MN, ZN, CU, NI, CD AND PB) IN THE WESTERN ANTARCTIC PENINSULA SHELF WATER COLUMN: HOW NATURAL FE FERTILIZATION WORKS AND DOESN'T WORK (30069)

082 COUPLING AND EXCHANGE ACROSS THE SEDIMENT-WATER INTERFACE

Chair(s): Gary Fones, gary.fones@port.ac.uk
Anouska Panton, anouska.panton@port.ac.uk
Charlie Thompson, celt2@soton.ac.uk

Location: 306 B

14:30 **Weigelhofer, G.**; Pölz, E.; Hein, T.: EFFECTS OF AGRICULTURAL LAND USE ON THE ADAPTION AND SATURATION OF BENTHIC PROCESSES IN HEADWATER STREAMS (28576)

14:45 **Kim, S. H.**; Lee, J. S.; Hyun, J. H.: IMPACTS OF LARGE-SCALE ARTIFICIAL DYKE ON SULFATE REDUCTION, SEDIMENT OXYGEN DEMAND AND BENTHIC NUTRIENT FLUX IN THE YEONGSAN RIVER ESTUARY, YELLOW SEA (29283)

15:00 **Orvain, F.**; Rakotomalala, C.; Israël, S.; Meynard, G.; Grasso, F.; Le Hir, P.; Maire, O.: AN OVERVIEW OF MODELS SIMULATING DENSITY-EFFECTS OF MACROFAUNAL BIOTURBATORS ON BED ERODABITY TO DEFINE A STRATEGY FOR 3D SEDIMENT TRANSPORT MODELS (29811)

15:15 **Clark, J. B.**; Long, W.; Hood, R. R.: MODELING DISSOLVED ORGANIC MATTER CYCLING AND FLUXES IN ESTUARINE SEDIMENTS (29716)

16:30 **Algar, C. K.**: THE INFLUENCE OF ALTERNATIVE NITRATE REDUCTION PATHWAYS ON NITROGEN CYCLING IN MARINE SEDIMENTS. (29957)

16:45 **Cesbron, F.**; Brooks, K.; Hernandez, P.; Haynes, K.; Barfield, C.; Caffrey, J. M.: PRIMARY PRODUCTION, RESPIRATION AND NUTRIENT FLUXES ON THE SHALLOW NORTHEASTERN GULF OF MEXICO SHELF (29505)

17:00 **Sanial, V.**; Kipp, L. E.; Henderson, P. B.; van Beek, P.; Reyss, J. L.; Hammond, D. E.; Moore, W. S.; Charette, M. A.: TRACES ELEMENT FLUXES ACROSS THE PERUVIAN CONTINENTAL MARGIN DERIVED FROM RADIUM-228 (29639)

17:15 **Homoky, W. B.**; Conway, T. M.; John, S. G.; Woodward, E. M.; Mills, R. A.: MODEL EVALUATIONS OF PORE WATER IRON ISOTOPE SIGNATURES IN THE SOUTH ATLANTIC OCEAN - IMPLICATIONS FOR BENTHIC EXCHANGE (29870)

106 FISH

Chair(s): David Delaney, Delaney7@hawaii.edu

Location: 302 A/B

14:30 **Zhang, L.**; Yang, Y.; Bi, H.; Shahrestani, S.; Fan, C.: SELF-ORGANIZED FISH SCHOOLING: FROM INDIVIDUAL VARIABILITY TO SYNCHRONY (29463)

14:45 **Cornic, M.**; Rooker, J. R.: INFLUENCE OF THE MESOSCALE OCEANOGRAPHIC FEATURES ON THE SPATIOTEMPORAL DISTRIBUTION OF BIGEYE AND YELLOWFIN TUNA LARVAE (29074)

15:00 **Demirel, N.**: IMPLEMENTATION OF CMSY METHOD FOR ESTIMATING FISHERIES REFERENCE POINTS IN TURKISH STOCKS (28671)

15:15 **Delaney, D. G.**; Teneva, L. T.; Koike, H.; Ogawa, T.; Friedlander, A. M.; Kittinger, J. N.: CREEL SURVEYS AS TOOLS FOR MORE EFFECTIVE MONITORING AND MANAGEMENT OF COASTAL FISHERIES AND SEAFOOD SECURITY IN HAWAI'I (28765)

16:30 **TinHan, T. C.**; Rooker, J. R.; Wells, R. J.: VERTEBRAL CHEMISTRY OF JUVENILE BULL SHARKS IN THE NORTHWESTERN GULF OF MEXICO (29252)

16:45 **McManus, M. C.**; Hare, J. A.; Richardson, D. E.; Collie, J. S.: TRACKING SHIFTS IN ATLANTIC MACKEREL (*SCOMBER SCOMBRUS*) LARVAL AND SPAWNING HABITAT SUITABILITY ON THE NORTHEAST U.S. CONTINENTAL SHELF (28492)

17:00 **Robinson, H. E.**; Strickler, J. S.; Lenz, P. H.: PREDATION STRATEGIES OF LARVAL CLOWNFISH TO CAPTURE EVASIVE PREY (30072)

110 AQUATIC INVASION ECOLOGY

Chair(s): Joy L. Shih, joyshih@hawaii.edu

Location: 323 C

10:00 **Casties, I.**; Briski, E.: PERFORMANCE OF GAMMARID SPP. FROM DIFFERENT REGIONS UNDER STRESSFUL CONDITIONS IN COMMON GARDEN EXPERIMENTS (28467)

10:15 **Bradie, J. N.**; Broeg, K.; Gianoli, C.; He, J.; Heitmuller, S.; Lo Curto, A.; Nakata, A.; Rolke, M.; Schillak, L.; Stehouwer, P.; Vanden Byllaardt, J.; Veldhuis, M.; Welschmeyer, N.; Younan, L.; Zaake, A.; Bailey, S.: SAILING TOWARDS A BETTER UNDERSTANDING OF THE STRENGTH AND CHALLENGES OF ANALYTIC DEVICES FOR BALLAST WATER COMPLIANCE MONITORING (29802)

10:30 **Paiva, F.**; Briski, E.: COMPARATIVE ASSESSMENT OF SALINITY TOLERANCE OF GAMMARIDAE SPP. ORIGINATING FROM DIFFERENT REGIONS (28468)

10:45 **Hackerott, S.**; Valdivia, A. S.; Cox, C. E.; Silbiger, N.; Bruno, J. F.: IMPACTS OF INVASIVE LIONFISH ARE NOT APPARENT ON FISH COMMUNITY STRUCTURE ON THE MESOAMERICAN BARRIER REEF, BELIZE (29773)

12:00 **Shih, J. L.**: NUTRIENT CYCLING AND SEAWATER PUMPING RATES BY THE INVASIVE SPONGE *MYCALE GRANDIS* IN KANE'OHE BAY, O'AHU (29984)

12:15 **Chiquillo, K. L.**; Campese, L.; Winters, G.; Barak, S.; Procaccini, G.; Barber, P. H.; Willette, D. A.: COMPARING THE GENETIC DIVERSITY OF THE INVASIVE SEAGRASS *HALOPHILA STIPULACEA*, BETWEEN ITS NATIVE AND INVASIVE RANGE (29099)

12:45 **Raut, Y.**; Matzke, S.; Vieira, C.; Capone, D.: NITROGEN FIXATION ASSOCIATED WITH *SARGASSUM HORNERI* AND *SARGASSUM PALMERI* (29235)

TUESDAY POSTERS

002 ASLOMP STUDENT SYMPOSIUM

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: Kamehameha Exhibit Hall

9 **Devine, G. M.**: OUTREACH AS A TOOL TO ADDRESS ILLEGAL HARASSMENT AND PROMOTE CONSERVATION OF STRAND FEEDING DOLPHINS (28355)

10 **Wright-Fairbanks, E. K.**; Oikonomou, A.; Menden-Deuer, S.: ASSESSING THE EFFECT OF COPEPOD EXCRETIONS ON THE GROWTH AND INGESTION RATES OF THE PHAGOTROPHIC PROTIST OXYRRHIS MARINA (28519)

11 **Cornish, K. M.**; Lycett, K. A.; Pitula, J. S.: PREVALENCE OF THE PARASITIC DINOFLAGELLATE HEMATODINIUM SP. IN AMPHIPODS WITHIN THE COASTAL BAYS OF MARYLAND AND VIRGINIA (28520)

12 Chancellor, K. S.; **Renzi, J. J.**; Robinson, D. R.; Fong, C. R.; Barber, P. H.; Habtes, S. Y.; Fong, P.: EPIPHYTES ON TURBINARIA ORNATA, A FOUNDATIONAL MACROALGA, PROVIDE TROPHIC SUPPORT TO SMALL HERBIVOROUS FISH (28524)

13 **Serra, R. L.**; Byrnes, J. E.; Lockwood, L.: JETTIES, SEAWALLS, AND ARMORED SHORELINES, OH MY! THE STUDY OF HOW COASTAL INFRASTRUCTURES AFFECT PREDATION INTENSITY IN MASSACHUSETTS BAY (28525)

14 **Francesco, J. P.**; Urban-Rich, J.: THE EFFECTS OF FOUR COMMON MICROPLASTICS ON ARGOPECTEN IRRADIANS LARVAE GROWTH AND MORTALITY AT ENVIRONMENTALLY RELEVANT CONCENTRATIONS (28531)

15 **Yazzie, T.**; Sison-Mangus, M.: THE ROLE OF PHYTOPLANKTON-ASSOCIATED BACTERIA IN DEGRADING POLYCYCLIC AROMATIC HYDROCARBONS VIA HOST-STRESS MEDIATED LIPID PRODUCTION. (28534)

16 **Dennis O. Perez-Lopez, D. O.**; Nahira E. Arocho-Hernandez, N. E.; Carlos Santos Flores, C. J.: MACROINVERTEBRATES COMMUNITIES IN AREAS COVERED AND DEVOID OF THE FLOATING FERNS (SALVINIA SPP.) IN BOQUERÓN WILDLIFE REFUGE (BWR) AT CABO ROJO, PUERTO RICO (28539)

17 **Rodriguez, A. E.**; Harris, L.: NITROGEN FLUXES IN TIDAL CREEKS OF THE PATUXENT RIVER (28543)

18 **Quinteros Jr., P. R.**; Ahemedaltayb, A.; Richardson, C.; Smith, M.; Ishaque, A.: ANALYSIS OF MERCURY CONCENTRATIONS IN CALLINECTES SAPIDUS (ATLANTIC BLUE CRAB) AND MARYLAND COASTAL BAY SEDIMENTS (28553)

19 Farrington, K.; **Rogers, J.**; North, H.; Shannon, J.; Rodríguez, A.; Gibson, D.: OYSTER REEF RESTORATION: AN OYSTER SPAT RECRUITMENT STUDY IN THE HAMPTON RIVER (28573)

20 **Hinojosa, N. A.**: GENETIC ASSESSMENT OF THE HYBRID ZONE BETWEEN THE MUMMICHOG AND GULF KILLIFISH (28594)

21 **Good, A. M.**; Lawrence, N. F.; Breef-Pilz, A.; Pelletier, S.; Burmester, E.; Rotjan, R.: TO FEAST OR FAMINE: THE EFFECTS OF FOOD AVAILABILITY ON THE FORAGING BEHAVIOR OF THE FACULTATIVE SYMBIOTIC CORAL *ASTRANGIA POCULATA* (28598)

22 **Lebrasse, M. C.**; Osburn, C. L.; He, R.; Bohnenstiehl, D. R.: THE INFLUENCE OF WATER CIRCULATION ON DISSOLVED ORGANIC MATTER EXPORT FROM BALD HEAD CREEK, NC. (28604)

23 **Edauri Navarro-Pérez, E.**; Olufunke Oyebamiji, O.; Wiebke Boeing, W.; Omar Holguin, O.: ANTI-BACTERIAL AND ANTI-FUNGAL PROPERTIES OF ALLELOPATHIC CHEMICALS (28623)

24 **DeBuysser, J.**; Candelmo, A.; Butkowski, D.: CATCH ME IF YOU CAN: ASSESSMENT OF INVASIVE LIONFISH (*PTEROIS VOLITANS*) BEHAVIOR ON LITTLE CAYMAN, CAYMAN ISLANDS TO AID CULLING EFFICIENCY (28624)

25 **Chapina, R. J.**; Rowe, C. L.; Woodland, R.: OXYGEN CONSUMPTION BY NEOMYSIS AMERICANA UNDER REALISTIC SUMMER TEMPERATURES AND SALINITY CONDITIONS (28632)

26 **Budden, d. a.**: A COMPARISON OF GROWTH AND MORTALITY OF AQUACULTURED JUVENILE FLORIDA POMPANO FED FISHMEAL AND PLANT-BASED DIETS (28651)

27 **Adnan Sultan, S. A.**: IDENTIFYING LOCATIONS OF SEWAGE POLLUTION IN GROUNDWATER IN THE PUAKŌ WATERSHED (28652)

28 **Walters, C. K.**; Rom, E.; Patino, L.; Adams, A.; Green, S.: PARTICIPANT TRENDS IN THE OCEAN SCIENCES RESEARCH EXPERIENCES FOR UNDERGRADUATES PROGRAM (28732)

29 **Paguirigan, M. N.**; Durkin, C. A.: INFLUENCE OF DIATOM MORPHOLOGY AND COMMUNITY COMPOSITION ON AGGREGATION IN MONTEREY BAY, CALIFORNIA (28751)

30 **Spies, N. P.**; Richmond, R. H.: TWO TOUGH CORALS: INVESTIGATING BRIGHT SPOTS IN A DEGRADED WATERSHED (28767)

31 **Negrete, G.**; Doney, S. C.; Glover, D. M.; Rheuban, J. E.; McCorkle, D.; Jakuba, R.: IMPACTS OF WATER QUALITY AND OCEAN ACIDIFICATION ALONG BUZZARDS BAY, MASSACHUSETTS (28789)

32 **Malabanan, A. B.**; Jones, A. C.; Kim, D. Y.: THE USC THORNTON AQUAPONICS SYSTEM: A SEMI-CLOSED LIVING ECOSYSTEM FOR MICROBIAL ANALYSIS (28794)

34 **Griffith, A. G.**; Schnyder, C.; Zercero Marin, E.; Fong, P.; Fong, C.; Barber, P.: IMPACTS OF TURBINARIA ORNATA DENSITY ON INVERTEBRATE DIVERSITY AND ABUNDANCE IN THE REEFS OF MOOREA, FRENCH POLYNESIA (28807)

35 **Booker, V. J.**; Nianhong Chen, N.; Dev Gurung, D. P.: PHOSPHORUS ACCUMULATION IN MARINE SEDIMENTS OF DEAD-END CANAL (JOLLY ROGER AREA) OF MARYLAND COASTAL BAYS (28816)

36 Pérez-Rodríguez, I.; **Abuyen, K. O.**; Tremblay, J. R.; Bird, L. J.; Barco, R. A.; Savalia, P.; Amend, J. P.; Tully, B. J.: ISOLATION AND CHARACTERIZATION OF GEOTHERMOBACTER SP. NOV. STRAIN HR-1, AN FE(III) REDUCING DELTAPROTEOBACTERIUM FROM DEEP-SEA HYDROTHERMAL VENTS (28912)

37 **Vázquez-Cardona, J.**; Esparra-Escalera, H. J.; Santos-Flores, C. J.: ASSESSMENT OF THE IMPACT OF AN EXOTIC SNAIL ON EPILITHONIC COMMUNITIES IN A SUBTROPICAL URBAN STREAM (28971)

38 **Gómez, C. D.**; Legg, M.; Shintaku, N.; Lin, F.; Weeraratne, D. S.: A COMPREHENSIVE STUDY OF THE TSUNAMI AND SEISMIC WAVE PROPAGATION ACROSS THE SOUTHERN CALIFORNIA CONTINENTAL MARGIN FROM THE AMPHIBIOUS ALBACORE SEISMIC ARRAY (28973)

39 **Ford, A. T.**; Laplace, R. J.; Munoz, J. D.; Fong, P.; Habtes, S.; Barber, P.; Fong, C.: "SPATIAL PATTERNS IN PARASITE PREVALENCE AND LOAD ON A CORAL HOST SUGGESTS PARASITISM IS DRIVEN BY ANTHROPOGENIC STRESS IN MO'OREA, FRENCH POLYNESIA" (29027)

40 **Acosta, Z. V.**; Le, J.; Levin, L.: PLANT AND ANIMAL RELATIONSHIPS IN ELMER STREET BIOFILTERS (LOS ANGELES, CALIFORNIA) (29069)

41 **Askin, S. E.**; McDowell, J.: A GENETIC ASSESSMENT COMPARING BROOD STOCK AND NATURAL POPULATIONS OF ATLANTIC BAY SCALLOPS (ARGOPECTEN IRRADIANS) ALONG THE VIRGINIA COAST (29085)

42 **Few, C. N.**; Haiat-Sasson, K.; Ryan, K.; Wagner, S.; Stubbins, A.: PHOTODEGRADATION OF DISSOLVED ORGANIC CARBON WITHIN THE CONNECTICUT RIVER WATERSHED (29088)

43 **Christensen, K. M.**: MIXING VARIABILITY AND SEASONALITY OF UPPER LAYER IN A GLACIO-MARINE FJORD, ANDVORD BAY, WESTERN ANTARCTICA PENINSULA (29156)

44 **Shapiro, A. N.**; Kordbacheh, A.; Walsh, E. J.: ECOLOGICAL DIFFERENTIATION AMONG ROTIFERS IN A CRYPTIC SPECIES COMPLEX (29174)

45 **Melanson, J. R.**; Cockshutt, A. M.: CONFIRMATION OF THE PREDICTED BINDING PARTNER OF HYPER-CONSERVED PROTEIN, LARGE RIBOSOMAL SUBUNIT IN *PROCHLOROCOCCUS* AND MARINE *SYNECHOCOCCUS* (29180)

46 **Matthew, T. N.**; Kearns, P.; Bauer, C.; Mozdzer, T.; Bowen, J.: THE EFFECT OF NUTRIENT ENRICHMENT AND PRIOR EXPOSURE TO NUTRIENTS ON MICROBIAL COMMUNITY COMPOSITION AND ACTIVITY (29219)

47 **Martin, T. C.**: MODELING AND ANALYSIS OF MOORING/BUOY DESIGN FOR UPPER KUROSHIO EXTENSION (29250)

48 **Diep, K. Q.**; Bingham, B. B.: SENSITIVITY OF THE ANEMONE *ANTHOPLEURA ELEGANTISSIMA* AND ITS GREEN SYMBIONT *ELLIPTOCHLORIS MARINA* TO TEMPERATURE AND CO_2 (29270)

49 **Said, N. E.**; Lavery, P. S.; McMahon, K.: THE EFFECT OF TEMPERATURE AND LATITUDE ON THE PHOTOSYNTHESIS IRRADIANCE RELATIONSHIP IN HALOPHILA OVALIS (29279)

50 **Janson, O. P.**; Geng, Z.; Baker, M. C.; White, H. K.: EXAMINING THE DIVERSITY OF A MICROBIAL COMMUNITY GROWN ON WEATHERED OIL (29444)

51 **Geng, Z.**; Janson, O. P.; Baker, M. C.; White, H. K.: DEGRADATION OF OIL BY FUNGI ISOLATED FROM WEATHERED OIL RESIDUES (29468)

52 **Holderness, A. M.**; Brooks, G. R.; Larson, R. A.; Hastings, D. W.: SEDIMENT REDOX IN THE NE GOM FOLLOWING THE 2010 DEEPWATER HORIZON OIL SPILL (29491)

53 **Figueroa, N. J.**; Figueroa, D. F.; Hicks, D.: PHYLOGEOGRAPHY OF AN ESTUARINE COPEPOD, ACARTIA TONSA (CALANOIDA: COPEPODA) FROM THE TEXAS GULF OF MEXICO (29767)

54 **Gilbert, N. E.**; Wilhelm, S. W.; Steffen, M. M.: GLOBAL SURVEY OF UREA DEGRADER DIVERSITY ASSOCIATED WITH FRESHWATER TOXIC CYANOBACTERIAL BLOOMS (29918)

55 **Howo, K. L.**: ASSESSING THE MORPHOLOGICAL EFFECTS OF AQUATIC ACIDIFICATION ON MODEL ORGANISM DAPHNIA MAGNA (30023)

56 **Saraceno, H. M.**; Hochberg, E.: THE EFFECT OF TEMPERATURE CHANGES ON THE LIGHT USE EFFICIENCY OF TWO CORAL COMMUNITIES (30155)

57 Chancellor, K. S.; Renzi, J. J.; **Robinson, D.**; Fong, C. R.; Barber, P. H.; Fong, P.: EPIPHYTES ON TURBINARIA ORNATA, A FOUNDATIONAL MACROALGA, PROVIDE TROPHIC SUPPORT TO SMALL HERBIVOROUS FISH (30156)

58 **Ferrer, E. M.**; Koslow, J. A.; Davison, P.; Jimenez-Rosenberg, S. P.; Aceves-Medina, G.: PELAGIC LARVAL FISHES OFF BAJA'S WEST COAST: ASSESSING THE EFFECTS OF CLIMATE ON FISH COMMUNITY STRUCTURE OFF BAJA CALIFORNIA FROM 1951 TO PRESENT (30160)

59 **Ortiz Gonzalez, I. C.**: DE NOVO TRANSCRIPTOME ASSEMBLY OF THE HYDROCORAL MILLEPORA ALCICORNIS (BRANCHING FIRE CORAL) FOR THE CARIBBEAN (30161)

003 PHOSPHORUS ALONG THE SOIL-FRESHWATER-OCEAN CONTINUUM

Chair(s): Barbara Cade-Menun, barbara.cade-menun@agr.gc.ca
Adina Paytan, apaytan@ucsc.edu

Location: Kamehameha Exhibit Hall

60 **Yin, H.**: INFLUENCE OF SEDIMENT RESUSPENSION ON THE EFFICACY OF GEOENGINEERING MATERIALS IN THE CONTROL OF INTERNAL PHOSPHOROUS LOADING FROM SHALLOW EUTROPHIC LAKES (28830)

61 **An, S. U.**; Kim, S. H.; Mok, J. S.; Hyun, J. H.; Hyun, J. H.: IMPACT OF ARTIFICIAL DYKES ON THE INTERACTION BETWEEN FE-S-P AND BENTHIC P RELEASE IN THE YEONGSAN RIVER ESTUARY, YELLOW SEA (29630)

62 **Vulgaropulos, Z. L.**; Cornwell, J. C.; Owens, M. S.: THE EFFECT OF IRON SULFIDE FORMATION ON PARTICULATE PHOSPHORUS BIOAVAILABILITY IN SEDIMENTS DEPOSITED IN CHESAPEAKE BAY (29696)

64 **Wauchope-Thompson, M. S.**; Baulch, H. M.: UNDERSTANDING THE DRIVERS OF INTERNAL PHOSPHORUS LOADING IN THE CANADIAN PRAIRIE LAKES OF QU'APPELLE (29982)

65 **Popendorf, K. J.**; Duhamel, S.: RATES OF MARINE MICROBIAL PHOSPHORUS ACQUISITION: CELLULAR UPTAKE VS. BIOCHEMICAL INCORPORATION (30045)

008 CHANGES IN LARGE FRESHWATER ECOSYSTEMS: DRIVERS, RESPONSES, AND RESTORATION

Chair(s): Masumi Yamamuro, yamamuro@k.u-tokyo.ac.jp
Lyubov Burlakova, burlakle@buffalostate.edu
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Soren Brothers, sbrother@uoguelph.ca
Paul Sibley, psibley@uoguelph.ca

Location: Kamehameha Exhibit Hall

118 **Beletsky, D.**; Beletsky, R.; Wang, J.; Hawley, N.: OBSERVATIONS AND MODELING OF PHYSICAL PROCESSES IN LAKE ERIE IN WINTER (28491)

120 **Trentman, M. P.**; Martin, A. R.; Scott, A. F.; Mansfield, C.; Schmidt, J.; Black, F. J.: EFFECT OF THE DISAPPEARANCE OF THE DEEP BRINE LAYER ON TRACE ELEMENT UPTAKE INTO GREAT SALT LAKE FOOD WEBS (28606)

121 **Scott, A. F.**; Mansfield, C. R.; Martin, A. R.; Schmidt, J. N.; Trentman, M. P.; Black, F. J.: EVALUATING POTENTIAL TRACE METAL TOXICITY FOR BIRDS OF THE GREAT SALT LAKE, UTAH, USA (28610)

122 **Martin, A. R.**; Black, F. J.; Trentman, M. P.; Scott, A.; Schmidt, J.; Mansfield, C.: METHYLMERCURY IN GREAT SALT LAKE BRINE FLIES: SEASONAL VARIABILITY AND EFFECT OF DEEP BRINE LAYER DISAPPEARANCE (28804)

123 **Aguilar, C.**; Cuhel, R. L.: ALTERATION OF NON-LIMITING NUTRIENT DYNAMICS BY METEOROLOGICAL AND ECOLOGICAL EVENTS: LAKE MICHIGAN AMMONIUM AND SILICATE DELINEATE BENTHIFICATION IMPACTS (28824)

124 **Fraiola, K. M.**; Carlson, S. M.: Estuarine fish in freshwater: The influence of large scale environmental factors on the occurrence of *Mugil cephalus* in Hawaiian watersheds. (28841)

125 **Oni, S. K.**; Frost, P. C.; Haffner, G. D.; Howell, E. T.; Koops, M. A.; Vogt, R.; Watson, S. B.; Xenopoulos, M. A.: A CARBON BALANCE FOR LAKE ERIE (29144)

017 BACTERIAL INTERACTIONS WITH EUKARYOTIC PLANKTON

Chair(s): Xavier Mayali, mayali1@llnl.gov
Marilou Sison-Mangus, msisonma@ucsc.edu

Location: Kamehameha Exhibit Hall

195 **Smith, J.**; Gellene, A. G.; Cash, C.; Dojiri, M.; Caron, D. A.: A 'NATURAL' EXPERIMENT IN SANTA MONICA BAY, CALIFORNIA: POTENTIAL CHANGES IN THE MICROBIAL LOOP IN RESPONSE TO ANTHROPOGENIC NUTRIENT INPUT (28532)

196 **Franco-Cisterna, B.**; Hidalgo, P.; Murillo, A. A.; Ulloa, O.: REVISED APPROACH TO THE STUDY OF THE GUT MICROBIOME OF COPEPODS (28716)

197 **Lie, A. A.**; Liu, Z.; Terrado, R.; Tatters, A. O.; Heidelberg, K. B.; Caron, D. A.: BACTERIVORY ENHANCES THE PHOTOTROPHIC CAPABILITIES OF AN OBLIGATE PHOTOTROPHIC *OCHROMONAS* SP. (CHRYSOPHYTA) (29438)

198 **Baker, L. J.**; Kemp, P. F.: FUNCTIONAL CAPABILITIES OF BACTERIA ASSOCIATED WITH SINGLE *THALASSIOSIRA* CELLS FROM THE OLIGOTROPHIC OPEN OCEAN (29700)

027 TRANSITIONING ECOLOGICAL FORECASTING RESEARCH TO OPERATIONAL APPLICATIONS

Chair(s): Becky Baltes, becky.baltes@noaa.gov
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Raleigh Hood, rhood@umces.edu
Woody Turner, woody.turner@nasa.gov

Location: Kamehameha Exhibit Hall

293 **Greene, C. H.**; Meyer-Gutbrod, E. L.: A MOBILE OCEAN-OBSERVING NETWORK TO SUPPORT OPERATIONAL FORECASTING (28375)

294 **Nuss, E. S.**; Powell, B.; Steward, G.; Merrifield, M.: PREDICTING PATHOGENIC BACTERIA CONCENTRATIONS USING A COUPLED MICROBIAL-PHYSICAL MODEL (28642)

295 Friedrichs, M.; **Hood, R. R.**; Friedrichs, C. T.; Forrest, D. R.: HYPOXIA FORECASTS AS A TOOL FOR CHESAPEAKE BAY FISHERIES (29461)

296 **Baltes, R. E.**; Brown, C. W.: NOAA'S OPERATIONAL ECOLOGICAL FORECASTING ROADMAP (29628)

297 **Estes, M. G.**; Lee, C. M.; Estes, S. M.; Turner, W.; Haynes, J. A.; Doorn, B.: THE NASA APPLIED SCIENCES PROGRAM TRANSITIONING RESEARCH TO APPLICATIONS: CROSSCUTTING CASE STUDIES FOCUSED ON HARMFUL ALGAL BLOOMS (29670)

028 SPATIAL-TEMPORAL ORGANIZATION OF PLANKTON COMMUNITIES: FROM OBSERVATION TO THEORY AND INTEGRATED MODELS

Chair(s): Ilia Ostrovski, ostrovsky@ocean.org.il
Hidekatsu Yamazaki, hide@kaiyodai.ac.jp

Location: Kamehameha Exhibit Hall

299 **Morales, S. E.**; Meyer, M.; Baltar, F.: SEASONAL CHANGES IN BACTERIOPLANKTON COMMUNITY COMPOSITION ALONG THE SUBTROPICAL FRONTAL ZONE: ARE OCEANIC FRONTS ECOTONES AND DIVERSITY HOTSPOTS? (28783)

300 **Irie, M.**; Oda, K.; Okada, T.; Mattern, J. P.; Fennel, K.: OPTIMIZATION OF TIME-DEPENDENT MODEL PARAMETERS BY POLYNOMIAL CHAOS EXPANSION FOR A BETTER MODEL REPRESENTATION OF CHLOROPHYLL IN OSAKA BAY, JAPAN (28894)

301 **Larkin, A. A.**; Martiny, A. C.: MICRODIVERSITY PROVIDES A CONCEPTUAL FRAMEWORK FOR IMPROVED UNDERSTANDING OF BACTERIOPLANKTON BIOGEOGRAPHY (29004)

302 **Amiri, S.**: DECONSTRUCTING THE INFLUENCE OF THE WARM BLOB ON THE BLOOM RESPONSE AND PERSISTENCE OF PSEUDO-NITZSCHIA WITHIN THE SBC DURING THE COAST WIDE TOXIC BLOOM EVENT (29286)

303 **Tsakalakis, I.**; Blasius, B.; Ryabov, A.: RESOURCE DISPERSAL ENHANCES BIODIVERSITY, PRODUCTIVITY AND SPECIES SURVIVAL IN A PHYTOPLANKTON MODEL (29470)

304 **Li, Z.**; Pospelova, V.; Lin, H. L.: SEASONAL PRODUCTION OF DINOFLAGELLATE CYSTS IN THE MONSOON INFLUENCED REGION: A SEDIMENT TRAP STUDY FROM THE SOUTHWEST TAIWAN WATERS (THE SOUTH CHINA SEA) (29685)

TUESDAY

305 **Messié, M.**; Chavez, F. P.: PLANKTON GROWTH AND GRAZING COUPLED WITH WINDS AND SURFACE CURRENTS DESCRIBE ZOOPLANKTON DISTRIBUTION AND HOTSPOTS IN UPWELLING SYSTEMS (29942)

306 **Jonsson, B. F.**; Salisbury, J.; Mahadevan, A.: THE TEMPORAL AND SPATIAL VARIABILITY OF SATELLITE DERIVED CHL AND SST USING SPARSE DAILY DATA FIELDS (29981)

307 **Lankowicz, K. M.**; Bi, H.; Shahrestani, S.; Zhang, L.; Fan, C.: A NOVEL APPROACH TO OBSERVING *MYSIDAE* DISTIBUTION IN THE CHESAPEAKE BAY (30140)

031 GLOBAL REMOTE SENSING OF INLAND WATERS

Chair(s): Claudia Giardino, giardino.c@irea.cnr.it
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Leif Olmanson, olman002@umn.edu
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Andrew Tyler, a.n.tyler@stir.ac.uk
Yunlin Zhang, ylzhang@niglas.ac.cn

Location: Kamehameha Exhibit Hall

311 **Zhang, Y.**; Ma, R.: A MODIS-BASED NOVEL METHOD TO DISTINGUISH SURFACE CYANOBACTERIAL BLOOMS AND AQUATIC MACROPHYTES IN A LARGE TURBID LAKE (28805)

312 **Xue, K.**; Zhang, Y.; Ma, R.; Duan, H.: AN APPROACH TO CORRECT THE EFFECTS OF PHYTOPLANKTON VERTICAL NONUNIFORM ON REMOTE SENSING REFLECTANCE OF OPTICALLY COMPLEX INLAND WATERS (28813)

313 **Shi, K.**; Zhang, Y.: RESPONSES OF CYANOBACTERIAL DYNAMICS TO NUTRIENT ENRICHMENT AND CLIMATE CHANGE IN LAKE TAIHU (28873)

314 **Gyawali, B.**; Murgulet, D.: EVALUATION OF COASTAL GROUNDWATER STORAGE VARIABILITY: IMPLICATIONS ON THE EFFECTS OF CLIMATE ANOMALIES ON SUBMARINE GROUNDWATER DISCHARGE (SGD) (29178)

315 **Greb, S. R.**; Dekker, A.; DiGiacomo, P. M.; Smail, E.: AQUAWATCH – THE GEO WATER QUALITY COMMUNITY OF PRACTICE (29200)

316 **Ade, C.**; Hestir, E. L.: EXPLORING THE BENEFIT OF INCREASED TEMPORAL RESOLUTION ON MONITORING INLAND WATER QUALITY USING A SENTINEL-2 PROXY (30054)

317 Islam, M. R.; Ahmed, Z. U.; Miah, M. U.; **Abdullah, H. M.**: SPATIOTEMPORAL CHANGES OF WATER LOGGED AREA IN SOUTH-WESTERN BANGLADESH (30134)

039 FUTURE WATER - INTER- AND TRANSDISCIPLINARITY IN METROPOLITAN AQUATIC SCIENCES

Chair(s): Johannes Euler, johannes.euler@kwi-nrw.de
Fabian Itzel, itzel@iuta.de
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Julia Kristina Nuy, julia.nuy@uni-due.de

Location: Kamehameha Exhibit Hall

345 **Lykkebo Petersen, K.**; Bar-Zeev, E.; Rahav, E.; Levy, O.; Silverman, J.; Moav-Barzel, O.; Shaked, Y.; Tal, U.; Kress, N.; Paytan, A.: WILL SEAWATER REVERSE OSMOSIS DESALINATION BRINE IMPACT CORAL REEFS? (29706)

041 SEDIMENTS WITH HYDRODYNAMICALLY DRIVEN FLOW, FROM STREAM TO SHELF

Chair(s): Jud Harvey, jwharvey@usgs.gov
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Location: Kamehameha Exhibit Hall

358 **Masunaga, E.**; Fringer, O. B.; Arthur, R. S.; Uchiyama, Y.; Yamazaki, H.: INTERNAL WAVE-DRIVEN SEDIMENT TRANSPORT OVER CONTINENTAL SLOPES (28458)

359 **Zhao, H.**; Zhang, Y.; Cao, W.; Tang, L.; Wang, C.; Wang, X.; Wang, Y.; Liu, D.; Guo, C.; Lu, J.: A NUMERICAL MODEL OF BIO-FLOCCULATED SEDIMENT TRANSPORT (28701)

360 **Hutley, N. R.**; Lockington, J. R.; Grinham, A. R.; Cossu, R.; Gibbes, B. R.: TOWARDS A THREE-DIMENSIONAL HYDRODYNAMIC NUMERICAL MODEL OF SEDIMENT DYNAMICS IN MORETON BAY (29276)

361 **Lockington, J. R.**; Hutley, N. R.; Grinham, A. R.: TERRESTRIAL SEDIMENT INFILLING OF MORETON BAY, AUSTRALIA - A LARGE, SUBTROPICAL EMBAYMENT. (29280)

362 **Liu, S.**; Shi, X.; Fang, X.; Khokiattiwong, S.; Kornkanitnan, N.: DISTRIBUTION OF CLAY MINERALS IN SURFACE SEDIMENTS OF THE WESTERN GULF OF THAILAND: SOURCES AND TRANSPORT PATTERNS (29311)

363 **Pilegard, T. C.**; Trembanis, A.: EVALUATING NEARSHORE MAPPING CAPABILITIES OF AN AUTONOMOUS KAYAK (29910)

063 MICROBIAL ECOSYSTEM SERVICES AND INTERACTIVE EFFECTS ON ORGANIC MATTER PROCESSING ALONG THE LAND-SEA CONTINUUM

Chair(s): Allison A. Fong, allison.fong@awi.de
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Nuria Catalan, nurcatalga@gmail.com
Anne Kellerman, akellerman@fsu.edu

Location: Kamehameha Exhibit Hall

506 **Wang, K.**; Gholamian, J.; Campbell, B.: MICROSPATIAL AND SEASONAL EXPRESSION PATTERNS OF BACTERIAL AND ARCHAEAL BIOGEOCHEMICALLY-RELEVANT GENES IN THE DELAWARE BAY (28450)

507 **Wyatt, K. H.**; Sampson, A. M.; Shurzinske, A. C.; Meingast, K.; Kane, E. S.; Rober, A. R.; Turetsky, M. R.: WARMING ENHANCES THE SYNERGISTIC EFFECT OF ALGAL EXUDATES ON ORGANIC MATTER DECOMPOSITION IN NORTHERN PEATLANDS (28481)

508 **Textor, S. R.**; Guillemette, F.; Kellerman, A. M.; Spencer, R. G.: EVIDENCE FOR A PRIMING EFFECT IN ORGANIC RICH AQUATIC SYSTEMS? (28726)

068 SPATIAL AND TEMPORAL DYNAMICS OF AQUATIC MICROBIAL COMMUNITIES

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Nicolas Tromas, nicolas.tromas@umontreal.ca

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526 **Ross, O. N.**; Doglioli, A. M.; Klun, K.; Talaber, I.; Rousselet, L.; Berline, L.; Guillemain, D.; Yohia, C.; Petrenko, A. A.; Pinazo, C.: MESO- & SUB-MESOSCALE PHYSICO-BIOGEOCHEMICAL DYNAMICS IN A COASTAL NW MEDITERRANEAN SEA: QUANTIFYING & UNDERSTANDING ECOSYSTEM STRUCTURE & TRANSPORT (SEAQUEST) (29349)

531 Zhang, H.; Wang, K.; Shen, L.; Wang, X.; Zheng, Z.; Qian, Y.; **Zhang, D.**: BIOGEOGRAPHY OF MICROBIAL EUKARYOTES IN COASTAL NORTHERN ZHEJIANG, EAST CHINA SEA (28946)

532 **Dinasquet, J.**; Stephens, B.; Tiirola, M.; Aluwihare, L.; Obernosterer, I.; Azam, F.: BACTERIOPLANKTON SEASONAL DYNAMICS AND CAPABILITY TO UTILIZE DIFFERENT COMPOUNDS IN COASTAL SURFACE WATERS (29892)

533 **Ulaski, B. P.**; Collins, R. E.: A MOLECULAR ASSESSMENT OF MARINE BACTERIAL AND PROTIST COMMUNITIES WITHIN TWO GATEWAYS TO THE ARCTIC OCEAN (30087)

082 COUPLING AND EXCHANGE ACROSS THE SEDIMENT-WATER INTERFACE

Chair(s): Gary Fones, gary.fones@port.ac.uk
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Charlie Thompson, celt2@soton.ac.uk

Location: Kamehameha Exhibit Hall

602 **Koshikawa, H.**; Fuchida, S.; Yokoyama, A.; Tsuboi, S.; Yamagishi, T.; Kawachi, M.: DEEP SEA MINING AND ITS POSSIBLE IMPACT ON SURFACE PHYTOPLANKTON AT HYDROTHERMAL FIELDS (28420)

603 **Thompson, C.**; Reynolds, S.; Panton, A.; Fones, G.; Couceiro, F.: CONTROLS OF TEMPORAL AND SPATIAL VARIATION IN RESUSPENSION DRIVEN INORGANIC NUTRIENT EXCHANGE IN UK SHELF SEAS. (28568)

604 **Roberts, K.**; Cook, P.; Wong, W.: BIOIRRIGATING POLYCHAETES PROMOTE THE NITROGEN RECYCLING PROCESS DNRA IN A PERIODICALLY HYPOXIC COASTAL LAGOON, THE GIPPSLAND LAKES (28629)

605 **Lee, J.**: BENTHIC MINERALIZATION AND SEDIMENTARY ORGANIC CARBON MASS BUDGET ACROSS FROM THE SHELF TO THE BASIN OF THE SOUTHWESTERN PART OF ULLEUNG BASIN, EAST SEA (28633)

606 **Stolpovsky, K.**; Dale, A. W.; Wallmann, K.: KINETICS OF ORGANIC CARBON REMINERALIZATION IN BIOTURBATED MARINE SEDIMENTS AT THE GLOBAL SCALE FROM A MULTI-G PERSPECTIVE (28989)

607 **Charette, M. A.**; Lam, P. J.; Lohan, M.; Kwon, E. Y.: QUANTIFYING SHELF-OCEAN FLUXES OF TRACE ELEMENTS AND ISOTOPES USING RADIUM-228 (29001)

608 **Panton, A.**; Thompson, C.; Reynolds, S.; Fones, G.: SEDIMENT BIOGEOCHEMISTRY IN CHRISTCHURCH HARBOUR (UK): DIFFUSIVE FLUXES AND THE ROLE OF RESUSPENSION EVENTS (29050)

609 **Inoue, T.**: TEMPORARY VARIATION IN BENTHIC PHOSPHORUS RELEASE DUE TO DISCONTINUOUS AERATION (29317)

610 **Lehman, J. R.**; Lambretti, A. L.; Waggoner, E.; Danford, S.; Cheng, B.; Ziebis, W.: PRODUCTION AND FLUXES OF THE GREENHOUSE GAS NITROUS OXIDE (N2O) IN COASTAL ZONES (29814)

087 TRAINING THE NEXT GENERATION: AN UNDERGRADUATE VIEW FROM THE MOUNTAINS TO THE SEA (POSTER SESSION)

Chair(s): Morgan M Steffen, steffemm@jmu.edu
Louie L Wurch, wurchll@jmu.edu

Location: Kamehameha Exhibit Hall

621 **Hodder, J.**; Watts, M.; Young, C. M.: THE MARINE BIOLOGY DEGREE AT THE UNIVERSITY OF OREGON: ENGAGING STUDENTS IN AUTHENTIC EXPERIENCES IN A YEARLONG IN-RESIDENCE PROGRAM. (28728)

622 **Gillies, S. L.**; Janmaat, A.; Marsh, S.; Kabool, S. M.; Kanda, S.; Yakemchuk, A.: TEACHING ECOLOGY AND GEOGRAPHY USING LOCAL STREAMS AS AN AUTHENTIC RESEARCH TOOL (28764)

623 **LeRoy, C. J.**: TAKING THEM THE WHOLE WAY: TEACHING SCIENCE PROCESS SKILLS THROUGH LARGE-SCALE EXPERIMENTS (29264)

624 **Steffen, M. M.**; Alvarez, G. H.; Coceano, M. A.; Eldridge, K. A.; Fried, H. I.; Gilbert, N. E.; Holmes, C. P.; Keelan, C. R.; Kohler, L. R.; Modolo, C. M.; Polisetti, S. M.; Sales, N. J.; Smith, M. R.; Walsh, E. S.; Harris, M. T.; McGrath, S. E.; Murray, E. A.; Walters, R.: EFFECT OF NITROGEN AMENDMENTS ON BACTERIAL COMMUNITY COMPOSITION IN LAKE SHENANDOAH (VIRGINIA, U.S.A.) AS DETERMINED BY AN UNDERGRADUATE LABORATORY CLASS (29549)

625 **Greengrove, C. L.**; Masura, J. E.: ESTUARINE RESEARCH: SUPPORTING UNDERGRADUATE STUDENT SUCCESS (29640)

626 **Greenwood, P. G.**; Twining, B. S.: THE CHANGING OCEANS SEMESTER-IN-RESIDENCE PROGRAM: A RESEARCH INTENSIVE PROGRAM OFFERED BY COLBY COLLEGE AND BIGELOW LABORATORY FOR OCEAN SCIENCES (29712)

627 **Rii, Y. M.**; Ambrosino, C. M.; Henley, M.; Heckman, M.; Hagedorn, M. M.; Rivera, M. J.: MINDING THE GAP: A GUIDED STEM PIPELINE FROM HIGH SCHOOL TO COLLEGE TO ADDRESS ATTRITION FACTORS (29839)

628 **Nelson, C. E.**; Alegado, R. A.: RIDGE TO REEF: INCORPORATING AUTHENTIC PLACE-BASED AND COMMUNITY-ENGAGED RESEARCH EXPERIENCES INTO UNDERGRADUATE ENVIRONMENTAL SCIENCE CURRICULA (30026)

629 **Maloney, A. E.**; Nowell, A. R.: INTEGRATING ACROSS LEVELS: THE UNIQUE ROLE OF GRADUATE STUDENT MENTORS IN A YEARLONG UNDERGRADUATE RESEARCH COURSE (30066)

106 FISH

Chair(s): David Delaney, Delaney7@hawaii.edu

Location: Kamehameha Exhibit Hall

658 **Bollozos, I. F.**; D'Alessandro, E.; Yniguez, A. T.: FISH LARVAE SENSORY CAPACITIES IN DETECTING PREY DENSITY (28463)

659 **Fall, J.**; Fiksen, Ø.: A ROLE FOR FORAGING THEORY IN FISHERIES MANAGEMENT? A MECHANISTIC APPROACH TO THE PREY SELECTION OF BARENTS SEA COD (28985)

TUESDAY

110 AQUATIC INVASION ECOLOGY

Chair(s): Joy L. Shih, joyshih@hawaii.edu

Location: Kamehameha Exhibit Hall

661 Casties, I.; Seebens, H.; **Briski, E.**: IMPORTANCE OF GEOGRAPHIC ORIGIN FOR INVASION SUCCESS (28464)

662 **Kuglerová, L.**; García, L.; Pardo, I.; Mottiar, Y.; Richardson, J. S.: LEAF LITTER DECOMPOSTION OF INVASIVE AND NATIVE RIPARIAN TREES, SHRUBS AND HERBS IN STREAM MESOCOSMS IN COASTAL BRITISH COLUMBIA (28542)

663 **Holt, W. A.**; Garner, Y. L.: SURVEY OF NATIVE AND NON-NATIVE MUSSEL SPECIES IN THE ST. JOHN'S RIVER, JACKSONVILLE, FLORIDA, USA (28760)

664 **Malej, A.**; Lucic, D.; Tirelli, V.; Vodopivec, M.; Bettoso, N.; Ferrari, C. R.; Camatti, E.; Paliaga, P.; Shiganova, T.: INVASIVE *MNEMIOPSIS LEIDYI* (CTENOPHORA) IN THE NORTHERN ADRIATIC: HERE TO STAY? (29344)

665 Walsh, J. R.; **Spear, M. J.**; Shannon, T. P.; Vander Zanden, M. J.: SEDIMENT SAMPLING OUTPERFORMS ZOOPLANKTON NETS AND ENVIRONMENTAL DNA FOR DETECTING INVASIVE SPINY WATER FLEA (BYTHOTREPHES LONGIMANUS) (29474)

666 **Whitt, J. L.**; Patrick, C. J.; Hogan, J. D.: THE EFFECT OF INVASIVE FISH ON BENTHIC MACROINVERTEBRATES IN HAWAIIAN STREAMS (29507)

667 **Chan, F. T.**; Bailey, S. A.: EVALUATING SHIP BIOFOULING AS A POTENTIAL VECTOR FOR THE INTRODUCTION AND SPREAD OF AQUATIC INVASIVE SPECIES INTO THE CANADIAN ARCTIC (29768)

114 PHYSICAL-BIOLOGICAL COUPLING

Chair(s): Stephan Zeeman, szeeman@une.edu

Location: Kamehameha Exhibit Hall

676 **Sorte, C.**; Pandori, L.; Cai, S.; Davis, K.: PREDICTING PERSISTENCE OF MARINE INVERTEBRATES: FLOW PATTERNS INFLUENCE POLEWARD DISPERSAL AND TOLERANCE PHENOTYPES (28356)

677 **Shavit, U.**; Park, S.; Piriatinskiy, G.; Zeevi, D.; Ben-David, J.; Yossifon, G.; Lotan, T.: NEMATOCYST'S STINGING IS DRIVEN BY THE TUBULE MOVING FRONT (28704)

678 **Ibañez-Tejero, L.**; Ladah, L. B.; Sanchez-Velasco, L.; Barton, E. D.: EFFECT OF THE INTERNAL TIDE ON THE DISTRIBUTION AND ABUNDANCE OF ZOOPLANKTON IN TODOS SANTOS BAY (BAJA CALIFORNIA, MEXICO) (28802)

679 **Filonov, A.**; Ladah, L.: INTERNAL TIDAL WAVES IN THE TODOS SANTOS BAY, BAJA CALIFORNIA, MEXICO (28996)

680 **Tereshchenko, I.**; Ladah, L.: DIURNAL FREQUENCY INTERNAL WAVES IN THE NE PACIFIC AS A POTENTIAL NUTRIENT SOURCE (29038)

681 **Vodopivec, M.**; Peliz, A. J.; Malej, A.: TRACING THE OFFSPRING OF MOON JELLYFISH POLYPS (29077)

682 **Kessouri, F.**; McWilliams, J.; Sutula, M.; Renault, L.; Deutsch, C.; McLaughlin, K.; Frenzel, H.; Bianchi, D.; Feely, R.; Bednaršek, N.; Alin, S.; Ambrose, R. F.; Gold, M.; Weisberg, S.: INTEGRATED MODEL OF OCEAN ACIDIFICATION AND HYPOXIA TO SUPPORT ECOSYSTEM PREDICTION AND ENVIRONMENTAL MANAGEMENT IN THE CALIFORNIA CURRENT ECOSYSTEM (29269)

683 **Fields, D. M.**; Ross, M. L.: SWIMMING UNDER THE INFLUENCE: SIGNAL DETECTION IN A CHANGING WORLD (29404)

WEDNESDAY ORALS

002 ASLOMP STUDENT SYMPOSIUM

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: 301 B

14:30 **Wang, C. H.**; Zhang, T.; Hansel, C.; Sievert, S.: MICROBIAL COLONIZATION OF METAL SULFIDES AT A DIFFUSE-FLOW DEEP-SEA HYDROTHERMAL VENT (28705)

14:45 **Chan, M. M.**; Van Alstyne, K. L.; Padilla, D. K.: DIETARY CHEMICAL SIGNALS INDUCE MORPHOLOGICAL CHANGE IN *LACUNA VINCTA* (28714)

15:00 **Baker, M. C.**; Null, K. A.; Connolly, T. P.: EFFECTS OF TIDAL MANAGEMENT ON SALINITY AND NUTRIENT CONCENTRATIONS IN A LOW-FLOW ESTUARY (28715)

15:15 **Aoki, N. S.**; Mushegian, N.; Katija, K.; Osborn, K.: A KINEMATIC DESCRIPTION OF LOCOMOTION IN TOMOPTERID POLYCHAETES (28790)

16:30 **Givens, K. F.**; North, E.; Sanford, L.; Kahover, K.; Harris, L.; Wiberg, P.: OBSERVING AND DETECTING CRASSOSTREA VIRGINICA FILTRATION IN HARRIS CREEK, MD (28966)

16:45 **Onofrio, M. D.**; Sipler, R.; Shadwick, E.; Mann, R.: EFFECTS OF DISSOLVED ORGANIC MATTER ON LARVAL OYSTER MORTALITY (29125)

17:00 **McHaskell, D. A.**; Smith, J. R.: THE EFFECTS OF PHLOROTANNIN CONCENTRATIONS OF BROWN SEAWEEDS (PHAEOPHYCEAE) ON THE FEEDING RATES OF THE BLACK SEA HARE APLYSIA VACCARIA (29536)

17:15 **Tognacchini, C.**; Serejo, J. H.; Conroy, T.; McManus, M. A.; Ruttenberg, K. C.: THE EFFECTS OF ANTHROPOGENIC PERTURBATIONS AND CLIMATIC CHANGE ON A TROPICAL COASTAL SYSTEM: A COMPARATIVE STUDY (29554)

004 BIOGEOCHEMICAL CYCLING OF TRACE ELEMENTS AND ISOTOPES IN THE ARCTIC OCEAN

Chair(s): Greg Cutter, gcutter@odu.edu
Roger Francois, rfrancoi@eos.ubc.ca
David Kadko, dkadko@fiu.edu
William Landing, wlanding@fsu.edu
Michiel Rutgers Van der Loeff, Mloeff@awi.de

Location: 313 C

10:00 **Agather, A. M.**; Bowman, K. L.; Lamborg, C. H.; Hammerschmidt, C. R.: DISTRIBUTION OF MERCURY SPECIES IN THE WESTERN ARCTIC OCEAN (28960)

10:15 **Mason, R. P.**; DiMento, B.; Moore, C.; Brooks, S.: AIR-SEA EXCHANGE OF MERCURY IN THE ARCTIC OCEAN* (29048)

10:30 **Heimburger, L. E.**; Sonke, S. E.; Rijkenberg, M.; Lodeiro, P.; Cossa, D.; Schartup, A.; Soerensen, A.; Petrova, M.; Zhang, Y.; Garnier, C.; Sunderland, E. M.; Achterberg, E.; Sarthou, G.; Kanzow, T.; Schauer, U.; Rutgers van der Loeff, M.; Planquette, H.: MERCURY IN THE NORTH ATLANTIC AND ARCTIC OCEANS - RESULTS OF THE 2014 GEOTRACES GEOVIDE, 2015 GEOTRACES TRANSARC II & 2016 GEOTRACES GRIFF CRUISES (29391)

10:45 **Brooks, S. B.**; Mason, R.; DiMento, B.; Moore, C.: COMPARISON OF ATMOSPHERIC GASEOUS ELEMENTAL MERCURY MEASUREMENTS AT POINT BARROW, ALASKA AND THE 2015 ARCTIC GEOTRACES CRUISE (29592)

12:00 **Cutter, G. A.**; Wambaugh, Z.: THE UNIQUE BIOGEOCHEMICAL CYCLING OF ARSENIC IN THE ARCTIC OCEAN (28779)

12:15 **Kipp, L. E.**; Charette, M. A.; Moore, W. S.; Henderson, P. B.; Hammond, D. E.: INCREASED FLUXES OF SHELF-DERIVED MATERIALS TO THE CENTRAL ARCTIC OCEAN (28998)

12:30 **Thomas, H.**; Dehairs, F.; Mol, J.: SHELF EXCHANGE PROCESSES OF CO2, RA AND BA IN THE CANADIAN ARCTIC ARCHIPELAGO (28895)

12:45 **Whitmore, L. M.**; Shiller, A. M.: DISSOLVED BARIUM DISTRIBUTION IN THE 2015 U.S. GEOTRACES ARCTIC SECTION (28993)

14:30 **Bam, W.**; Krupp, K.; Maiti, K.; Baskaran, M.: LEAD-210 AND POLONIUM-210 DISEQUILIBRIA ALONG THE US ARCTIC GEOTRACES SECTION (29025)

14:45 **Vivancos, S. M.**; Anderson, R. F.; Pavia, F. J.; Fleisher, M. Q.; Zhang, P.; Cheng, H.; Edwards, R. L.: EFFECTS OF BOUNDARY AND BOTTOM SCAVENGING ON DISSOLVED THORIUM AND PROTACTINIUM IN THE ARCTIC OCEAN ALONG GEOTRACES GN01 TRANSECT (29993)

15:00 **Black, E. E.**: THORIUM ISOTOPES AS TRACERS OF PARTICULATE EXPORT AND REMINERALIZATION IN THE ARCTIC OCEAN (28685)

15:15 **Timmerman, A.**; Hamme, R. C.; Miller, L. A.; Francois, R.; Soon, M.; Giesbrecht, K.; Varela, D. E.: SPATIAL VARIABILITY OF CARBON EXPORT FROM THE SUB-ARCTIC TO THE ARCTIC OCEAN (29173)

16:30 **Altabet, M. A.**; Chen, S.; Granger, J.; Dabundo, R.: SOURCE OF THE NITROGEN DEFICIT IN CHUKCHI SEA INTERMEDIATE WATERS (29535)

16:45 **Granger, J.**; Sigman, D. M.: N BIOGEOCHEMISTRY OF THE WESTERN ARCTIC OCEAN EVIDENCED BY COUPLED N AND O ISOTOPE RATIOS OF NITRATE (29589)

17:00 **Bourbonnais, A.**; Altabet, M. A.; Granger, J.: N_2O CYCLING IN THE WESTERN ARCTIC AS INFERRED FROM CONCENTRATION, STABLE ISOTOPE AND ISOTOPOMER DATA (28585)

17:15 **Varela, D. E.**; Giesbrecht, K. E.: SILICON BIOGEOCHEMISTRY IN ARCTIC AND SUB-ARCTIC WATERS DURING 2015 CANADIAN GEOTRACES: BIOGENIC SILICA PRODUCTION AND NATURAL SI ISOTOPIC SIGNATURES (29888)

006 NEW DIRECTIONS IN PLANKTON ECOLOGY

Chair(s): Zoe V Finkel, zfinkel@mta.ca
Andrew J. Irwin, airwin@mta.ca
Susanne Menden-Deuer, smenden@uri.edu

Location: 313 A

10:00 **Dutkiewicz, S.**; Jahn, O.; Hickman, A. E.; Follows, M. J.: BIOGEOGRAPHY AND DIMENSIONS OF PHYTOPLANKTON DIVERSITY (28947)

10:15 **Barton, A. D.**; Gonzalez-Taboada, F.; Stock, C. A.: DISTRIBUTION AND DRIVERS OF REGIME SHIFTS IN MARINE PLANKTON COMMUNITIES (28473)

10:30 **Kuhn, A. M.**; Fennel, K.; Landou, E.; Lazar, B.; Berman-Frank, I.: IMPORTANCE OF AUTOTROPHIC AND HETEROTROPHIC N_2 FIXATION IN THE GULF OF AQABA, RED SEA: A MODELING APPROACH (29453)

10:45 **Zakem, E. J.**; Follows, M. J.: REPRESENTING MICROBIAL METABOLISMS AT GLOBAL SCALES WITH REDOX-BASED COMMUNITY-LEVEL METABOLIC FUNCTIONAL TYPES (30113)

12:00 **Scharfe, M.**; Wiltshire, K. H.; Kraberg, A.: INFLUENCE OF HYDRO-CLIMATIC VARIATION ON MARINE PHYTOPLANKTON PHENOLOGY: SPECIES-SPECIFIC RESPONSES ON THE DECADAL SCALE (29851)

12:15 **Wells, S. R.**; Cook, K.; Douglas, A.; Bresnan, E.; Mayor, D.: THE STATUS OF THE PLANKTON COMMUNITY AT LOCH EWE, SCOTLAND: ENVIRONMENTAL DRIVERS AND THE UK PLANKTON INDEX. (28696)

12:30 **Ajani, P. A.**; Hallegraeff, G. M.; Allen, A.; Coughlan, A.; Richardson, A. J.; Armand, L. K.; Ingleton, T.; Murray, S. A.: ESTABLISHING BASELINES: A REVIEW OF EIGHTY YEARS OF PHYTOPLANKTON DIVERSITY AND BIOMASS IN SOUTH-EASTERN AUSTRALIA (28333)

12:45 **McGinty, N.**; Barton, A. D.; Record, N. R.; Finkel, Z.; Irwin, A.: NICHES ARE DETERMINED BY TROPHIC LEVEL IN NORTH ATLANTIC AND SOUTHERN OCEAN CALANOID COPEPODS (29693)

14:30 **Munns, L. R.**; Hickman, A. E.; Poulton, A. J.: DIVERSITY AND SIZE SCALING OF COCCOLITHOPHORE PHOTOPHYSIOLOGY (28991)

14:45 **Eigemann, F.**; Schwartke, M.; Schulz-Vogt, H.: TEMPERATURE AND RADIATION DEPENDENT GROWTH RATES OF THREE BLOOM FORMING BALTIC SEA CYANOBACTERIA IN SINGLE, PAIR AND MULTI-SPECIES CULTURES (29691)

15:00 **Ayres, S. L.**; Karp-Boss, L.; Jumars, P. A.: MEASUREMENTS OF CELL DENSITY OF DIATOMS *COSCINODISCUS RADIATUS* AND *COSCINODISCUS WAILESII* IN RELATION TO CELL SIZE AND GROWTH (29883)

15:15 **Laney, S. R.**: NEW FRAMEWORKS FOR REPRESENTING THE DYNAMICS OF THE PHOTOSYNTHESIS-IRRADIANCE RELATIONSHIP (29812)

16:30 **Lee, H. A.**; Sosik, H. M.; Lucchese, A.; McAmis, A.; Steichen, J.; Genzer, J.; Windham, R.; Williams, A.; Quigg, A. S.: USING AN IMAGING FLOWCYTOBOT TO DETERMINE FINE SCALE CHANGES IN PHYTOPLANKTON COMMUNITY COMPOSITION RESPONDING TO PHYSICAL DISTURBANCE IN GALVESTON BAY, TX (28367)

16:45 **Heuschele, J.**; Lode, T.; Wolf, R.; Andersen, T.; Titelman, J.: CONSISTENT BEHAVIORAL DIFFERENCES IN ZOOPLANKTON - A NOVEL APPROACH USING AUTOMATIZED IMAGING SYSTEMS (29351)

17:00 **Nayak, A. R.**; McFarland, M. N.; Sullivan, J. M.; Twardowski, M. S.: A STUDY OF COLONIAL DIATOM CHAIN DISTRIBUTIONS AND BIOPHYSICAL INTERACTIONS IN THE WATER COLUMN OF A FJORD USING A SUBMERSIBLE HOLOGRAPHIC IMAGING SYSTEM (29659)

17:15 **Ellen, J. S.**; Ohman, M. D.: LEVERAGING CONTEXTUAL DATA TO IMPROVE MACHINE-LEARNING CLASSIFICATIONS OF MARINE ZOOPLANKTON (29955)

007 THE POWER OF DIATOMS

Chair(s): Lisa R. Estepp, lestepp@d.umn.edu
Euan D. Reavie, ereavie@d.umn.edu

Location: 302 A/B

10:00 **Edlund, M. B.**; Ramstack Hobbs, J. M.; Heathcote, A. J.; Engstrom, D. R.; Saros, J. E.; Strock, K. E.; Hobbs, W. O.; VanderMeulen, D. D.: HISTORICAL DIATOM COMMUNITY AND PRODUCTIVITY SHIFTS HELP PREDICT THE SENSITIVITY OF BOREAL LAKES TO CLIMATE CHANGE* (30049)

10:15 **Bramburger, A. J.**; Reavie, E. D.; Sgro, G. V.; Estepp, L. R.; Chraibi, V. S.; Pillsbury, R. W.: DECREASES IN DIATOM CELL SIZE OVER THE COURSE OF THE 20TH CENTURY IN THE LAURENTIAN GREAT LAKES: A RESPONSE TO WARMING WATERS? (28725)

10:30 **Reavie, E. D.**; Cai, M.; Estepp, L. R.; Twiss, M. R.; Sgro, G. V.; Carrick, H. J.; Bramburger, A. J.; Davis, T. W.; Johengen, T. H.; Pillsbury, R. W.; Gossiaux, D.; Smith, D. E.; Shaw Chraïbi, V. L.; Stow, C. A.; Dove, A.; Palladino, D.; Burtner, A. M.: THREE DIATOM-BASED FINDINGS THAT ARE CRITICAL TO MANAGEMENT OF NORTH AMERICA'S LARGEST SURFACE WATER RESOURCE (28709)

10:45 **Faria, D. M.**; Cardoso, L. S.; Motta-Marques, D.: WIND DISTURBANCE AND COLD-FRONT ACT AS MAIN STRUCTURING FORCES FOR ALGAE ATTACHMENT AND SUCCESSION DURING WINTER IN A SHALLOW LAKE (29916)

12:00 **Jyrkänkallio-Mikkola, J.**; Soininen, J.: MULTI-SCALE ENVIROMENTAL FACTORS AFFECTING TROPICAL STREAM DIATOM DIVERSITY (28396)

12:15 **McKnight, D. M.**; Howkins, A.; Kohler, T.; Sokol, E.: THE DIATOMS OF CAPE ROYDS: HISTORICAL PERSPECTIVES ON UNDERSTANDING DIATOM COMMUNITY ECOLOGY IN ANTARCTICA (29876)

12:30 **Julius, M. L.**: WHAT WILL YOU DO FOR A DIATOM DINNER?: EVOLUTIONARY MODIFICATION IN ALGIVOROUS FISH TO ENABLE DIATOM FEEDING STRATEGIES* (30084)

12:45 **Bretherton, L.**; Kamalanathan, M.; Genzer, J.; Hillhouse, J.; Couffer, B.; Quigg, A.: USING DIATOMS TO UNDERSTAND THE TOXICITY OF OIL SPILLS AND CHEMICAL DISPERSANTS (28948)

14:30 **Volpe, C.**; Nymark, M.; Grønbech Hafskjold, M. C.; Winge, P.; Bones, A.; Vadstein, O.: FUNCTIONAL STUDIES ON THE LIGHT HARVESTING COMPLEX SYSTEM IN MARINE DIATOMS USING THE CRISPR/CAS GENE EDITING METHOD (28908)

14:45 **Cannonier, S.**: A STUDY OF NUTRIENT IMPACTS ON HAB BIOTOXIN CONCENTRATIONS IN APALACHICOLA BAY AND GRAND BAY NATIONAL ESTUARINE RESEARCH RESERVES (28471)

15:00 **Young, J. N.**: VARIABILITY IN CO2 FIXATION KINETICS BY DIATOM RUBISCO: IMPLICATIONS FOR THE DIATOM-DRIVEN CARBON SINK IN A CHANGING OCEAN (29188)

15:15 Sachs, J. P.; **Maloney, A. E.**; Gregersen, J.: THE INFLUENCE OF LIGHT ON $^{2}H/^{1}H$ FRACTIONATION IN THE DIATOM *THALASSIOSIRA PSEUDONANA* (30025)

013 INTEGRATIVE RESEARCH ON ORGANIC MATTER CYCLING ACROSS AQUATIC GRADIENTS

Chair(s): Richard G. Keil, rickkeil@uw.edu
Sairah Y. Malkin, smalkin@umces.edu
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Carol Robinson, Carol.Robinson@uea.ac.uk
Michael Seidel, m.seidel@uni-oldenburg.de
Nicholas D. Ward, nickdward@gmail.com

Location: 304 A/B

10:00 **Goni, M. A.**; White, A.; Shearman, K.; Lerczak, J.; Wheatcroft, R.; Hatten, J.: THE IMPACT OF RIVERINE FLOODING ON COASTAL BIOGEOCHEMISTRY IN THE PACIFIC NORTHWEST[T] (29514)

10:30 **Hernes, P. J.**; Spencer, R. G.; Dyda, R. Y.; O'Geen, A. T.; Dahlgren, R. A.: THE GENESIS AND EXODUS OF VASCULAR PLANT DOM FROM AN OAK WOODLAND LANDSCAPE (28791)

10:45 **Graham, E. B.**; Crump, A. R.; Kennedy, D. W.; Tfaily, M.; Stegen, J. C.: ORGANIC CARBON COMPOSITION AND THERMODYNAMICS INDICATE PREFERENTIAL CARBON SEQUESTRATION AT A TERRESTRIAL-AQUATIC INTERFACE (29915)

12:00 **Wagner, S.**; Brandes, J.; Goranov, A.; Stubbins, A.: STABLE CARBON ISOTOPES OFFER NEW INSIGHT INTO THE BIOGEOCHEMICAL CYCLING OF BLACK CARBON (28692)

12:15 **Webb, J. R.**; Santos, I. R.; Maher, D. T.; Macdonald, B.; Robson, B.; Isaac, P.; McHugh, I.: TERRESTRIAL VERSUS AQUATIC CARBON FLUXES IN AN AGRICULTURAL COASTAL FLOODPLAIN (28555)

12:30 **Liu, Y.**; Bianchi, T. S.; Arellano, A. R.; Ward, N. D.; Tolic, N.; Pasa-Tolic, L.; Kuo, L.; Rivas Ubach, A.: MOLECULAR SIGNATURE OF ORGANIC CARBON ALONG A SALINITY GRADIENT IN SUWANNEE RIVER PLUME (28784)

12:45 **Pika, P.**; Arndt, S.; Eglinton, T.; S. Freitas, F.: EXPLORING THE INFLUENCE OF ORGANIC MATTER REACTIVITY ON BENTHIC-PELAGIC COUPLING ON THE GLOBAL COASTAL AND OPEN OCEAN (29493)

14:30 **Kujawinski, E. B.**; Johnson, W. M.; Kido Soule, M. C.; Longnecker, K.: METABOLIC PROFILING ACROSS A COASTAL-OPEN OCEAN GRADIENT (29688)

14:45 **Amaral, V.**; Yannicelli, B.; Hernández, K.: DISSOLVED ORGANIC MATTER DISTRIBUTION IN THE EASTERN SOUTH PACIFIC: FROM THE CONTINENT TO THE OCEANIC ISLANDS IN THE OLIGOTROPHIC SUB-TROPICAL GYRE (29932)

15:00 **Goldberg, S. J.**; Nelson, C. E.; Dulai, H.; Donahue, M.; Remple, K.; Richardson, C.; La Valle, F.; Fackrell, J.; Quinlan, Z.; Thomas, F.: NUTRIENT-RICH SUBMARINE GROUNDWATER DISCHARGE DRIVES UNIQUE PATTERNS IN FDOM AND PLANKTON BIOMASS AT A CORAL REEF IN MAUNALUA BAY, HI (29825)

15:15 **Widner, B.**; Macias Tapia, A.; Ji, Q.; Bernhardt, P. W.; Jayakumar, A.; Mulholland, M. R.: UPTAKE AND DISSIMILATORY UTILIZATION OF SIMPLE ORGANIC NITROGEN COMPOUNDS IN THE EASTERN TROPICAL PACIFIC OXYGEN DEFICIENT ZONE (29596)

16:30 **Margolin, A. R.**; Gonnelli, M.; Hansell, D. A.; Santinelli, C.: OPTICAL PROPERTIES OF BLACK SEA DISSOLVED ORGANIC MATTER: ORIGIN AND IMPLICATIONS (28662)

16:45 **Kellerman, A. M.**; Arellano, A.; Podgorski, D. C.; Martin, E. E.; Martin, J. B.; Deuerling, K.; Bianchi, T. S.; Spencer, R.: FUNDAMENTAL DRIVERS OF DISSOLVED ORGANIC MATTER COMPOSITION ACROSS AN ARCTIC EFFECTIVE PRECIPITATION GRADIENT (29414)

17:00 **Myers-Pigg, A. N.**; Louchouarn, P.: PYROGENIC CARBON DYNAMICS ACROSS LAND-TO-SEA GRADIENTS (28392)

17:15 **Drake, T. W.**; Guillemette, F.; Chanton, J. P.; Podgorski, D. C.; Zimov, N. S.; Spencer, R. G.: THE EPHEMERAL SIGNATURE OF PERMAFROST CARBON IN AN ARCTIC FLUVIAL NETWORK (28590)

015 PATTERNS OF BIOGEOCHEMICAL CHANGE IN STREAM AND RIVER NETWORKS

Chair(s): Ted Stets, estets@usgs.gov
Rob Striegl, rstriegl@usgs.gov
Suzanne Tank, suzanne.tank@ualberta.ca

Location: 302 A/B

16:30 **Karlsson, J.**; Pokrovsky, O.; Prokushkin, A.; Serikova, S.: CARBON EMISSION FROM SIBERIAN RIVERS (28691)

16:45 **Zolkos, S.**; Tank, S.; Kokelj, S.; Striegl, R.: INORGANIC CARBON DYNAMICS IN STREAMS ACROSS DIVERSE PERMAFROST LANDSCAPES, YUKON AND NORTHWEST TERRITORIES, CANADA (29625)

17:00 **Campeau, A.**; Bishop, K. B.; Leith, F. I.; Klemedtsson, L.; Laudon, H.; Nilsson, M. B.; Wallin, M. B.: MULTIPLE FATES OF DIC EXPORT ACROSS THE SOIL-STREAM INTERFACE IN BOREAL CATCHMENTS - THROUGH THE LENS OF STABLE ISOTOPE COMPOSITION (29314)

17:15 **Ulseth, A. J.**; Bertuzzo, E.; Singer, G. A.; Schelker, J.; Battin, T. J.: CLIMATE-INDUCED CHANGES IN SPRING SNOWMELT IMPACT ECOSYSTEM METABOLISM AND CARBON FLUXES IN AN ALPINE STREAM NETWORK (28682)

018 VERTICAL CONNECTIVITY OF THE PELAGIC OCEAN: UNDERSTANDING THE FUNCTION AND SERVICES OF INTERMEDIATE TROPHIC LEVELS

Chair(s): Kevin Boswell, kevin.boswell@fiu.edu
Rosanna Milligan, rboyle@nova.edu
Tracey Sutton, tsutton1@nova.edu
Joseph Warren

Location: 308 A/B

10:00 **Judkins, H.**; Vecchione, M.; Cook, A.; Sutton, T.: VERTICAL MIGRATION PATTERNS OF CEPHALOPODS IN THE NORTHERN GULF OF MEXICO (28762)

10:15 **Milligan, R. J.**; Sutton, T. T.: QUANTIFYING PELAGIC HABITAT USE BY MYCTOPHID FISHES IN THE NORTHERN GULF OF MEXICO (29540)

10:30 **deRada, S.**; Penta, B.; Sutton, T.; Johnston, M.; Milligan, R.; Easson, C.; Cook, A.; Boswell, K.; Lembke, C.; English, D.; Hu, C.: PHYSICAL-BIO-OPTICAL MODELING IN THE GULF OF MEXICO: ANALYSIS OF WATER MASS RELATIONSHIPS TO PELAGIC HABITAT (29960)

10:45 **Gaube, P.**: WHITE SHARKS CALL INTO QUESTION ANTICYCLONES AS OCEAN DESERTS (28438)

12:00 **Kaartvedt, S.**; Røstad, A.: RED SEA MESOPELAGIC SCATTERING LAYERS ARE FORMED BY FISH (28446)

12:15 **Aksnes, D. L.**; Røstad, A.; Kaartvedt, S.; Martinez, U.; Duarte, C. M.; Irigoien, X.: LIGHT PENETRATION STRUCTURES THE OCEANIC ACOUSTIC SCATTERING LAYER (28861)

12:30 **Proud, R.**; Cox, M. J.; Brierley, A. S.: A BIOGEOGRAPHY OF THE MESOPELAGIC ZONE (200 – 1000 M) BASED ON DEEP SCATTERING LAYERS (29623)

[*] REPRESENTS INVITED PRESENTATIONS

12:45 **Boswell, K. M.**; Rieucau, G.; D'Elia, M. A.; Warren, J. D.; Sutton, T. T.: EXAMINING COMPLEX VERTICAL MOVEMENTS OF MESOPELAGIC SCATTERING LAYERS: FROM TAXONOMIC-BASED MIGRATION DECISIONS TO GLOBAL BIOLOGICAL FLUXES (29990)

14:30 **Richards, T. M.**; Sutton, T. T.; Wells, J. D.: TROPHIC STRUCTURE OF MESO- AND BATHYPELAGIC MICRONEKTON IN RELATION TO MESOSCALE OCEANOGRAPHIC FEATURES IN THE NORTHERN GULF OF MEXICO (29057)

14:45 **Drazen, J. C.**; Gloeckler, K.; Choy, C. A.; Close, H. G.; Hannides, C. C.; Benitez-Nelson, C. R.; Umhau, B.; Popp, B. N.: SMALL PARTICLES MAY FORM A PREVIOUSLY OVERLOOKED FOOD SOURCE FOR MESOPELAGIC ZOOPLANKTON AND MICRONEKTON (29671)

15:00 **Gloeckler, K. M.**; Choy, C. A.; Ko, W.; Hannides, C.; Close, H. G.; Popp, B. N.; Drazen, J. C.: COMPOUND SPECIFIC STABLE ISOTOPE ANALYSIS OF MICRONEKTON AROUND HAWAII REVEALS SUSPENDED PARTICLES ARE AN IMPORTANT DIETARY RESOURCE IN THE MESO/BATHYPELAGIC (30033)

15:15 **Romero, I. C.**; Sutton, T.; Quintana-Rizzo, Q. C.; Ross, S.; Torres, J.; Hollander, D.: LONG-TERM STUDY OF POLYCYCLIC AROMATIC HYDROCARBONS IN DEEP-WATER FISH SPECIES IN THE NORTHERN GULF OF MEXICO REVEALS EXPOSURE TO DEEPWATER HORIZON OIL (29580)

16:30 **Cook, A. B.**; Sutton, T. T.: LARGER PREDATORY FISHES OF THE MESO- AND BATHYPELAGIC DOMAINS: LINKING THE PLANKTIVORES AND TOP PREDATORS (29829)

17:00 **Sutton, T. T.**; Cook, A. B.; Milligan, R. J.: EVIDENCE OF DIEL VERTICAL MIGRATIONS BY BATHYPELAGIC FISHES IN THE GULF OF MEXICO: A NEW VECTOR OF WATER-COLUMN CONNECTIVITY IN THE OCEANIC DOMAIN (28646)

17:15 **Hernández-León, S.**; Koppelmann, R.; Fraile-Nuez, E.; Irigoien, X.; Olivar, P.; Bode, A.; Echevarría, F.; Fernández de Puelles, M. L.; González-Gordillo, I.; Cózar, A.; Acuña, J. L.; Agustí, S.; Duarte, C. M.: BATHYPELAGIC FAUNA AS A MAIN DRIVER OF CARBON SEQUESTRATION IN THE OCEAN (29327)

021 CROSSING DISCIPLINARY BOUNDARIES ACROSS THE FRESHWATER-MARINE CONTINUUM TO ADVANCE THE UNDERSTANDING OF HARMFUL ALGAL BLOOMS (HABS)

Chair(s): Bryan Brooks, bryan_brooks@baylor.edu
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J. Thad Scott, thad_scott@baylor.edu
Jeffery Steevens, jeffery.a.steevens@erdc.usace.army.mil
Alan Wilson, wilson@auburn.edu

Location: 323 B

10:00 **Hilborn, E. D.**: HUMAN HEALTH EFFECTS ASSOCIATED WITH EXPOSURE TO TOXIC CYANOBACTERIA – WHAT IS THE EVIDENCE? (28453)

10:15 **Younan, L.**: NEW INSTRUMENTATION ENABLING MONITORING OF CYANOBACTERIA (29041)

10:30 **Steevens, J. A.**; Brooks, B. W.: DEFINING INTERDISCIPLINARY SOLUTIONS FOR INLAND HABS: THE NEED FOR TOXICOLOGY TO INFORM RISK MANAGEMENT (30007)

10:45 **Engene, N.**: WHO ARE THE BAD GUYS? IDENTIFYING CYANOBACTERIAL HARMFUL ALGAL BLOOMS USING AN INTEGRATIVE MOLECULAR AND CHEMICAL APPROACH (30021)

12:00 **Jankowiak, J. G.**; Gobler, C.; Hattenrath, T.: UNRAVELLING THE ROLE OF NITROGEN, PHOSPHORUS, AND TEMPERATURE IN DRIVING CYANOHAB DIVERSITY USING NEXT GENERATION SEQUENCING (28478)

12:15 **Paul, J. H.**; Hubbard, K.; Nieuwkerk, D.; Ulrich, R.; Tilney, C.; Hoaglund, A.; Olesin, E.: PCMHAB: IMPLEMENTING THE KARENIA "TRICORDER" TO IMPROVE RED TIDE MONITORING AND MANAGEMENT IN THE GULF OF MEXICO (29087)

12:30 **Dearth, N.**; Jones, W. J.; Mortensen, R.; Doll, C.; Pinckney, J. L.; Greenfield, D. I.: DEVELOPMENT OF A SANDWICH HYBRIDIZATION ASSAY FOR THE HARMFUL CYANOBACTERIUM *MICROCYSTIS AERUGINOSA* (29008)

12:45 **Shang, S.**: SENSING A PHAEOCYSTIS BLOOM IN THE WESTERN TAIWAN STRAIT FROM RADIOMETRIC MEASUREMENTS WITH AN UAV (29084)

14:30 **Filstrup, C. T.**; Leavitt, P. R.; Downing, J. A.: CYANOBACTERIA PHYSIOLOGICAL RESPONSES TO RESOURCE IMBALANCE IN EUTROPHIC LAKES AS REVEALED BY CELLULAR PIGMENT CONTENT (29699)

14:45 **Salk, K. R.**; Bullerjahn, G. S.; McKay, R. M.; Ostrom, N. E.: ACTIVE NITROGEN CYCLING IS LINKED TO THE FORMATION AND PERSISTENCE OF HABS IN SANDUSKY BAY, LAKE ERIE (28517)

15:00 **Gardner, W. S.**; McCarthy, M. J.; Newell, S. E.; Hou, L.; Dai, R.; Lu, K.: AMMONIUM AND UREA CYCLING AND DEMAND IN THE NORTHERN GULF OF MEXICO MISSISSIPPI RIVER PLUME AND IN CYANOBACTERIA IMPACTED LAKES (29519)

15:15 **Hampel, J. J.**; McCarthy, M. J.; Gardner, W. S.; Lu, Z.; Zhu, G.; Xu, H.; Newell, S. E.: "WATER COLUMN AMMONIUM DYNAMICS IN TWO LARGE, EUTROPHIC, FRESHWATER LAKES: LAKE TAIHU (CHINA) AND LAKE OKEECHOBEE (FLORIDA)." (28898)

16:30 **Hoffman, D. K.**; McCarthy, M. J.; Davis, T. W.; Gossiaux, D.; Burtner, A.; Johengen, T.; Palladino, D.; Gardner, W. S.; Myers, J. A.; Newell, S. E.: WATER COLUMN AMMONIUM DYNAMICS AFFECTING HARMFUL CYANOBACTERIAL BLOOMS IN LAKE ERIE (28910)

16:45 **Bade, D. L.**: MICROCYSTIN DYNAMICS IN LAKE ERIE LINKED TO NITRATE CONCENTRATIONS (30119)

17:00 **Mackey, K. R.**; Kavanaugh, M. T.; Wang, F.; Chen, Y.; Liu, F.; Glover, D. M.; Chien, C.; Paytan, A.: EUTROPHICATION FROM ATMOSPHERIC DEPOSITION AND RIVER DISCHARGE FUELS HARMFUL ALGAL BLOOMS IN THE EAST CHINA SEA (28758)

17:15 **Fernandez, E. G.**; Olsen, B. K.; Chislock, M. F.; Rebelein, A.; Thornton, W.; Hilyer, D.; Wilson, A. E.: EUTROPHICATION MEDIATES COMPLEX INTERACTIONS BETWEEN CYANOBACTERIA AND DIATOMS THAT INFLUENCE TASTE AND ODOR EVENTS IN A DRINKING WATER RESERVOIR (29413)

022 ADVANCES IN MODELING COASTAL HYPOXIA AND ACIDIFICATION: FROM PHYSICS TO FISH

Chair(s): Katja Fennel, katja.fennel@dal.ca
Dubravko Justic, djusti1@lsu.edu
John Lehrter, jlehrter@disl.org

Location: 313 B

14:30 **Lohrenz, S. E.**; Cai, W. J.; Tian, H.; He, R.; Xue, Z.; Fennel, K.: CHARACTERIZING CLIMATE AND HUMAN INFLUENCES ON COASTAL MARGIN ECOSYSTEMS USING INTEGRATED LAND-OCEAN MODELING APPROACHES* (28737)

14:45 **Justic, D.**; Wang, L.: CAN FRESHWATER DIVERSIONS ON THE LOWER MISSISSIPPI RIVER REDUCE HYPOXIA IN THE NORTHERN GULF OF MEXICO? (28615)

15:00 **Stanev, E. V.**: TEMPORAL AND SPATIAL VARIABILITY OF OXYGEN AND SULFIDE IN THE BLACK SEA (29102)

15:15 **Lehrter, J. C.**: MODELING SEDIMENT DIAGENESIS CONTROLS ON SEDIMENT-WATER EXCHANGES OF OXYGEN AND ALKALINITY DURING HYPOXIA (29556)

16:30 **Ito, Y.**; Irie, M.; Okada, T.; Yu, L.; Fennel, K.: DATA ASSIMILATION OF CHLOROPHYLL AND DISSOLVED OXYGEN PROFILES USING THE ENKF: A NUMERICAL EXPERIMENT FOR OSAKA BAY, JAPAN (29175)

16:45 **Rowe, M. D.**; Anderson, E. J.; Ruberg, S. A.; Verhamme, E. M.; Beletsky, D.; Zhang, H.; Johengen, T. H.; Stow, C. A.: INVESTIGATION OF A HYDRODYNAMIC FORECAST MODEL AS A PREDICTOR OF DISSOLVED OXYGEN DYNAMICS NEAR PUBLIC WATER SYSTEM INTAKES IN THE CENTRAL BASIN OF LAKE ERIE (28761)

17:00 **Zhang, H.**; Rutherford, E.; Mason, D.; Johnson, T.; Zhu, X.; Adamack, A.; Gorman, A.; Kayle, K.; Scavia, D.: ECOSYSTEM LEVEL ASSESSMENTS OF HYPOXIA IMPACTS ON THE FOOD WEB AND FISHERIES OF LAKE ERIE (28755)

17:15 **de Mutsert, K.**; Brandt, S.; Campbell, M. D.; Lewis, K.; Laurent, A.; Sellinger, C. E.; Steenbeek, J. G.; Buszowski, J.; Cowan, J. H.; Christensen, V.: ASSESSING EFFECTS OF REDUCED NUTRIENTS AND HYPOXIA ON LIVING RESOURCES IN THE GULF OF MEXICO USING A COUPLED ECOSYSTEM MODELING APPROACH. (29431)

023 DYNAMIC DON: THE ROLE OF ORGANIC NITROGEN IN REGULATING AQUATIC ECOSYSTEM FUNCTIONING FROM LAND TO SEA

Chair(s): Mario Brauns, mario.brauns@ufz.de
Daniel Graeber, dgr@bios.au.dk
Naomi S. Wells, naomi.wells@scu.edu.au

Location: 301 B

10:00 **Bronk, D. A.**; Sipler, R.; Spackeen, J.: THE POTENTIAL OF DON TO SERVE AS A CONTROLLING VARIABLE FOR INORGANIC NUTRIENT CONCENTRATIONS IN COASTAL AND ESTUARINE SYSTEMS[T] (29674)

10:30 **Broek, T. A.**; Guilderson, T. P.; McCarthy, M. D.: DON Δ14C: DIRECT ASSESSMENT OF DISSOLVED ORGANIC NITROGEN CYCLING RATES IN THE GLOBAL OCEAN. (29847)

10:45 **Bour, A. L.**; Broek, T.; Guilderson, T. P.; Gier, E. J.; McCarthy, M. D.: AMINO ACID STEREOCHEMISTRY AND ABUNDANCE ACROSS THE DOM SIZE- 14C AGE CONTINUUM: IMPLICATIONS FOR A MICROBIAL N PUMP (30083)

12:00 **Wymore, A. S.**; Bernal, S.; Marti, E.; McDowell, W. H.: CHANGING PERSPECTIVES ON THE BIOGEOCHEMISTRY AND ECOLOGY OF DISSOLVED ORGANIC NITROGEN (28957)

12:15 **Riekenberg, P. M.**; Oakes, J. M.; Eyre, B. D.: NUTRIENT-DRIVEN ALTERATIONS IN DISSOLVED ORGANIC NITROGEN PROCESSING WITHIN SEDIMENTS REVEALED USING 15N ENRICHMENT, BIOMARKERS AND d^{15}-DON (28660)

12:30 **Toor, G. S.**; Lusk, M. G.: MOLECULAR COMPOSITION AND BIOAVAILABILITY OF DISSOLVED ORGANIC NITROGEN IN URBAN WATERS (28918)

12:45 **Farrell, M.**; Sanderman, J.: DISSOLVED ORGANIC NITROGEN: RECENT TERRESTRIAL ADVANCES AND AQUATIC IMPLICATIONS* (29005)

026 UNDERGRADUATE RESEARCH IN THE AQUATIC SCIENCES

Chair(s): David Fields, dfields@bigelow.org
Elizabeth Rom, elrom@nsf.gov

Location: 306 A

16:30 **Matzke, S. E.**; Raut, Y.; Vieira, C. D.; Capone, D. G.: NITROGEN FIXATION RATES ASSOCIATED WITH ANATOMICAL FEATURES OF SARGASSUM HORNERI SURROUNDING CATALINA ISLAND, CA (29232)

16:45 **Michaud, C. A.**; Whitney, L. P.; Lomas, M. W.: GROWTH OF EMILIANIA HUXLEYI ON PHOSPHONATE (28346)

17:00 **Davis, A. N.**; F. Shamberger, K. E.; Roark, E. B.; Baco, A. R.; Brooks, J.; Miller, K.: CHARACTERIZATION OF CARBONATE SATURATION HORIZONS NEAR DEEP-SEA CORAL BEDS IN THE NORTHWESTERN HAWAIIAN ISLANDS (28733)

17:15 **Matteson, N. L.**; Gilg, I.; Martinez, J. M.: THE EFFECT OF INCREASED TEMPERATURE AND CO 2 LEVELS ON THE TEMPORAL ABUNDANCE OF KEY MARINE VIRUSES. (28368)

030 TROPHIC INTERACTIONS AS MODIFIERS OF CARBON AND NUTRIENT CYCLES IN THE OCEAN

Chair(s): Susanne Neuer, susanne.neuer@asu.edu
Tammi Richardson, tammirichardson@gmail.com

Location: 323 C

10:00 De Martini, F.; **Neuer, S.**; Dudek, K.: RELATIVE CONTRIBUTION OF CYANOBACTERIA AND PROTISTS IN THE SHALLOW SEDIMENT TRAP MATERIAL IN THE SARGASSO SEA: INDICATION OF FOOD WEB CONTROL (29195)

10:15 **Cotti-Rausch, B. E.**; Condon, R. H.; De Martini, F.; Neuer, S.; Lomas, M. W.; Richardson, T. L.: PLANKTONIC FOOD WEB INTERACTIONS UNDER VARIABLE ENVIRONMENTAL CONDITIONS IN THE SARGASSO SEA (29521)

10:30 **van der Jagt, H.**; Iversen, M. H.: DIRECT OBSERVATIONS OF MESOZOOPLANKTON AGGREGATE FEEDING – IMPLICATIONS FOR UPPER OCEAN FLUX ATTENUATION (29523)

10:45 **Ramondenc, S.**; Delahaye, F.; Eveillard, D.; Stemmann, L.; Guidi, L.; Lombard, F.: CONTRIBUTION OF THE JELLYFISH "PELAGIA NOCTILUCA" TO CARBON EXPORT IN THE MEDITERRANEAN SEA (29324)

12:00 **Liu, X.**; Jiang, S. Y.; Huang, B. Q.: GROUP-SPECIFIC GROWTH AND GRAZING RATES FOR PHYTOPLANKTON IN THE SOUTH CHINA SEA BASIN (28819)

12:30 **Lueders-Dumont, J. A.**; Sigman, D. M.; Ward, B. B.: VARIABILITY IN BASELINE D15N PROPAGATES TO ZOOPLANKTON BUT NOT TO OTOLITH D15N OF A SMALL PELAGIC FISH ON THE U.S. NORTHEAST CONTINENTAL SHELF (29917)

12:45 DeGasparro, S. L.; Beresford, D. V.; **Frost, P. C.**: EFFECTS OF MACROINVERTEBRATES ON LEAF LITTER BREAKDOWN IN LAKES ACROSS A TROPHIC GRADIENT (29680)

040 STATION ALOHA: A SENTINEL OF OPEN OCEAN CHANGE

Chair(s): Matt Church, mjchurch@hawaii.edu
Sam Wilson, stwilson@hawaii.edu

Location: 314

10:00 **Kavanaugh, M. T.**; Church, M. J.; Letelier, R. M.; Karl, D. M.; Doney, S. C.: ALOHA FROM THE EDGE: MULTISCALE BIOPHYSICAL VARIABILITY IN THE NORTH PACIFIC OLIGOTROPHIC GYRE (29988)

10:15 **Liu, X.**; Levine, N. M.: IMPACT OF FINE-SCALE PHYSICS ON MARINE ECOSYSTEM AND CARBON DYNAMICS IN THE NORTH PACIFIC SUBTROPICAL GYRE: PERSPECTIVES FROM A NEW MODELING APPROACH (29855)

10:30 **Barone, B.**; Nicholson, D. P.; Karl, D. M.: MESOSCALE EDDY STRUCTURE AND HORIZONTAL BIOGEOCHEMICAL VARIABILITY FROM AUTONOMOUS OBSERVATIONS IN THE NORTH PACIFIC SUBTROPICAL GYRE (29155)

10:45 **Ferrón, S.**; Barone, B.; Church, M. J.; Karl, D. M.: BIOLOGICAL OXYGEN PRODUCTION IN THE NORTH PACIFIC SUBTROPICAL GYRE (28549)

12:00 **White, A. E.**; Watkins-Brandt, K. S.: ANNUAL VARIABILITY IN THE ABUNDANCE AND DIVERSITY OF LARGE DIAZOTROPHS AT STATION ALOHA (28788)

12:15 **Eichner, M.**; Klawonn, I.; Wilson, S. T.; Littmann, S.; Whitehouse, M.; Church, M. J.; Kuypers, M. M.; Karl, D. M.; Ploug, H.: DISTINCT MICROENVIRONMENTS AND HIGH SINGLE-CELL VARIABILITY IN *TRICHODESMIUM* COLONIES COLLECTED AT STATION ALOHA (28857)

12:30 **Follett, C. L.**; White, A. E.; Follows, M. J.: NITROGEN FIXATION MEASURED BY STOICHIOMETRIC FLUCTUATIONS (29681)

12:45 **Church, M. J.**; Bjorkman, K. M.; Karl, D. M.; Rii, Y. M.; Viviani, D. A.: EMERGING VIEWS ON PICOPLANKTON DYNAMICS AT STATION ALOHA (29941)

14:30 **Edwards, B. R.**; Romano, A. E.; Eppley, J. M.; Clemente, T. M.; Karl, D. M.; DeLong, E. F.: PARTICLE-ASSOCIATED MICROBIAL COMMUNITY STRUCTURE AND METABOLISM AT ABYSSAL DEPTHS IN THE NORTH PACIFIC SUBTROPICAL GYRE. (29998)

14:45 **Bryant, J. A.**; Mende, D. R.; Aylward, F. O.; Eppley, J. M.; Nielsen, T. N.; DeLong, E. F.: A GENOMIC INFLECTION POINT IN THE TWILIGHT ZONE OF THE OCEAN'S INTERIOR (29624)

15:00 **Valencia, B.**; Landry, M. R.; Décima, M.; Hannides, C. C.: ENVIRONMENTAL DRIVERS OF MESOZOOPLANKTON BIOMASS VARIBILITY AT STATION ALOHA, NORTH PACIFIC SUBTROPICAL GYRE (29014)

15:15 **Olson, D. K.**; Mende, D. R.; Aylward, F. O.; DeLong, E. F.: METAGENOMICS REVEALS PHYLOGENETIC DIVERSITY AND DEPTH STRATIFICATION OF UNIQUE PROTEORHODOPSIN GENES IN SHALLOW VERSUS DEEP OCEAN WATERS AT STATION ALOHA (29929)

042 AQUATIC GENOMICS

Chair(s): Erica Goetze , egoetze@hawaii.edu
Galice Hoarau, galice.g.hoarau@nord.no
Katja Peijnenburg, K.T.C.A.Peijnenburg@uva.nl

Location: 323 A

10:00 **Jueterbock, A.**: A DECADE INTO NEXT GENERATION SEQUENCING ON MARINE NON-MODEL ORGANISMS: CURRENT STATE AND DEVELOPMENTS (TUTORIAL)[T] (28731)

10:30 **Madoui, M. A.**; Poulain, J.; Sugier, K.; Wessner, M.; Berline, L.; Cornils, A.; Blanco-Bercial, L.; Labadie, K.; Gasparini, S.; Stemmann, L.; Jamet, J.; Wincker, P.: COMPARATIVE AND POPULATION GENOMICS OF THE EPIPELAGIC COPEPOD OITHONA NANA (CRUSTACEA, COPEPODA) (28469)

10:45 **Burton, R. S.**; Tangwancharoen, S.: GENOMICS OF POPULATION DIFFERENTIATION AND THERMAL ADAPTATION IN A TIDEPOOL COPEPOD (30105)

12:00 **Smolina, I.**; Jueterbock, A.; Diaz Pauli, B.; Hoarau, G.; Heino, M.: GENOMIC EFFECTS OF FISHERY-INDUCED SELECTION IN GUPPY *POECILIA RETICULATA* (29354)

12:15 **Choquet, M. R.**; Smolina, I.; Hoarau, G.: NEW INSIGHT ON THE POPULATION STRUCTURE OF *CALANUS FINMARCHICUS* IN THE NORTH ATLANTIC USING NEXT-GENERATION SEQUENCING TECHNOLOGIES (28712)

12:30 **Iacchei, M.**; Van Woudenberg, L.; Peijnenburg, K. T.; Goetze, E.: EXPLORING THE ENVIRONMENTAL DRIVERS OF GENOMIC DIFFERENTIAION IN A MESOPELAGIC COPEPOD, *PLEUROMAMMA XIPHIAS* (29150)

12:45 **Knapp, I. S.**; Belcaid, M.; Williams, G. J.; Toonen, R. J.: HOMOLOGS TO HUMAN CANCER GENES FOUND ASSOCIATED WITH CORAL GROWTH ANOMALIES (30002)

14:30 **Moya, A.**: GENOMIC APPROACHES TO ANSWER ECOLOGICAL QUESTIONS IN NON-MODEL MARINE ORGANISMS: INSIGHTS FROM REEF-BUILDING CORALS* (29240)

14:45 **Sleight, V. A.**; Antczak, P.; Peck, L. S.; Clark, M. S.: HOW DO MULLUSCS BUILD THEIR SHELLS FROM OMICS TO FUNCTION? (28669)

15:00 Roncallli, V.; Matthews, S.; Cieslak, M. C.; Clarke-Hopcroft, C.; Hopcroft, R. R.; **Lenz, P. H.**: PHYSIOLOGICAL CHANGES IN *NEOCALANUS FLEMINGERI* FEMALES DURING THE TRANSITION FROM DIAPAUSE TO REPRODUCTION (29198)

15:15 **Windisch, H. S.**; Fink, P.: WHAT MAKES GOOD FOOD? GENE EXPRESSION ANALYSIS REVEALS FATTY ACID SPECIFIC RESPONSES TO SESTON QUALITY IN *DAPHNIA* (28424)

16:30 **Logares, R.**; Montiel, L.; R. Giner, C.; Pernice, M. C.; Sánchez, P.; Sebastián, M.; Cornejo-Castillo, F. M.; Salazar, G.; Duarte, C. M.; G. Acinas, S.; Gasol, J. M.; Massana, R.: GLOBAL METAGENOMICS REVEALS A WIDESPREAD FUNGAL COMPONENT OF THE DEEP-OCEAN MICROBIOME (29304)

[T] REPRESENTS TUTORIAL PRESENTATIONS

16:45 **Peura, S.**; Buck, M.; Sinclair, L.; Aalto, S. A.; Nykänen, H.; Eiler, A.: METAGENOMICS REVEALS NOVEL PHOTOTROPHS AND CHEMOTROPHS CONTRIBUTING TO AUTOTROPHIC PROCESSES OF A BOREAL LAKE (28616)

17:00 **Questel, J. M.**; Hopcroft, R. R.; Bucklin, A.: METAGENETIC ANALYSIS OF ZOOPLANKTON BIODIVERSITY OF THE PACIFIC-ARCTIC'S CHUKCHI BORDERLANDS REGION (29430)

17:15 **Wangensteen, O. S.**; Bakker, J.; Sales, N. G.; Mariani, S.: ASSESSING FISH BIODIVERSITY USING ENVIRONMENTAL DNA METABARCODING: EXPECTATION VS REALITY (28882)

045 WHAT'S THE MATTER OF BIODIVERSITY?

Chair(s): Patrick Fink, patrick.fink@uni-koeln.de
Maria Stockenreiter, stockenreiter@biologie.uni-muenchen.de

Location: 305 A/B

16:30 **Stockenreiter, M.**; Hammerstein, S. K.; Ilic, M.; Fink, P.; Stibor, H.: PHYTOPLANKTON – ZOOPLANKTON INTERFACE IN LAKE FOODWEBS: CONSEQUENCES OF A LOSS OF PHYTOPLANKTON TRAITS (29310)

16:45 **Ilic, M.**; Hammerstein, S.; Stockenreiter, M.; Stibor, H.; Fink, P.: PIGMENT COMPOSITION OF NATURAL PHYTOPLANKTON COMMUNITIES – POSSIBLE LINK BETWEEN BIODIVERSITY LOSS AND ECOSYSTEM FUNCTIONING? (28584)

17:00 **Bock, C.**; Boenigk, J.; Beisser, D.; Sures, B.; Zimmermann, S.; Rahmann, S.; Vos, M.: FLEXIBLE UNTIL IT SNAPS - DOES DIVERSITY HAVE A PROTECTIVE EFFECT AGAINST STRESSORS? (29318)

17:15 **Flöder, S.**; Klauschies, T.; Gaedke, U.; Hillebrand, H.; Moorthi, S.: CONSUMER DIVERSITY EFFECTS IN MULTISPECIES PREDATOR-PREY SYSTEMS: THE RELEVANCE OF INTERSPECIFIC CONSUMER TRAIT VARIATION (29380)

056 OCEAN AND COASTAL ACIDIFICATION: SYNTHESIZING INFORMATION AND SUPPORTING MITIGATION

Chair(s): Erica Ombres, erica.h.ombres@noaa.gov
Beth Turner, elizabeth.turner@noaa.gov
David Koweek, dkoweek@carnegiescience.edu
Aaron Strong, aaron.strong@maine.edu

Location: 305 A/B

10:00 **Liu, W. T.**; Xie, X.: OCEAN ACIDITY ESTIMATED FROM SPACE DATA (28494)

10:15 **Jiang, L.**; Feely, R. A.; Lauvset, S. K.; Carter, B.; olsen, A.: CLIMATOLOGICAL DISTRIBUTION OF PH IN THE GLOBAL OCEANS (28607)

10:30 **Hunt, C. W.**; Salisbury, J. E.; Vandemark, D.; Mook, W.; Sobin, J.; Aßmann, S.: EXPANDING OCEAN ACIDIFICATION INFORMATION FOR THE GULF OF MAINE AND BEYOND (29697)

10:45 **Oliver, T. A.**; Young, C. W.; Brainard, R. E.: SYNTHESIZING DIVERSE APPROACHES TO OBSERVING PROCESS IN THE REEF CARBONATE SYSTEM: NATIONAL CORAL REEF MONITORING PROGRAM IN THE PACIFIC ISLANDS (30030)

12:00 **Silbiger, N. J.**; Sorte, C. J.: "PH"INGERPRINTING WEST COAST TIDE POOLS: COMMUNITY METABOLISM BOTH DRIVES AND RESPONDS TO PH VARIABILITY (29271)

12:15 **Barott, K. L.**; Gates Coral Lab, R.; Lio, S.; Glazer, B. T.; Gates, R. D.: DEVELOPING STRATEGIES TO PROMOTE CORAL REEF SURVIVAL IN THE FACE OF CLIMATE CHANGE (30064)

12:30 **Sippo, J. Z.**; Maher, D. T.; Tait, D. R.; Holloway, C.; Santos, I. R.: MANGROVE FORESTS ARE BUFFERS OF COASTAL ACIDIFICATION (28497)

12:45 **Wallace, R. B.**; Gobler, C. J.: COASTAL OCEAN ACIDIFICATION IN TEMPERATE COASTAL HABITATS: DYNAMICS AND POTENTIAL TO AFFECT MARINE MOLLUSKS (29921)

14:45 **Newton, J. A.**; Hales, B.; Beck, J.; Evans, W.; Alin, S.; Hill, T.; Martz, T.; Mayorga, E.; McCammon, M.; Anderson, D.; Thomas, J.; Barrette, M.: TURNING THE HEADLIGHTS ON HIGH: IMPROVING OCEAN ACIDIFICATION OBSERVATIONS AND NETWORKS IN SUPPORT OF SHELLFISH GROWERS (29928)

15:00 **Coupland, K.**; Cole, K.; Brady, D.: UNDERSTANDING SHELLFISH GROWTH POTENTIAL IN THE DAMARISCOTTA RIVER, MAINE USING A COUPLED MODELING APPROACH (29666)

15:15 **Strong, A. L.**: WHAT DO WE KNOW ABOUT WHAT WE CAN DO ABOUT ACIDIFICATION? (30013)

062 TRACING ECOLOGICAL DYNAMICS AND BIOGEOCHEMICAL CYCLES VIA COMPOUND-SPECIFIC ISOTOPE ANALYSIS (CSIA) OF ORGANIC COMPOUNDS

Chair(s): Yoshito Chikaraishi, ychikaraishi@jamstec.go.jp
Matthew D. McCarthy, mdmccar@ucsc.edu
Kelton McMahon, kemcmaho@ucsc.edu
Nanako O. Ogawa, nanaogawa@jamstec.go.jp

Location: 306 A

10:00 **Ogawa, N. O.**; Yoshikawa, C.; Suga, H.; Makabe, A.; Matsui, Y.; Kawagucci, S.; Fujiki, T.; Harada, N.; Ohkouchi, N.: MOLECULAR CHLOROPHYLL ISOTOPE TO ELUCIDATE NITROGEN CYCLE IN THE WESTERN PACIFIC OCEAN (28419)

10:15 **Isaji, Y.**; Yoshimura, T.; Araoka, D.; Kuroda, J.; Ogawa, N. O.; Takano, Y.; Jiménez-Espejo, F. J.; Makabe, A.; Suzuki, A.; Shibuya, T.; Lugli, S.; Santulli, A.; Manzi, V.; Roveri, M.; Kawahata, H.; Ohkouchi, N.: d26MG OF THE CHLOROPIGMENTS FROM OXYGENIC AND ANOXYGENIC PHOTOTROPHIC BACTERIA INSIDE THE BENTHIC MICROBIAL MAT OF THE TRAPANI SOLAR SALTERNS (ITALY) (28890)

10:30 **Boissonnot, L.**; Ehrenfels, B.; Niehoff, B.; Hagen, W.; Søreide, J. E.; Graeve, M.: LIPID TURNOVER OF ARCTIC SHELLED PTEROPODS REVEALED BY STABLE ISOTOPES ANALYSES (28930)

10:45 **Takano, Y.**; Kaneko, M.; Chikaraishi, Y.; Ogawa, N. O.; Ohkouchi, N.: METHANE CYCLE IN SUB-SEAFLOOR ENVIRONMENT: INSIGHT FROM KEY ORGANIC MOLECULES IN ARCHAEAL METHANOGENESIS AND METHANOTROPHY (29278)

12:00 **Chikaraishi, Y.**: NITROGEN ISOTOPIC COMPOSITION OF METHIONINE, AS A POTENTIAL TOOL TO QUANTIFY TERRESTRIAL AMINO ACID INPUT INTO THE AQUATIC ECOSYSTEM (29272)

WEDNESDAY

12:15 **Choi, H. T.**; Choi, B. H.; Chikaraishi, Y.; Kim, M. S.; Shin, K. H.: TROPHIC POSITION ASSESSMENT IN OPEN AND CLOSED ESTUARINE ECOSYSTEM AFTER RAINY SEASON USING COMPOUND-SPECIFIC ISOTOPE ANALYSIS OF AMINO ACIDS (28806)

12:30 **Landry, M. R.**; Décima, M. R.: PROTISTAN MICROZOOPLANKTON AND THE TROPHIC POSITION OF TUNA (28718)

12:45 **Brault, E. K.**; Koch, P. L.; Hall, B. L.; Costa, D. P.; McCarthy, M. D.; Hoelzel, A. R.; Welch, A. J.: ANTARCTIC SEAL BULK AND COMPOUND-SPECIFIC ISOTOPE ANALYSES REVEAL HOLOCENE CHANGES IN ROSS SEA BIOGEOCHEMISTRY AND PINNIPED BEHAVIOR (30040)

14:30 **Wiley, A. E.**; Chikaraishi, Y.; James, H. F.; Morra, K.; Ostrom, P. H.; Rossman, S.; Zipkin, E.: FOOD WEB ALTERATION AND INDIVIDUAL FORAGING SPECIALIZATION IN AN OCEANIC PREDATOR, THE HAWAIIAN PETREL: A STABLE ISOTOPE PERSPECTIVE FROM THE LAST MILLENNIUM (30099)

14:45 **Morra, K.**; Chikaraishi, Y.; James, H. F.; Ostrom, P. H.; Rossman, S.; Wiley, A. E.; Zipkin, E.: PERSISTENT FORAGING SEGREGATION BETWEEN CLOSELY-SPACED SEABIRD POPULATIONS (30106)

15:00 **Close, H. G.**; Ka'apu-Lyons, C. A.; Grabb, K. C.; Bour, A. L.; Wallsgrove, N.; Umhau, B. P.; Benitez-Nelson, C. R.; McCarthy, M. D.; Drazen, J. C.; Popp, B. N.: HETEROTROPHIC INFLUENCE ON ORGANIC MATTER AT EPIPELAGIC VS. MESOPELAGIC DEPTHS REFLECTED IN COMPOUND-SPECIFIC STABLE ISOTOPE PATTERNS (30048)

15:15 **McCarthy, M. D.**; Close, H.; Sauthoff, W.; Ravelo, A. C.: MODES OF MICROBIAL ALTERATION TO CSI-AA PATTERNS: IS THERE A LINKAGE BETWEEN MICROBIAL DEGRADATION AND RECORDED TROPHIC POSITION (TP) IN PALEOARCHIVES? (30110)

072 BIOTIC INTERACTIONS IN AQUATIC ECOSYSTEMS - IMPLICATIONS FOR FOOD WEBS AND ECOSYSTEM FUNCTIONING

Chair(s): Luciano Chiaverano, luciano.chiaverano@usm.edu
Adam Greer, adam.greer@usm.edu

Location: 314

16:30 **Kratina, P.**; Breen, H.; Knell, R. J.; Hirst, A.: WARMING CAN DISRUPT PLASTIC PHENOTYPIC RESPONSES TO PREDATION (28431)

16:45 **Faillace, C. A.**; Morin, P. J.: STRANGERS IN A STRANGE LAND: EVOLUTION ALTERS THE CONSEQUENCES OFINVASIONS IN EXPERIMENTAL AQUATIC COMMUNITIES (28483)

17:00 **Howarth, L. M.**; Somerfield, P. J.; Blanchard, J. P.; Hiddink, J. G.: TOP-DOWN OR BOTTOM-UP? INVESTIGATING THE EFFECTS OF FISHING PRESSURE AND PRIMARY PRODUCTIVITY ON BENTHIC SIZE SPECTRA (28569)

17:15 **Decima, M. R.**; Pinkerton, M.; Safi, K.; Gutierrez-Rodriguez, A.: INTERDEPENDENCE OF LOWER FOOD-WEB DYNAMICS AND MESOZOOPLANKTON COMMUNITIES (29987)

073 HITTING A MOVING TARGET - NAVIGATING THE PATH TO THE WORKFORCE

Chair(s): Todd Christenson, todd.christenson@noaa.gov
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Gisele Muller-Parker, gtmuller@nsf.gov
Lisa Rom, elrom@nsf.gov
Luis Tupas, ltupas@nifa.usda.gov

Location: 313 B

10:00 **Briggs, R. A.**; Galkiewicz, J.; Lilley, J.: NOAA'S NATIONAL SEA GRANT COLLEGE PROGRAM: EDUCATION AND PROFESSIONAL OPPORTUNITIES AT THE STATE, REGIONAL, AND NATIONAL LEVEL (29407)

10:15 **Kellogg, C. A.**: BEYOND USAJOBS.GOV: OPPORTUNITIES AND AVENUES TO WORKING AT THE U.S. GEOLOGICAL SURVEY (28579)

10:30 **Murphy, D. J.**: MAKING A CAREER IN THE OCEAN SCIENCE INDUSTRY (29477)

10:45 **Aguilar, C.**; Cuhel, R. L.: CULTIVATING A WATER TECHNOLOGY WORKFORCE: RAISING TECHNICAL COLLEGE STUDENTS TO BS DEGREES WITH FOCUSED ACADEMIC AND PRACTICAL SKILLS FOR WATER INDUSTRY NEEDS (28828)

12:00 **Davies, T.**: SCIENCE POLICY AND SCIENCE COMMUNICATION INTERNSHIPS (28678)

12:15 **Wiener, C. S.**; Pace, L.; Zykov, V.: SCIENCE AND TECHNOLOGY TRAINING AT SEA THROUGH BERTHS OF OPPORTUNITY AND REMOTE PARTICIPATION (28622)

12:30 **Seki, M. P.**: CAREER AND DEVELOPMENTAL OPPORTUNITIES AT NOAA'S PACIFIC ISLANDS FISHERIES SCIENCE CENTER (29944)

075 DOES CONNECTIVITY ENHANCE INTEGRITY? DEPENDENCE OF PHYSICAL, BIOLOGICAL, AND CHEMICAL INTEGRITY OF NATURAL WATERS ON CONNECTIONS TO LAND AND OTHER WATERBODIES

Chair(s): Michael Gooseff, michael.gooseff@colorado.edu
Emma Rosi-Marshall, rosimarshalle@caryinstitute.org

Location: 306 B

14:30 **Rains, M. C.**: CRITICAL NEEDS AT THE INTERSECTION OF SCIENCE AND POLICY: HOW RESEARCH ON HYDROLOGICAL CONNECTIVITY CAN AFFECT POLICY OUTCOMES* (29275)

14:45 **Reisinger, A. J.**; Rosi-Marshall, E. J.; Richmond, E.; Kaushal, S. S.; Groffman, P. M.: CHALLENGES OF CONNECTIVITY WITHIN URBAN LANDSCAPES: EXAMPLES FROM THE BALTIMORE ECOSYSTEM STUDY (29382)

15:00 **Tank, J. L.**; Hanrahan, B. R.; Christopher, S. F.; Trentman, M. T.; Royer, T. V.; Prior, K. E.: WATERSHED-SCALE LAND COVER CHANGE ALTERS STREAM ECOSYSTEM FUNCTION AND REDUCES NUTRIENT EXPORT FROM AGRICULTURAL LANDSCAPES (29985)

15:15 **Haig, H. A.**; Hayes, N. M.; Simpson, G. L.; Hodder, K. R.; Leavitt, P. L.: QUANTIFYING THE RELATIVE EFFECTS OF CLIMATE AND CATCHMENT CONTROLS UPON ISOTOPIC MASS BALANCES IN LAKES OF THE NORTH AMERICAN GREAT PLAINS (29762)

16:30 **Creed, I. F.**: CONNECTIVITY MATTERS: PORTFOLIOS OF HYDROLOGIC CONNECTIONS OF WETLANDS TO STREAMS ARE IMPORTANT DETERMINANTS OF WETLAND FUNCTIONS * (29481)

16:45 **Zamberletti, P.**; Zaffaroni, M.; Accatino, F.; Creed, I. F.; De Michele, C.: "KEYSTONE" WETLANDS FOR MAINTENANCE OF VULNERABLE SPECIES IN LANDSCAPES WITH DIFFERENT WETLAND NETWORK CONFIGURATIONS (29433)

17:00 **Subalusky, A. L.**; Dutton, C. L.; Rosi-Marshall, E. J.; Post, D. M.: LARGE WILDLIFE MOVEMENTS CONNECT SAVANNA GRASSLANDS AND RIVERS AND DRIVE CHANGES IN WHOLE-RIVER METABOLISM (29667)

17:15 **Hipsey, M. R.**; Brookes, J. D.: CAPTURING CHANGING PATTERNS OF CONNECTIVITY IN A COMPLEX AQUATIC LANDSCAPE USING A 3D COUPLED ECOHYDROLOGY-HYDRODYNAMIC-BIOGEOCHEMICAL MODEL (29464)

086 HYDROLOGIC CONNECTIVITY: LINKING LAND USE CHANGES AND MANAGEMENT TO MOVEMENT AND TRANSFORMATIONS OF RESOURCES WITHIN CATCHMENTS

Chair(s): Maira Ometto Bezerra, mbezerra@umd.edu
Kelly Hondula, khondula@sesync.org
Margaret Palmer, mpalmer@sesync.org

Location: 306 B

10:00 **Alexander, L. C.**; Vanderhoof, M. K.; Christensen, J. R.; Epting, S. M.; Evenson, G. R.; Lang, M. W.; Ali, G.; Brooks, J. R.: FROM CONNECTIVITY SCIENCE TO PRACTICE: BRIDGING THE GAP WITH INTERDISCIPLINARY HYDROLOGICAL AND ECOLOGICAL RESEARCH (29662)

10:15 **Caylor, K.**: DRYLAND FEEDBACKS BETWEEN BIOGEOCHEMISTRY, PLANTS, AND SURFACE HYDROLOGICAL DYNAMICS. (29804)

10:30 **Haygarth, P. M.**: CHARACTERIZING THE CONNECTIVITY AND DYNAMICS OF PHOSPHORUS IN AGRICULTURAL CATCHMENTS IN THE FACE OF CLIMATE CHANGE (29039)

10:45 Mortensen, J.; **Gonzalez-Pinzon, R.**; Dahm, C.; Wang, J.; Zeglin, L.; Van Horn, D.: CLOSING NUTRIENT LOOPS IN ARID RIVER CORRIDORS (29934)

12:00 **Larsen, L. G.**; Newman, S.; Saunders, C.; Harvey, J. W.: COMPLEX NETWORKS OF FUNCTIONAL CONNECTIVITY IN AN ISOLATED WETLAND RECONNECTED TO ITS FLOODPLAIN (29654)

12:15 **Poole, G. C.**: A FRAMEWORK FOR LINKING LAND USE AND RESTORATION TO RESOURCE TRANSPORT AND PROCESSING IN STREAM CORRIDORS WITH EXPANSIVE HYPORHEIC ZONES (29660)

12:30 **Rosero-Lopez, D.**: THE DISRUPTION OF HYDROLOGICAL CONNECTIVITY IN PROTECTED AREAS: WATER SUPPLY AND VEGETATION COVER CONSERVATION (29963)

095 METABOLISM OF INLAND WATERS: PATTERNS AND DRIVERS ACROSS MULTIPLE SCALES

Chair(s): Bob Hall, bhall@uwyo.edu
Jud Harvey, jwharvey@usgs.gov
Jim Heffernan, james.heffernan@duke.edu
Jordan Read, jread@usgs.gov
Emily Stanley, ehstanley@wisc.edu
Ted Stets, estets@wisc.edu

Location: 323 C

14:30 **Stets, E. G.**; Appling, A. P.; Hall, R. O.; Yackulic, C. B.; Bernhardt, E. S.; Stanley, E. H.; Heffernan, J. B.; Read, J. S.; Harvey, J. W.; Arroita, M.; Griffiths, N. A.: ADVANCES IN STREAM METABOLISM STUDIES: STEPS TOWARD A COMPREHENSIVE, LONG-TERM PERSPECTIVE (29909)

14:45 **Grace, M. R.**: LTIM – IF IT AIN'T WET IT DOESN'T HELP – FINDINGS FROM YEAR 1 STREAM METABOLISM MEASUREMENTS* (28827)

15:00 **Machado-Silva, F.**; Bastviken, D.; Enrich-Prast, A.: DOMINANCE OF AUTOTROPHIC PROCESSES IN AMAZON STREAMS (30075)

15:15 **Upadhyay, S.**; Oliver, R.; Brookes, J.: SPATIAL VARIABILITY IN THE RESPONSE OF ECOSYSTEM METABOLISM DURING A MANAGED FLOODPLAIN INUNDATION IN THE LOWER RIVER MURRAY, SOUTH AUSTRALIA (28570)

16:30 **Heffernan, J. B.**; Stets, E. G.; Appling, A. P.; Arroite, M.; Bernhardt, E. S.; Finlay, J. C.; Griffiths, N.; Hall, R. O.; Harvey, J.; Lorenz, D.; Read, J.; Stanley, E. H.; Yackulic, C.: LOCAL AND MACRO-SCALE DRIVERS OF ANNUAL METABOLISM IN STREAMS AND RIVERS (29707)

16:45 **Hall, R. O.**; Madinger, H. L.: SCALING DENITRIFICATION WITH ECOSYSTEM RESPIRATION IN MOUNTAIN STREAMS (29134)

17:00 **Nydahl, A. C.**; Wallin, M. B.; Tranvik, L. J.; Weyhenmeyer, G. A.: MODERATE EFFECT OF ALLOCHTHONOUS ORGANIC CARBON INPUT ON GAS DYNAMICS IN A WELL-BUFFERED MESOTROPHIC LAKE (28717)

17:15 **Finlay, K.**; Leavitt, P. R.; Simpson, G. L.: SEASONAL VARIATIONS IN CO2 FLUX OF HARD-WATER LAKES IN THE NORTHERN GREAT PLAINS (30073)

WEDNESDAY POSTERS

004 BIOGEOCHEMICAL CYCLING OF TRACE ELEMENTS AND ISOTOPES IN THE ARCTIC OCEAN

Chair(s): Greg Cutter, gcutter@odu.edu
Roger Francois, rfrancoi@eos.ubc.ca
David Kadko, dkadko@fiu.edu
William Landing, wlanding@fsu.edu
Michiel Rutgers Van der Loeff, Mloeff@awi.de

Location: Kamehameha Exhibit Hall

66 **Mukherjee, P.**; Gao, Y.; Marsay, C.; Buck, C.; Landing, W. M.: CHARACTERIZATION OF THE WATER-SOLUBLE INORGANIC AND ORGANIC SPECIES ON AEROSOLS IN THE ARCTIC TROPOSPHERE DURING SUMMER (28434)

67 **MCQUIGGAN, K. A.**; Cutter, G. A.: BIOGEOCHEMICAL CYCLING OF SELENIUM IN THE ARCTIC OCEAN (28772)

68 **Bauch, D.**: FRESHWATER FRACTIONS AND SOURCES WITHIN THE TRANSPOLAR DRIFT OF THE ARCTIC HALOCLINE: OXYGEN ISOTOPE DERIVED RESULTS FROM PS94 (28786)

69 **Lanning, N. T.**; Jensen, L. T.; Sherrell, R. M.; Fitzsimmons, J. N.: SIZE PARTITIONING OF DISSOLVED TRACE METALS INTO SOLUBLE AND COLLOIDAL FRACTIONS IN SEA ICE, SNOW AND MELT PONDS OF THE WESTERN ARCTIC OCEAN (28970)

70 **Rember, R. D.**; Aguilar-Islas, A. M.: DEVELOPING A TRACE METAL ICE CORER (29100)

71 **Clark, S. C.**; Mastorakis, A.; Granger, J.; Aguilar-Islas, A.; Hastings, M. G.: ARCTIC SEA ICE: NITRATE IS DERIVED FROM THE ATMOSPHERE AND BIOLOGICAL ACTIVITY (29101)

72 **Brown, K. A.**; Peucker-Ehrenbrink, B.; Blusztajn, J.; Francois, R.; Fiske, G.; Williams, W. J.; Carmack, E. C.; McLennan, D.; Schimnowski, A.; Galy, V.; Wang, Z. A.: $^{87}SR/^{86}SR$ TRACES RIVERINE INPUTS TO THE CANADIAN ARCTIC ARCHIPELAGO (29165)

73 **Li, L.**; Wang, X.; Zhang, C.; Liu, J.; Shi, X.: DISSOLVED TRACE METAL DISTRIBUTIONS AND SPECIATION IN YELLOW SEA, CHINA (29289)

74 **Sonke, J. E.**; Heimburger, L. E.; Teisserenc, R.; Marusczak, N.; Le Dantec, T.; Tananaev, N.; Pokrovski, O. S.: RIVER MERCURY FLUXES TO THE ARCTIC OCEAN (29306)

75 **Lehmann, N.**; Kienast, M.; Granger, J.; Bourbonnais, A.; Altabet, M.; Tremblay, J. E.: SPATIAL VARIABILITY OF 15N/14N AND 18O/16O IN NITRATE AND NITROUS OXIDE IN THE CANADIAN ARCTIC: TRACING WATERS FROM TWO OCEANS (29390)

76 **Molodtsova, T.**; Amon, R.; Kaiser, K.; Walker, S.; Stedmon, C.: RELATIONSHIPS BETWEEN DISSOLVED ORGANIC MATTER, HYDROGRAPHY, AND TRACE ELEMENTS IN THE EURASIAN ARCTIC OCEAN (29532)

77 **Krupp, K. D.**: QUANTIFYING ICE SHEET FORMATION/ABLATION RATES AND CONSTRAINING THE 'AGE' OF ICE-RAFTED SEDIMENTS USING $^{210}PO/^{210}PB$ DISEQUILIBRIA (29584)

78 **Amon, R. M.**; Aagaard, K.; Anderson, L. G.; Benner, R.; Newton, R.; Swift, J. H.: THE HYDROGRAPHY OF CDOM IN THE ARCTIC OCEAN: IMPLICATIONS FOR THE CARBON AND FRESHWATER CYCLE (29618)

79 **Kenna, T. C.**; Chang, C.; Lam, P. J.: THE DISTRIBUTION OF RADIOCESIUM ALONG THE U.S. GEOTRACES ARCTIC SECTION (GN01) (29824)

80 **Domena, V. A.**; Aguilar-Islas, A. M.; Rember, R.: TRACE METAL CONCENTRATIONS IN ARCTIC LANDFAST ICE (30022)

81 **Jones, E.**; Ulfsbo, A.; Rutgers van der Loeff, M.; de Baar, H.; Anderson, L.: ARCTIC OCEAN CO_2-CARBONATE CHEMISTRY: DYNAMICS IN THE MARGINAL ICE ZONE AND DEEP WATER ACIDIFICATION (30043)

82 **Collins, E.**; Weisend, R.; Dilliplaine, K.; Morton, P.: MICROBE-METAL INTERACTIONS IN THE CENTRAL ARCTIC OCEAN (30124)

83 **Aguilar-Islas, A. M.**; Rember, R.: TRACE METAL CONCENTRATIONS IN THE SEA ICE ENVIRONMENT DURING THE US GEOTRACES ARCTIC SECTION (30135)

007 THE POWER OF DIATOMS

Chair(s): Lisa R. Estepp, lestepp@d.umn.edu
Euan D. Reavie, ereavie@d.umn.edu

Location: Kamehameha Exhibit Hall

111 **Pajunen, V.**; Luoto, M.; Soininen, J.: THE DIRECT AND INDIRECT EFFECTS OF CLIMATE, LAND COVER AND WATER CHEMISTRY ON STREAM DIATOM COMMUNITIES (28556)

112 **Estepp, L. R.**; Reavie, E. D.: THE ECOLOGICAL HISTORY OF LAKE HURON ACCORDING TO PHYTOPLANKTON (28621)

113 **Kaczmarska, I.**; Gray, B. S.; Ehrman, J. M.; Thaler, M.: PEEPING INTO THE GLASS HOUSE: SEXUAL REPRODUCTION IN PLAGIOGRAMMACEAN DIATOMS (28630)

114 Song, N.; **Liu, Y.**; Fan, Y.; Chen, Y.; Wang, Q.: BIODIVERSITY OF PHYTOPLANKTON AND ENVIRONMENTAL INFLUENCES ANALYSIS OF LONGFENG WETLAND, CHINA (29190)

115 **Mystkowska, A. A.**; Vidal-Melgosa, S.; Hehemann, J. H.: DEVELOPING CARBOHYDRATE BINDING PROTEINS AS NOVEL PROBES TO DETECT AND VISUALIZE ALGAL POLYSACCHARIDES (29397)

116 **Hillhouse, J. L.**; Bretherton, L.; Kamalanathan, M.; Genzer, J.; Setta, S.; Quigg, A.: IMPACT OF PHOSPHORUS LIMITATION ON PHYTOPLANKTON IN THE GULF OF MEXICO IN THE PRESENCE OF OIL AND DISPERSANTS (29439)

117 **Manoylov, K. M.**; Andrejic, J.; Thomson, A.: MICROPHYTOBENTHOS DYNAMICS IN MUDFLATS ALONG THE SAVANNAH RIVER ESTUARY (29730)

015 PATTERNS OF BIOGEOCHEMICAL CHANGE IN STREAM AND RIVER NETWORKS

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Suzanne Tank, suzanne.tank@ualberta.ca

Location: Kamehameha Exhibit Hall

185 **D'Andrilli, J.**; Storb, M. B.; Payn, R. A.: EXPLORING SPATIOTEMPORAL REGIMES OF STREAM DOM COMPOSITION IN A MONTANE, URBANIZING WATERSHED, MONTANA, USA (28536)

186 **LeBrun, E. S.**; Back, J.; King, R. S.; Kang, S.: TOTAL PHOSPHOROUS AND TURBIDITY ARE STRONG DRIVERS OF STRUCTURE AND FUNCTION FOR MICROBIAL POPULATIONS IN A LOTIC FRESHWATER ECOSYSTEM (28540)

187 **Salamanca, A. C.**; Xu, X.; Wei, H.; Moffett, K.; McClelland, J.; Hardison, A. K.: TIDAL FRESHWATER ZONES AS HOTSPOTS FOR BIOGEOCHEMICAL CYCLING: SEDIMENT PROPERTIES AND OXYGEN CONSUMPTION RATES IN THE LOWER REACHES OF TWO TEXAS RIVERS (29023)

188 **Dutton, C. L.**; Subalusky, A. L.; Hamilton, S. K.; Rosi-Marshall, E. J.; Post, D. M.: DEATH BY HIPPO: A MECHANISTIC UNDERSTANDING OF HYPOXIC FLOODS IN A TROPICAL RIVER (29358)

189 **Seunghee Kim, K.**; Youngsook Huh, H.; Kwangchul Jang, J.; Jisu Lee, L.; Kyoung-Seok Lee, L.: SILICON ISOTOPE SIGNATURES OF RIVERS DRAINING THE EASTERN TIBETAN PLATEAU AND MT. BAEKDU (29443)

190 **Pacheco, F. S.**; Miranda, M.; Ometto, J. P.; Assireu, A. T.; Marinho, M. M.; Reis, A. L.; Silva, M. S.; Corrêa, G.; Domingos, P.; Malafaia, M.; Pezzi, L. P.: HEADWATER TO OCEAN: AN INTERDISCIPLINARY EXPEDITION THOUGHT THE PARAIBA DO SUL RIVER, BRAZIL. (29797)

191 **McColaugh, S. G.**; Morton, P.; Humayun, M.: VIABILITY OF GREENLAND ICE SHEET (GRIS) MELT AS A POTABLE WATER RESOURCE: A GEOCHEMICAL INVESTIGATION (29951)

018 VERTICAL CONNECTIVITY OF THE PELAGIC OCEAN: UNDERSTANDING THE FUNCTION AND SERVICES OF INTERMEDIATE TROPHIC LEVELS

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Rosanna Milligan, rboyle@nova.edu
Tracey Sutton, tsutton1@nova.edu
Joseph Warren

Location: Kamehameha Exhibit Hall

199 **Portner, E. J.**; Choy, C. A.; Polovina, J. J.: SPATIAL, SEASONAL, AND ONTOGENETIC VARIABILITY IN THE TROPHIC ECOLOGY OF THE LONGNOSE LANCETFISH (ALEPISAURUS FEROX) ACROSS THE NORTH PACIFIC SUBTROPICAL GYRE (28638)

200 Alcorn, K. L.; Muterspaw, K. M.; **Hammerschmidt, C. R.**: METHYLMERCURY ACCUMULATION IN MESO- AND BATHYPELAGIC FISH OF THE NORTHERN GULF OF MEXICO (28756)

201 Sutton, T.; Cook, A.; Boswell, K.; Bracken-Grissom, H.; deRada, S.; English, D.; Eytan, R.; Hu, C.; Johnston, M.; Judkins, H.; Lembke, C.; Lopez, J.; Moore, J.; Nizinski, M.; Penta, B.; Romero, I.; Rooker, J.; Shivji, M.; **Vecchione, M.**; Wells, D.; Youngbluth, M.; Fenolio, D.; Frank, T.: DEEP-PELAGIC RESEARCH IN THE GULF OF MEXICO: THE DEEPEND CONSORTIUM (29627)

202 **Meinert, C. R.**; David Wells, R. J.; Sutton, T. T.; Clausen, K.; Rooker, J. R.: HIGH OCCURRENCE OF MESOPELAGIC FISH LARVAE IN EPIPELAGIC WATERS DEMONSTRATES IMPORTANCE OF VERTICAL CONNECTIVITY BETWEEN PHOTIC AND APHOTIC BIOMES (29843)

203 Comfort, C. M.; **Smith, K. A.**; Sevadjian, J. C.; McManus, M. A.; Neuheimer, A. B.; Ostrander, C. E.: OBSERVATIONS OF THE MESOPELAGIC MICRONEKTON BOUNDARY COMMUNITY'S DIEL MIGRATION AT OAHU, HAWAII BASED ON BACKSCATTER DATA (30123)

022 ADVANCES IN MODELING COASTAL HYPOXIA AND ACIDIFICATION: FROM PHYSICS TO FISH

Chair(s): Katja Fennel, katja.fennel@dal.ca
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228 **Luisi, C. J.**; Jones, C.; Driggers III, W. B.; Hannan, K.: DISTRIBUTION AND RELATIVE ABUNDANCE OF SHARKS WITHIN HYPOXIC ZONES IN THE NORTHERN GULF OF MEXICO (28336)

229 **Okada, T.**; Irie, M.; Nishida, S.: TWIN EXPERIMENTS OF BIOGEOCHEMICAL PARAMETER ESTIMATION BY 4DVAR DATA ASSIMILATION IN AN ESTUARY (28972)

230 **Limburg, K. E.**; Walther, B.; Lu, Z.; Casini, M.; Altenritter, M.; Samson, M.: HYPOXIA AS PERCEIVED BY FISH: EMPIRICAL OBSERVATION AND MODELING (29063)

231 **Kirchner, J. S.**; Lettmann, K. A.; Schnetger, B.; Wolff, J. O.; Brumsack, H. J.: MODELING EFFECTS OF ARTIFICIAL LIMESTONE WEATHERING ON CARBONATE CHEMISTRY OF THE NORTH SEA (29785)

232 **Leonard, K. P.**; Smith, S.: THE EFFECTS OF HYPOXIA ON THE ANXIETY BEHAVIOR OF LARVAL ESTUARINE FISH (29891)

023 DYNAMIC DON: THE ROLE OF ORGANIC NITROGEN IN REGULATING AQUATIC ECOSYSTEM FUNCTIONING FROM LAND TO SEA

Chair(s): Mario Brauns, mario.brauns@ufz.de
Daniel Graeber, dgr@bios.au.dk
Naomi S. Wells, naomi.wells@scu.edu.au

Location: Kamehameha Exhibit Hall

233 **Wells, N. S.**; Erler, D.; Maher, D.; Eyre, B.: NITROGEN REACTIVITY GRADIENTS IN ESTUARIES UNDER INCREASING ANTHROPOGENIC STRESS (28902)

234 **Thibodeau, B.**; Bauch, D.; Voss, M.: EVIDENCE OF DISSOLVED ORGANIC NITROGEN ASSIMILATION IN ARCTIC COASTAL ECOSYSTEM (29170)

235 **Hornak, K.**; Posch, T.; Pernthaler, J.: SYNCHRONOUS CHANGES CONTRAST WITH DIFFERENT STABILITY OF DISSOLVED FREE AMINO ACID AND GLUCOSE CONCENTRATIONS IN A MESOTROPHIC LAKE (29293)

236 **Swarbrick, V. J.**; Quiñones-Rivera, Z.; Leavitt, P. R.: SEASONAL IMPACTS OF UREA AND P INPUTS ON PHYTOPLANKTON ABUNDANCE AND COMMUNITY COMPOSITION IN A HYPEREUTROPHIC LAKE: THE IMPORTANCE OF TIMING AND NUTRIENT FORM (29739)

026 UNDERGRADUATE RESEARCH IN THE AQUATIC SCIENCES

Chair(s): David Fields, dfields@bigelow.org
Elizabeth Rom, elrom@nsf.gov

Location: Kamehameha Exhibit Hall 1 & 2

248 **Holman, J. M.**; Pachiadaki, M.; Becraft, E. D.; Stepanauskas, R.: THE ECOLOGY AND EVOLUTION OF A RECENTLY DISCOVERED, HIGHLY-DIVERSE, AND GLOBALLY DISTRIBUTED MICROBIAL DARK MATTER ARCHAEAL PHYLUM—WOESEARCHAEOTA (28341)

249 **Keller, A.**; Apprill, A.; Lebaron, P.; Robbins, J.; Whalen, K.: ISOLATING DIVERSE MICROORGANISMS VIA TARGETED CULTIVATION OF MARINE ANIMAL MICROBIOMES (28362)

250 **Baer, J. L.**; Woodley, C. M.: INVESTIGATING GENOTYPE VIGOR IN *ACROPORA CERVICORNIS* (28369)

251 **Nguyen, C. P.**; Key, P.: SUBLETHAL EFFECTS OF CRUDE OIL DISPERSANTS ON A TIDAL CREEK CRUSTACEAN (28433)

252 **Rosera, T. J.**; Heyes, A.; Gonsior, M.: ASSESSING THE PLANT COMMUNITY CONTROLS ON CARBON AND HOW THAT CONTRIBUTES TO METHYLMERCURY PRODUCTION IN THE PORE WATERS OF A CHESAPEAKE BAY TIDAL MARSH (28480)

253 **McFarland, S.**; Hrycik, A.; Stockwell, J.: THE EFFECTS OF MILD VERSUS COLD WINTER CONDITIONS ON ZOOPLANKTON COMMUNITY WINTER-SPRING TRANSITIONS (28493)

254 **Boyd, A. D.**; Schweitzer, C. C.; Bradley, S. G.: THE SIZE DISTRIBUTION OF BLACK SEA BASS ON ARTIFICIAL AND NATURAL REEFS (28521)

255 **Waite, H. R.**; Forward, R. B.: RHYTHMIC LARVAL RELEASE IN THE ESTUARINE CRAB *DYSPANOPEUS SAYI* : ENTRAINMENT BY TEMPERATURE CYCLES (28526)

256 **Romano, R. G.**; Franco, D. C.; Giorgioni, M.; Bertassoli, D.; Sawakuchi, H. O.; Jovane, L.; Pellizari, V. H.: MICROBIAL DIVERSITY AND METHANE CYCLING IN A TROPICAL MARINE ENVIRONMENT (SACO DO MAMANGUÁ, RIO DE JANEIRO - BRAZIL) (28527)

257 **Fitzgerald, L. M.**; Long, M. H.; Mooney, T. A.: EFFECTS OF FLOW AND HYPOXIA ON DEVELOPING SQUID (*DORYTEUTHIS PEALEII*) EGG CAPSULES (28596)

258 **Knight, J. C.**; O'Malley, B. P.; Stockwell, J. D.: BENTHIC INVERTEBRATES SHOW LITTLE VARIATION IN OFFSHORE LAKE CHAMPLAIN BUT A MAJOR DECLINE NEARSHORE SINCE 1991 (28639)

259 **Lister, H. R.**; Grigel, H. B.; Hrycik, A. R.; O'Malley, B. P.; Stockwell, J. D.: UNDER-ICE DIEL VERTICAL MIGRATION OF ZOOPLANKTON IN A SHALLOW HYPERTROPHIC LAKE (28723)

260 **Cordoba Ibarra, G. C.**; Karlin, M.; Urbano, N. C.; Vu, A.; Salinas, A.; Rodriguez, Y.: ABIOTIC FACTORS INFLUENCING HEALTH OF THE CORAL REEFS IN ROATAN, HONDURAS (28820)

261 **Bruno-Laureano, Y.**: EFFECTS OF CONTRASTING WATER CLARITY IN PROTEIN AND CHLOROPHYLL CONCENTRATION AND, SYMBIODINIUM SPP. DENSITIES IN THE WEEDY CORAL PORITES ASTREOIDES. (28915)

262 **Bragdon, B. L.**; Floge, S. A.; Layman, J. J.; Fields, D. M.; Sullivan, M. B.: EFFECT OF MYOVIRUS INFECTION ON SYNECHOCOCCUS PHOTOSYNTHETIC EFFICIENCY (28965)

263 **Carter, S. R.**; Heckman, J.; Kalin, R.; Larson, R.; Holmes, C.; Brooks, G.: PRESERVATION OF THE 2010 DEEPWATER HORIZON OIL SPILL IN THE SEDIMENTARY RECORD: TEXTURE AND COMPOSITION (28983)

264 **Jones, M. J.**: LABORATORY ASSESSMENT OF DELPHINUS CAPENSIS THYROID HORMONES IN BLUBBER TISSUE WITH RESPECT TO DEMOGRAPHIC STATUS (28984)

265 **Caradine-Taber, S.**; Grebmeier, J. M.; Cooper, L. W.; Goethel, C. L.: ECOSYSTEM CHANGES IN THE BENTHOS: LENGTH-WEIGHT MEASUREMENTS OF FOUR DOMINANT BIVALVE SPECIES IN THE NORTHERN BERING SEA FROM 2012 TO 2015 (29030)

266 **Grigel, H. B.**; Lister, H. R.; Hrycik, A. R.; Lini, A.; Stockwell, J. D.: UNDER-ICE PHYTOPLANKTON DIEL VERTICAL DISTRIBUTION IN A SHALLOW HYPERTROPHIC LAKE (29058)

267 **Griffin, J. E.**; O'Malley, B. P.; Stockwell, J.: FOOD QUALITY AND DIET PREFERENCE IN MYSIS DILUVIANA (29145)

040 STATION ALOHA: A SENTINEL OF OPEN OCEAN CHANGE

Chair(s): Matt Church, mjchurch@hawaii.edu
Sam Wilson, stwilson@hawaii.edu

Location: Kamehameha Exhibit Hall

346 **Grabowski, E. M.**; Karl, D. M.: CALORIC CONTENT OF SINKING PARTICULATE MATTER IN THE NORTH PACIFIC SUBTROPICAL GYRE (28599)

347 **Rosburg, K. C.**; Potemra, J. T.; Santiago-Mandujano, F.; Lukas, R.; Weller, R. A.; Plueddemann, A. J.: COMPARISON OF OBSERVED AND INDEPENDENTLY-DERIVED UPPER OCEAN CURRENTS AT STATION ALOHA (28637)

348 **Hayes, C. T.**; Fitzsimmons, J. N.; Morton, P. L.; McGee, D.; Boyle, E. A.: DIEL TRACE METAL VARIATIONS IN THE NORTH PACIFIC SUBTROPICAL GYRE (28739)

349 **Lindh, M. V.**; Church, M. J.: THERE AND BACK AGAIN – UNRAVELING MECHANISMS OF MICROBIAL BIOGEOGRAPHY IN THE NORTH PACIFIC SUBTROPICAL GYRE TO AND FROM STATION ALOHA (28864)

350 **Nelson, A. J.**; Church, M. J.; Dornan, N.; Kyi, E.; Van Mooy, B.; Ossolinski, J.; Viviani, D.: RATES OF MICROBIAL ACTIVITIES ASSOCIATED WITH SINKING PARTICLES AT STATION ALOHA IN THE NORTH PACIFIC SUBTROPICAL GYRE (29138)

351 **Björkman, K. M.**; Duhamel, S.; Church, M. J.; Karl, D. M.: SPATIAL AND TEMPORAL VARIABILITY IN PHOSPHORUS INVENTORIES AND TURNOVER OF INORGANIC P AND ADENOSINE-TRIPHOSPHATE IN THE NORTH PACIFIC (29172)

352 **Curless, S. E.**; Church, M. J.; Segura-Noguera, M.; Karl, D. K.: AMMONIUM CONCENTRATIONS AT STATION ALOHA – IMPROVED METHODOLOGY ALLOWS FOR FULL OCEAN DEPTH ANALYSIS. (29177)

353 **Sadler, D. W.**; Barone, B.; Burkitt, J. W.; Dore, J. E.; Church, M. J.; Karl, D. M.: HIGH-RESOLUTION IN SITU PH MEASUREMENTS AT STATION ALOHA USING AN ION-SENSITIVE FIELD EFFECT TRANSISTOR (29220)

354 **Luo, E.**; Eppley, J. M.; Aylward, F. O.; Romano, A. R.; DeLong, E. F.: VERTICAL VARIABILITY IN VIRAL AND HOST ASSEMBLAGES AT STATION ALOHA (29822)

355 **Viviani, D. A.**; Böttjer, D.; Letelier, R. M.; Church, M. J.: THE INFLUENCE OF ABRUPT INCREASES IN SEAWATER PCO_2 ON RATES OF MICROBIAL PRODUCTION IN THE SUBTROPICAL NORTH PACIFIC OCEAN (30071)

356 **Royer, S. J.**; Ferrón, S.; Wilson, S. T.; del Valle, D. A.; Sosa, O.; Karl, D. M.: METHANE PRODUCTION FROM SINKING PARTICULATE MATTER AT STATION ALOHA (30078)

357 Turk-Kubo, K. A.; Hogan, M. E.; Zehr, J. P.; **Munoz-Marin, M.**: *IN SITU* DIAZOTROPH NET GROWTH RATES UNDER DIFFERENT RESOURCE RATIOS AT STATION ALOHA (30115)

042 AQUATIC GENOMICS

Chair(s): Erica Goetze , egoetze@hawaii.edu
Galice Hoarau, galice.g.hoarau@nord.no
Katja Peijnenburg, K.T.C.A.Peijnenburg@uva.nl

Location: Kamehameha Exhibit Hall

364 **Makino, W.**; Matsuki, Y.; Suyama, Y.; Urabe, J.: APPLYING MULTIPLEXED INTER-SIMPLE SEQUENCE REPEAT GENOTYPING BY SEQUENCING TO A SMALL-SIZED FRESHWATER ZOOPLANKTER *DIAPHANOSOMA* IN JAPAN (28667)

365 **Martinez Alarcon, D.**; Saborowski, R.; Harms, L.; Hagen, W.: TRANSCRIPTOME AND GENE EXPRESSION ANALYSIS OF THE BROWN SHRIMP CRANGON CRANGON REVEALS SEASONAL MODULATION OF DIGESTIVE ENZYMES. (28749)

366 **Dávila-Santiago, L.**; DeLeón-Rodríguez, N. I.; LaSanta-Pagán, K.; Hatt, J.; Konstantinidis, K.; Massol-Deyá, A.: METAGENOMIC ANALYSIS REVEALS TEMPORAL SHIFT IN THE BENTHIC MICROBIAL COMMUNITY STRUCTURE AND FUNCTION OF A MILITARY-IMPACTED LAGOON IN VIEQUES, PUERTO RICO (28935)

367 **James, A. K.**; Kelly, L. W.; Nelson, C. E.; Carlson, C. A.: COMPARING BACTERIAL METAGENOMES ACROSS PCO_2 LEVELS (29095)

368 **Matthews, S. A.**; Roncallli, V.; Cieslak, M. C.; Hartline, D. K.; Christie, A. C.; Lenz, P. H.: THE TRANSCRIPTOME OF *LABIDOCERA MADURAE*: EVALUATION OF THE QUALITY AND DEPTH OF A *DE NOVO* ASSEMBLY (29119)

369 **Nigro, L.**; Pérez, V.; Kurte, L.; Dorador, C.; Hengst, M.; Molina, V.; Hernandez, K.; Jeffrey, W. H.: METAGENOMIC INVESTIGATION OF MICROORGANISMS EXPOSED TO HIGH SOLAR RADIATION STRESS IN SALAR DE HUASCO, CHILE (29244)

370 **Boeuf, D.**; Mahé, F.; Audic, S.; Cariou, T.; Rigaut-Jalabert, F.; Jeanthon, C.: SEASONAL DYNAMICS AND EXPRESSION OF PROTEORHODOPSIN GENES IN THE COASTAL WESTERN ENGLISH CHANNEL (29379)

371 **Peijnenburg, K. T.**; Ramos-Silva, P.; Girard, G. A.; Burridge, A. K.; Maas, A. E.; Goetze, E.; Marlétaz, F.: RESOLVING THE EVOLUTIONARY RELATIONSHIPS OF PTEROPODS WITH PHYLOGENOMIC TOOLS (29509)

372 **Boedecker, A.**; Newell, S.; Franzè, G.; Duff, J.; Sherr, B.; Sherr, E.; Lavrentyev, P.: EVALUATING THE PAN-ARCTIC DIVERSITY OF EUKARYOTIC PLANKTON (29513)

373 **YAEGASHI, S.**; WATANABE, K.: METABARCODING ANALYSIS OF WATER ENVIRONMENTAL DNA TO REVEAL SPECIES DIVERSITY OF AQUATIC INSECTS USING NEXT GENERATION SEQUENCING (29575)

375 **Setta, S.**; Whitaker, E.; Genzer, J.; Bretherton, L.; Doyle, S.; Brown, C.; Sylvan, J.; Irwin, A.; Finkel, Z.; Quigg, A.: THE INTERACTION BETWEEN BACTERIA AND PHYTOPLANKTON IN RESPONSE TO OIL AND COREXIT IN MESOCOSM EXPERIMENTS (29676)

056 OCEAN AND COASTAL ACIDIFICATION: SYNTHESIZING INFORMATION AND SUPPORTING MITIGATION

Chair(s): Erica Ombres, erica.h.ombres@noaa.gov
Beth Turner, elizabeth.turner@noaa.gov
David Koweek, dkoweek@carnegiescience.edu
Aaron Strong, aaron.strong@maine.edu

Location: Kamehameha Exhibit Hall

461 **Choi, Y.**; Kim, D.; Rhee, T.: ARAGONITE SATURATION STATE IN THE SOUTHWESTERN EAST/JAPAN SEA DURING SUMMER (28457)

463 **Menu-Courey, K.**: OCEAN ACIDIFICATION EFFECTS ON JUVENILE AMERICAN LOBSTER LIFE HISTORY AND PHYSIOLOGY (28597)

464 **Ventura, A.**; De Wit, P.; Dupont, S.: ADAPTATION POTENTIAL OF THE PACIFIC OYSTER CRASSOSTREA GIGAS TO OCEAN ACIDIFICATION: A QUANTITATIVE GENETIC APPROACH. (28880)

465 **Cuyler, E. E.**; Byrne, R. H.: SIMPLIFIED SPECTROPHOTOMETRIC MEASUREMENTS FOR CARBONATE SATURATION STATE CALCULATIONS (29053)

466 **Clare, X. S.**; Deheyn, D. D.: OCEAN ACIDIFICATION AFFECTS THE NERVOUS SYSTEM IN MARINE ORGANISMS--THE CASE OF A LUMINOUS INVERTEBRATE (29248)

467 **Sharp, J. D.**; Byrne, R. H.; Liu, X.; Feely, R. A.: AN UPDATED PROCEDURE FOR SPECTROPHOTOMETRIC DETERMINATION OF CARBONATE ION CONCENTRATION IN SEAWATER AND A THERMODYNAMIC EXAMINATION OF TEMPERATURE EFFECTS (29601)

468 **Mandirola, J. E.**; Ludwig, P. M.: OYSTER REEF RESTORATION USING ALTERNATIVE SUBSTRATES (29695)

469 **Long, W. C.**; Van Sant, S. B.; Swiney, K. M.; Foy, R. J.: SURVIVAL, GROWTH, MORPHOLOGY, AND BLUE KING CRABS: EFFECT OF OCEAN ACIDIFICATION DECREASES WITH EXPOSURE TIME (29914)

471 **Raney, S. E.**; Meseck, S.; Milke, L.: EFFECTS OF OCEAN ACIDIFICATION ON THE FEEDING RATES OF THE EASTERN OYSTER *CRASSOSTREA VIRGINICA* (30052)

472 **Shitashima, K.**: NATURAL ANALOGUE STUDY FOR OCEAN ACIDIFICATION (30081)

473 **Day, R. D.**; Stewart, J. A.; Brainard, R. E.: EVALUATING THE UTILITY OF CRUSTOSE CORALLINE ALGAE AS A Δ11B BIOSENSOR FOR OCEAN ACIDIFICATION MONITORING ON CORAL REEFS (30101)

062 TRACING ECOLOGICAL DYNAMICS AND BIOGEOCHEMICAL CYCLES VIA COMPOUND-SPECIFIC ISOTOPE ANALYSIS (CSIA) OF ORGANIC COMPOUNDS

Chair(s): Yoshito Chikaraishi, ychikaraishi@jamstec.go.jp
Matthew D. McCarthy, mdmccar@ucsc.edu
Kelton McMahon, kemcmaho@ucsc.edu
Nanako O. Ogawa, nanaogawa@jamstec.go.jp

Location: Kamehameha Exhibit Hall

501 **Yoshikawa, C.**; Ogawa, N. O.; Chisaraishi, Y.; Makabe, A.; Matsui, Y.; Kawagucci, S.; Sasai, Y.; Aita, M. N.; Wakita, M.; Honda, M. C.; Fujiki, T.; Harada, N.; Ohkouchi, N.: NITROGEN ISOTOPE RATIOS OF SINKING PARTICLES RECORD AUTUMN PROGRESS OF NITRIFICATION (28418)

WEDNESDAY

502 **Takizawa, Y.**; Chikaraishi, Y.: TROPHIC ISOTOPIC DISCRIMINATION OF 15N/14N OF AMINO ACIDS IN PRIMARY PRODUCERS (29273)

503 **Glynn, D. S.**; Guilderson, T.; McMahon, K.; McCarthy, M. D.: DRAMATIC NUTRIENT AND PHYTOPLANKTON COMMUNITY SHIFTS IN THE NPSG DURING RECOVERY FROM YOUNGER DRYAS COLD PERIOD AND LITTLE ICE AGE (29784)

504 **Swalethorp, R.**; Thompson, A. R.; Chargualaf, D.; Ohman, M. D.; Aluwihare, L. I.; Landry, M. R.: TROPHIC ECOLOGY VARIABILITY AND RELATIONSHIP TO RECRUITMENT OF LARVAL NORTHERN ANCHOVY OVER THE PAST 50 YEARS (30053)

505 **Johnson, J. J.**; Polito, M. J.: COMPOUND-SPECIFIC STABLE ISOTOPE ANALYSIS OF AMINO ACIDS REVEALS TERRESTRIAL-AQUATIC LINKAGES IN A NORTHERN GULF OF MEXICO SALT MARSH (30122)

072 BIOTIC INTERACTIONS IN AQUATIC ECOSYSTEMS - IMPLICATIONS FOR FOOD WEBS AND ECOSYSTEM FUNCTIONING

Chair(s): Luciano Chiaverano, luciano.chiaverano@usm.edu
Adam Greer, adam.greer@usm.edu

Location: Kamehameha Exhibit Hall

556 **Dalu, T.**; Wasserman, R. J.; Vink, T. J.; Weyl, O. L.; Froneman, P. W.: SEX AND SPECIES SPECIFIC ISOTOPIC NICHE SPECIALISATION INCREASES WITH TROPHIC COMPLEXITY: EVIDENCE FROM AN EPHEMERAL POND ECOSYSTEM (28360)

557 **Jones, E. L.**; Gunther, L. A.; Kiffney, P. M.: POPULATION DYNAMICS OF RECOLONIZING COHO SALMON AND RESIDENT CUTTHROAT TROUT IN CEDAR RIVER (28636)

558 **Schachtl, K.**; Villegas, S.; Giessler, S.; Stibor, H.: FOOD WEB EFFECTS OF THE INVASIVE FRESHWATER JELLYFISH *CRASPEDACUSTA SOWERBII* (28872)

559 **Wukovits, J.**; Enge, A. J.; Watzka, M.; Wanek, W.; Heinz, P.: EFFECT OF TEMPERATURE AND PHYTODETRITUS QUALITY ON CARBON AND NITROGEN UPTAKE OF INTERTIDAL FORAMINIFERA (29417)

560 **Bezio, N. A.**; Perry, E.; Costello, J. H.; Colin, S. P.: EFFECTS OF JELLYFISH MORPHOLOGY ON FEEDING SUCCESS: A COMPARATIVE STUDY. (29561)

561 **Taub, F. B.**; Mahoney, T. H.; Turner, S. E.: SUPPORT OF A GRAZER POPULATION WITH EXTREMELY LOW APPARENT PHYTOPLANKTON AND AN EXAMPLE OF PSEUDO-CARBON LIMITATION. (29615)

562 **Figueroa, D. F.**; Hicks, D. W.: THE SOUTH TEXAS BANKS ECOSYSTEM: OCEANOGRAPHY, BIODIVERSITY AND GENETICS (30089)

073 HITTING A MOVING TARGET - NAVIGATING THE PATH TO THE WORKFORCE

Chair(s): Todd Christenson, todd.christenson@noaa.gov
Andrea Johnson, andjohns@nsf.gov
Gisele Muller-Parker, gtmuller@nsf.gov
Lisa Rom, elrom@nsf.gov
Luis Tupas, ltupas@nifa.usda.gov

Location: Kamehameha Exhibit Hall

563 **Yokota, K.**: LAKE MANAGEMENT MASTER'S PROGRAMS AT SUNY ONEONTA – BRIDGING THE GAP BETWEEN SCIENTIFIC RESEARCH AND PROFESSIONAL SKILLS NEEDED IN THE FIELD (28496)

564 **Christenson, T.**: NOAA STUDENT OPPORTUNITIES AND EMPLOYMENT PATHWAYS (29362)

075 DOES CONNECTIVITY ENHANCE INTEGRITY? DEPENDENCE OF PHYSICAL, BIOLOGICAL, AND CHEMICAL INTEGRITY OF NATURAL WATERS ON CONNECTIONS TO LAND AND OTHER WATERBODIES

Chair(s): Michael Gooseff, michael.gooseff@colorado.edu
Emma Rosi-Marshall, rosimarshalle@caryinstitute.org

Location: Kamehameha Exhibit Hall

571 **Gooseff, M. N.**; Payn, R. A.; Jencso, K.; McGlynn, B. L.: LATERAL AND LONGITUDINAL HYDROLOGIC CONNECTIVITY IN HEADWATER STREAMS (29399)

572 **Zaffaroni, M.**; Zamberletti, P.; Creed, I. F.; Accatino, F.; De Michele, C.: NO WETLAND IS AN ISLAND – QUANTIFIYNG THE CONTRIBUTION OF INDIVIDUAL WETLANDS TO THE RESILIENCE OF SPECIES-AT-RISK ON A PRAIRIE POTHOLE LANDSCAPE (29434)

086 HYDROLOGIC CONNECTIVITY: LINKING LAND USE CHANGES AND MANAGEMENT TO MOVEMENT AND TRANSFORMATIONS OF RESOURCES WITHIN CATCHMENTS

Chair(s): Maira Ometto Bezerra, mbezerra@umd.edu
Kelly Hondula, khondula@sesync.org
Margaret Palmer, mpalmer@sesync.org

Location: Kamehameha Exhibit Hall

618 **Raub, S. C.**: CARBON SINKS OR SOURCES, THE CONSEQUENCES OF ALTERING THE HYDROLOGY OF PEAT SWAMPS IN PENINSULAR MALAYSIA (29301)

619 **Melendez-Diaz, J. O.**; Garcia-Rodriguez, B.; Flores-Hernández, M. A.; Barreto-Vélez, T.; Sáez-Uribe, R.; Figueroa, Y.; Pérez-Rivera, K.; De-Jesús, A.; Ortiz-Zayas, J. R.: A PRELIMINARY ANALYSIS OF THE GUÁNICA BAY / RÍO LOCO WATERSHED: LINKING HISTORICAL LAND USE CHANGES, WITH WATER AND SEDIMENTS FLUXES AND HUMAN PERSPECTIVES (29454)

620 **Clilverd, H. M.**; Tsang, Y.; Strauch, A. M.; Lynch, A. J.; Infante, D. M.: ASSESSING CLIMATE-DRIVEN CHANGES IN STREAMFLOW IN THE HAWAIIAN ISLANDS (29959)

THURSDAY ORALS

013 INTEGRATIVE RESEARCH ON ORGANIC MATTER CYCLING ACROSS AQUATIC GRADIENTS

Chair(s): Richard G. Keil, rickkeil@uw.edu
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Patricia M. Medeiros, medeiros@uga.edu
Carol Robinson, Carol.Robinson@uea.ac.uk
Michael Seidel, m.seidel@uni-oldenburg.de
Nicholas D. Ward, nickdward@gmail.com

Location: 304 A/B

10:00 **Gonsior, M.**; Zhao, Z.; Hertkorn, N.; Schmitt-Kopplin, P.; Jiao, N.; Chen, F.; Powers, L.: IN SITU SOURCES OF MARINE CHROMOPHORIC DISSOLVED ORGANIC MATTER* (28528)

10:15 **Gardner, B.**; Chen, R. F.; Peri, F.: STRATEGIES FOR MEASURING DISSOLVED ORGANIC MATTER ACROSS STEEP LAND-OCEAN GRADIENTS (29066)

10:30 **Maier, M.**; Teodoru, C.; Kalvelage, T.; Wehrli, B.: SPATIAL AND TEMPORAL VARIABILITY OF CARBON TURNOVER AND FLUXES IN THE DANUBE DELTA (29490)

10:45 **Ward, N. D.**; Sawakuchi, H. O.; Gagne-Maynard, W.; Neu, V.; Less, D.; Diniz, J.; Valerio, A.; Cunha, A. C.; Brito, D. C.; da Silva, R.; Bianchi, T. S.; Krusche, A. V.; Richey, J. E.; Keil, R. G.: A REVISED PERSPECTIVE ON THE CONTRIBUTION OF MICROBIAL RESPIRATION TO CARBON DIOXIDE OUTGASSING IN THE AMAZON RIVER BASED ON NEW INCUBATION METHODS (28472)

12:00 **Stubbins, A.**; Wagner, S.; Dittmar, T.; Van Stan, J. T.: TREE-DOM: DOM FROM THE CROWNING HEADWATERS OF THE AQUATIC CARBON CYCLE (28752)

12:15 **Rosengard, S. Z.**; Galy, V.; Spencer, R.; McNichol, A. P.; Hemingway, J. D.: DIAGNOSING AND QUANTIFYING SOURCES OF AMAZON RIVER PARTICULATE ORGANIC CARBON VIA RAMPED OXIDATION (29837)

12:30 **Powers, L. C.**; Gonsior, M.; McDonald, N.; Blough, N. V.; Del Vecchio, R.; Hertkorn, N.; Schmitt-Kopplin, P.: EVALUATING THE CONTRIBUTION OF SARGASSUM TO THE MARINE COLORED DISSOLVED ORGANIC MATTER (CDOM) POOL (29722)

12:45 **Oviedo-Vargas, D.**; Osburn, C. L.; Bianchi, T. S.; D'Sa, E. J.; Ko, D. S.; Arellano, A.; Joshi, I. D.: EXTRACELLULAR ENZYME ACTIVITY IN ESTUARINE SYSTEMS OF THE GULF OF MEXICO AND ITS LINKS TO ORGANIC MATTER BIOGEOCHEMISTRY (29094)

14:30 **Bunse, C.**; Israelsson, S.; Lundin, D.; Lindh, M. V.; Sundh, J.; Martinez Garcia, S.; Fridolfsson, E.; Bertos-Fortis, M.; Legrand, C.; Pinhassi, J.: HETEROTROPHIC BACTERIAL ACTIVITIES AND FUNCTIONAL DYNAMICS IN THE BALTIC SEA (29772)

14:45 **Bennke, C. M.**; Alneberg, J.; Bombar, D.; Reader, H.; Riemann, L.; Andersson, A. F.; Labrenz, M.: WHAT METATRANSCRIPTOMICS CAN TELL US ABOUT ORGANIC MATTER DEGRADATION IN THE BALTIC SEA (28978)

15:00 **Kowalewska, G.**; Szymczak-Zyla, M.; Krajewska, M.; Filipkowska, A.; Lubecki, L.; Mazur-Marzec, H.; Witak, M.; Ceglowska, M.; Ciesielski, T. M.; Ardelan, M. V.; Jenssen, B. M.; Breedveld, G. D.; Oen, A. M.; Goslar, T.: CLIMATE WARMING TODAY AND IN THE PAST IN THE SOUTHERN BALTIC AND NORWEGIAN COAST AREA – A MULTIPROXY STUDY (28566)

15:15 **Davis, C. E.**; Mahaffey, C.; Carr, N.; Wolff, G.; Sharples, J.; Cavan, E.; Woodward, M.: SEASONAL ORGANIC MATTER DYNAMICS ACROSS A TEMPERATE SHELF SEA (29451)

015 PATTERNS OF BIOGEOCHEMICAL CHANGE IN STREAM AND RIVER NETWORKS

Chair(s): Ted Stets, estets@usgs.gov
Rob Striegl, rstriegl@usgs.gov
Suzanne Tank, suzanne.tank@ualberta.ca

Location: 302 A/B

10:00 **Yin, Y.**; Rogala, J. T.; Ingvalson, D.: QUANTIFYING THE EFFECTS OF CONNECTIVITY ON THE SPATIAL PATTERNS OF SUBMERSED AQUATIC VEGETATION IN THE UPPER MISSISSIPPI RIVER (29482)

10:15 **Wickland, K. P.**; Voss, B. M.; Wilson, S. S.; Stackpoole, S.: SPATIAL AND SEASONAL PATTERNS OF DISSOLVED ORGANIC MATTER QUALITY AND BACTERIAL RESPIRATION IN STREAMS AND RIVERS OF THE UPPER MISSISSIPPI RIVER BASIN (29966)

10:30 **Kuhn, C. D.**; Butman, D. E.; Crawford, J. T.; Loken, L. C.; Stadler, P.; Striegl, R. G.: LEVERAGING SPECTRAL-BIOGEOCHEMICAL PATTERNS TO MAP CARBON CHEMISTRY ACROSS A LARGE, HIGHLY REGULATED RIVER SYSTEM (29871)

10:45 **De Jager, N. R.**; Houser, J. N.: THE PATCH MOSAIC OF TOTAL NITROGEN (TN), TOTAL PHOSPHOROUS (TP), AND TN:TP IN THE UPPER MISSISSIPPI RIVER, USA (29423)

12:00 **Sinha, E.**; Michalak, A. M.; Balaji, V.: CLIMATE-CHANGE IMPACTS ON RIVERINE NITROGEN LOADING WITHIN THE CONTINENTAL US (29969)

12:15 THIEU, V.; **SILVESTRE, M.**; GARNIER, J.; BILLEN, G.: INTRODUCING THE BIOGEOCHEMICAL PYNUTS-RIVERSTRAHLER MODEL TO ASSESS PROSPECTIVE SCENARIO IMPACT ALONG THE AQUATIC CONTINUUM IN WESTERN EU-RIVERS (28904)

12:30 **Raimonet, M.**; Silvestre, M.; Garnier, J.; Vautard, R.; Rabouille, C.; Oudin, L.; Thieu, V.: THE CASCADE OF CLIMATE-INDUCED CHANGES ON NUTRIENT TRANSFER IN RIVER NETWORK: SETTING UP A NEW HYDRO-BIOGEOCHEMICAL MODEL ON THE REGIONAL SEINE RIVER BASIN (28888)

12:45 **Salcedo-Borda, J.**; Gettel, G.; Irvine, K.: EFFECT OF RESERVOIRS WITH LONG AND SHORT RESIDENCE TIME ON NUTRIENT CONCENTRATION AND RATIOS IN THE UPPER PART OF DANUBE RIVER BASIN (28571)

14:30 **Hamilton, S. K.**; Roley, S. S.; Kincaid, D. W.; Kieser, M. S.; Hoch-Melluish, P.; Boyer, B.; Heaton, S.: PHOSPHORUS INTERNAL LOADING FROM RESERVOIR SEDIMENTS: A HISTORICAL LEGACY, OR SUSTAINED BY ONGOING INPUTS? (28921)

14:45 **Jankowski, K. J.**; Deegan, L. A.; Neill, C.; Macedo, M. N.; Coe, M. T.; Brando, P. M.; Maracahipes, L.: LAND USE CHANGE ALTERS NUTRIENT EXPORT AND UPTAKE IN STREAMS ALONG BRAZIL'S AGRICULTURAL FRONTIER (29752)

15:00 **Hansen, A. T.**; Czuba, J. A.; Finlay, J. C.; Foufoula-Georgiou, E.: THE POTENTIAL OF WETLANDS TO CONTAIN AGRICULTURAL NITRATE (29791)

15:15 **Brauns, M.**; Kamjunke, N.; Neu, T. R.; Norf, H.; Wells, N. S.; Wild, R.; Guecker, B.: AGRICULTURAL LAND USE REDUCES IN-STREAM RETENTION OF TERRESTRIAL DISSOLVED ORGANIC CARBON (29415)

* REPRESENTS INVITED PRESENTATIONS

16:30 **Cooke, C. A.**; Kerr, J. G.; Hustins, S.; Jackson, B.; Taube, N.; Kruk, M.: INITIAL IMPACTS OF THE 2016 FORT MCMURRAY WILDFIRE (ALBERTA, CANADA) ON REGIONAL WATER QUALITY (29193)

16:45 **Xenopoulos, M. A.**; D'Amario, S. C.: CHANGES IN THE EXPORT OF NUTRIENTS AND CARBON DURING EXTREME CLIMATE EVENTS ACROSS LANDSCAPES (29389)

17:00 **Regier, P.**; Jaffé, R.: SHORT-TERM DISSOLVED ORGANIC CARBON DYNAMICS REFLECT TIDAL, WATER MANAGEMENT AND PRECIPITATION PATTERNS IN A SUBTROPICAL ESTUARY (28390)

17:15 **Bodmer, P.**; Wilkinson, J.; Lorke, A.: DRIVERS OF POTENTIAL METHANE PRODUCTION AND OXIDATION IN STREAMS AT CATCHMENT SCALE (29064)

019 THE BIOLOGICAL CARBON PUMP IN THE TROPICAL PACIFIC OCEAN

Chair(s): Sophie Bonnet, sophie.bonnet@mio.osupytheas.fr
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Kelvin Richards, rkelvin@hawaii.edu

Location: 313 C

10:00 **Rivkin, R. B.**; Anderson, M. R.; Hale, M.: INFLUENCE OF PHYTOPLANKTON-BACTERIAL COUPLING ON THE EXPORT OF BIOGENIC CARBON IN THE OCEAN: INSIGHTS FROM IRON ENRICHMENT EXPERIMENTS (29159)

10:15 **Lefevre, D.**; Grosso, O.; Gimenez, A.; van Wambeke, F.; Spungin, D.; Belkin, N.; Berman-Frank, I.: NET COMMUNITY PRODUCTION ACROSS THE WESTERN TROPICAL PACIFIC OCEAN. IMPLICATION FOR THE ECOSYSTEM FUNCTIONING. (28374)

10:30 **Duhamel, S.**; Van Wambeke, F.; Lefevre, D.; Benavides, M.; Bonnet, S.; Moutin, T.: ASSIMILATION OF ORGANIC MOLECULES BY UNICELLULAR CYANOBACTERIA: EVALUATING THE IMPORTANCE OF PHOTOHETEROTROPHY IN NATURAL COMMUNITIES OF THE SOUTHWEST PACIFIC (28513)

10:45 **Xie, Y.**; Huang, B.; Xin, L.; Xiao, W.: HABITAT CONTROLS ON PHYTOPLANKTON COMMUNITY STRUCTURE AND PRIMARY PRODUCTIVITY IN THE NORTHERN SOUTH CHINA SEA (29191)

12:00 **de Verneil, A.**; Rousselet, L.; Doglioli, A. M.; Petrenko, A. A.; Rougier, G.: WHAT GOES WHERE? IDENTIFYING AND VALIDATING SAMPLING SITES TO ENHANCE LAGRANGIAN SAMPLING DURING BIOGEOCHEMICAL CRUISES (28383)

12:15 **Bouruet-Aubertot, P.**; Cuypers, Y.; Le Goff, H.; Picheral, M.; Rougier, G.; Yohia, C.; Petrenko, A.; De Verneil, A.; Doglioli, A.; Caffin, M.; Moutin, T.: LONGITUDINAL CONTRAST IN SMALL SCALE TURBULENCE ALONG 20S: ORIGIN AND IMPACT ON BIOGEOCHEMICAL FLUXES (28380)

12:30 **Stukel, M. R.**; Decima, M. R.; Kelly, T. B.; Landry, M. R.; Selph, K. E.: CARBON, NITROGEN, AND ISOTOPE FLOWS THROUGH THE PLANKTONIC ECOSYSTEM OF THE COSTA RICA DOME: PRIMARY PRODUCTION TO EXPORT (29607)

12:45 **Weber, T. S.**: PARTICLE MICROENVIRONMENTS EXPAND THE NICHE OF ANAEROBIC METABOLISMS IN THE TROPICAL PACIFIC OCEAN (29912)

021 CROSSING DISCIPLINARY BOUNDARIES ACROSS THE FRESHWATER-MARINE CONTINUUM TO ADVANCE THE UNDERSTANDING OF HARMFUL ALGAL BLOOMS (HABS)

Chair(s): Bryan Brooks, bryan_brooks@baylor.edu
Christopher Gobler, christopher.gobler@stonybrook.edu
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J. Thad Scott, thad_scott@baylor.edu
Jeffery Steevens, jeffery.a.steevens@erdc.usace.army.mil
Alan Wilson, wilson@auburn.edu

Location: 323 B

10:00 **Molot, L.**; Verschoor, M. J.; Powe, C. R.; McQuay, E.; Schiff, S. L.; Venkiteswaran, J. J.; Li, J.: REDUCED IRON AS A PRE-CONDITION FOR CYANOBACTERIAL DOMINANCE IN EMBAYMENTS ALONG GEORGIAN BAY, GREAT LAKES (28482)

10:15 **Hillis, E. L.**; McLeod, A. M.; Xenopoulos, M. A.; Haffner, G. D.: POTENTIAL FACTORS REGULATING PRIMARY PRODUCTION IN THE WESTERN BASIN OF LAKE ERIE, EXAMINED USING TEMPORAL COMPARISONS AND GENERALIZED LINEAR MODELS (29222)

10:30 **Yñiguez, A. T.**; Azanza, R. V.; Benico, G. A.; Villanoy, C. L.: SEASONAL AND LONG-TERM PATTERNS IN HARMFUL ALGAL BLOOMS IN THE PHILIPPINES (28881)

10:45 **Owen, J. M.**; Haffner, G. D.: TEMPORAL AND SPATIAL DISTRIBUTIONS OF HARMFUL CYANOBACTERIA BLOOMS IN THE WESTERN BASIN OF LAKE ERIE DURING A SMALL BLOOM YEAR (29108)

12:00 **Soto Ramos, I. M.**; Cambazoglu, M. K.; Boyette, A. D.; Broussard, K.; Fitzpatrick, P.; Jacobs, G. A.; Greer, A. T.; Shiller, A. M.; Sheehan, D.; Arnone, R.; Lau, Y.; Lucas, K.; Mickle, P.: ADVECTION OF *KARENIA BREVIS* BLOOMS FROM THE FLORIDA PANHANDLE TO THE MISSISSIPPI COAST: A COMPARATIVE ANALYSIS BETWEEN THE 2015 AND 2007 BLOOM EVENTS (30142)

12:15 Steffen, M. M.; Davis, T. W.; Stough, J. A.; McKay, R. M.; Bullerjahn, G. S.; Krausfeldt, L. E.; Boyer, G. L.; Johengen, T. H.; Gossiaux, D. C.; Burtner, A.; Palladino, D.; Rowe, M. D.; Dick, G. J.; Myer, K. A.; Levy, S.; Boone, B.; **Wilhelm, S. W.**: TRANSCRIPTIONAL PROFILES OF THE 2014 LAKE ERIE *MICROCYSTIS* BLOOM (28693)

12:30 **Dyer, S. W.**; Needoba, J. A.; Peterson, T. D.: ASSAYING BOUYANCY RESPONSES AND THE PHYSIOLOGY OF PHYTOPLANKTON USING A NEPHELOMETRIC TURBIDIMETER (29629)

12:45 **Greengrove, C. L.**; Masura, J. E.; Moore, S. K.: TWO YEARS OF ALEXANDRIUM CYST MAPPING IN THE SURFACE SEDIMENTS OF HOOD CANAL, WA, FOLLOWING AN UNPRECEDENTED BLOOM (29626)

14:30 **Givens, C. E.**; Duris, J. W.; Stelzer, E. A.; Ecker, C. D.; Larson, J. H.; Loftin, K.; Lenaker, P.; Evan, M. A.: SHIFTS IN MICROBIAL COMMUNITY COMPOSITION AND MICROBIAL-MEDIATED PROCESSES WITH CYANOBACTERIAL HARMFUL ALGAL BLOOM FORMATION AND TOXIN OCCURENCE (28975)

14:45 **Gobler, C. J.**; Doherty, O. M.; Hattehrath-Lehmann, T. K.; Griffith, A. W.; Kang, Y.; Litaker, W.: OCEAN WARMING SINCE 1982 HAS EXPANDED THE NICHE OF HARMFUL ALGAL BLOOMS IN THE NORTH ATLANTIC AND NORTH PACIFIC OCEANS (29137)

[T] REPRESENTS TUTORIAL PRESENTATIONS

15:00 **Hayes, N. M.**; Haig, H. A.; Simpson, G. L.; Leavitt, P. R.: CLIMATIC AND URBAN CONTROL OF THE TIMING AND MAGNITUDE OF MICROCYSTIN PEAKS IN HARDWATER EUTROPHIC LAKES (29780)

15:15 **Quigg, A.**; Steichen, J.; Windham, R.; Williams, A.: EFFECT OF CHANGING LAND USE LAND COVER ON WATER QUALITY IN A RAPIDLY GROWING METROPOLITAN COMPLEX. (29258)

16:30 **Wilson, A. E.**; Chislock, M. F.; Olsen, B. K.; Wright, R. A.; Schrader, K. K.: FORECASTING TOXIC CYANOBACTERIAL BLOOMS THROUGHOUT THE SOUTHEASTERN U.S. (29405)

16:45 **Bi, H.**; Cai, Z.; Cheng, X.; He, Y.; Benfield, M. C.; Fan, C.: TRANSITIONING FROM MONITORING TO FORECASTING POTENTIAL HARMFUL ALGAL BLOOM: AN EXAMPLE FROM SHENZHEN BAY, P.R. CHINA (29422)

17:00 **Wang, G.**; Lee, Z.: REMOTE SENSING OF SEASONAL SPATIAL VARIATION OF PHYTOPLANKTON PIGMENTS IN LAKE ERIE (30111)

17:15 **Evans, M. A.**; Duris, J. W.; Larson, J. H.; Givens, C. E.; Stelzer, E. A.; Ecker, C. D.; Loftin, K. A.; Lenaker, P. L.: QUALITATIVE EVALUATION OF FORCING FACTORS CONTROLING CYANO-HAB INITIATION AND TIMING (29465)

024 SUPPORTING DATA-INTENSIVE FRESHWATER AND MARINE RESEARCH: INTEGRATING INFORMATICS, INFRASTRUCTURE, DATABASES AND OPEN SCIENCE

Chair(s): Helen Glaves, hmg@bgs.ac.uk
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Angelicque White, awhite@coas.oregonstate.edu

Location: 306 B

10:30 **Meier, O. W.**; Gates, R. D.; Zaslavsky, I.; Jacobs, G. A.; Gates Coral Lab, ..; Hawaii Coral Bleaching Collaborative, ..; EarthCube CRESCYNT Coral Reef RCN: CYBERINFRASTRUCTURE WORKBENCH SOLUTIONS FOR CORAL REEF RESEARCH: CHALLENGES OF SCALE, COLLABORATION, INTEROPERABILITY, REPLICATION, INTEGRATION & OPEN SCIENCE (30112)

10:45 **Zaslavsky, I.**; Meier, O. W.; Li, S.; Gates, R. D.; Gastil-Buhl, G.: ONLINE SHARING AND COLLABORATIVE VISUAL ANALYSIS OF CORAL REEF SURVEYS WITH SUAVE (30018)

026 UNDERGRADUATE RESEARCH IN THE AQUATIC SCIENCES

Chair(s): David Fields, dfields@bigelow.org
Elizabeth Rom, elrom@nsf.gov

Location: 306 A

16:30 **Spaur, M. S.**; Bricker, S.; Davenport, E.: ECOSYSTEM SERVICES ASSESSMENT USING BIOEXTRACTION FOR REMOVAL OF NITROGEN FOR ESTUARINE WATER QUALITY IMPROVEMENT IN CHOPTANK HABITAT FOCUS AREA (28338)

17:00 **Spehlmann, M. A.**; Silsbe, G.: IMPROVING REMOTELY SENSED CHLOROPHYLL CONCENTRATION ESTIMATES USING HYPERSPECTRAL RADIOMETERS IN THE CHESAPEAKE BAY (29726)

17:15 **Deering, N. J.**; Dunbabin, M.; Fisher, P.; Grinham, A.: RIVERNET - A LOW COST RIVER MONITORING SYSTEM DESIGNED BY UNDERGRADUATE STUDENTS (30133)

029 REE MARINE GEOCHEMISTRY IN THE 21ST CENTURY: A TRIBUTE TO THE PIONEERING RESEARCH OF HENRY ELDERFIELD (1943-2016)

Chair(s): Karen H. Johannesson, kjohanne@tulane.edu
Johan Schijf, schijf@cbl.umces.edu

Location: 313 B

10:00 **Paul, S.**; Bau, M.; Kuhn, T.; Volz, J.; Kasten, S.; Koschinsky, A.: CONTROLS ON THE DISTRIBUTION OF RARE EARTH ELEMENTS AND YTTRIUM IN SILICEOUS SEDIMENTS FROM THE PACIFIC OCEAN (28661)

10:15 **Byrne, R. H.**; Patten, J. T.; Soli, A. L.; Quinn, K. A.: COMPARATIVE COMPLEXATION OF RARE EARTHS BY CARBONATE AND SILICATE IN SEAWATER* (28729)

10:30 **Shiller, A. M.**: DISSOLVED RARE EARTH ELEMENTS IN THE US GEOTRACES NORTH ATLANTIC SECTION AND NEW INSIGHT INTO LIGHT RARE EARTH BIOACTIVITY (28997)

10:45 **Adebayo, S. B.**; Johannesson, K. H.: INVESTIGATING THE RARE EARTH ELEMENTS (REE) GEOCHEMISTRY OF THE MISSISSIPPI RIVER ESTUARY (29126)

12:00 **Osborne, A. H.**; Hathorne, E. C.; Plancherel, Y.; Schijf, J.; Böning, P.; Frank, M.: RARE EARTH ELEMENT PATTERNS IN SEDIMENTARY FORAMINIFERA: POTENTIAL WATER MASS TRACERS?* (29295)

12:30 **Amakawa, H.**; Usui, A.; Iijima, K.; Suzuki, K.: SURFACE LAYER ND ISOTOPIC COMPOSITION OF FERROMANGANESE CRUSTS COLLECTED FROM THE TAKUYO-DAIGO SEAMOUNT IN THE NORTHWEST PACIFIC OCEAN (28386)

12:45 **Christy, I. J.**; Schijf, J.: EFFECT OF MG AND CA ON THE STABILITY OF THE MRI CONTRAST AGENT GD–DTPA IN SEAWATER (28603)

038 ESTUARIES: BLUE CARBON SINKS OR GREENHOUSE GAS SOURCES?

Chair(s): David Ho, david.ho@hawaii.edu
Damien Maher, damien.maher@scu.edu.au

Location: 313 B

14:30 **Howard, J. L.**; Aguiar, M.; Creed, J. C.; Fourqurean, J. W.: CARBONATE SEDIMENT PRODUCTION IN SOME COASTAL AREAS MAY OFFSET THE BENEFITS OF SEAGRASS (28410)

14:45 **Hopkinson, C.**; Morris, J.; Fagherazzi, S.; Raymond, P.: BAY EDGE EROSION PROVIDES A CRITICAL SOURCE OF SEDIMENTS MAINTAINING ELEVATION AND BLUE CARBON STORAGE OF SALT MARSH PLATFORM (28415)

15:00 **Wang, Z. A.**; Kroeger, K. D.; Ganju, N. K.; Chu, S. N.; Gonneea, M. E.: HOW MUCH DO WE MISS: INTERTIDAL SALT MARSHES AS AN IMPORTANT SOURCE OF INORGANIC CARBON TO THE COASTAL OCEAN (30131)

15:15 **Mateo, M. A.**; Serrano, O.; Lavery, P. S.; Belshe, F.; Piñeiro, N.; Leiva, C.; Martínez-Cortizas, A.: CONCEPTS AND REFLECTIONS ON SEAGRASS BLUE CARBON: THE *POSIDONIA OCEANICA* PARADIGM (28893)

16:30 **Drexler, J. Z.**; Orlando, J.; Fuller, C. C.; Woo, I.; Davis, M.; De La Cruz, S.: DECONSTRUCTING THE CARBON SINK IN RESTORING AND HISTORIC MARSHES IN THE NISQUALLY RIVER DELTA, WASHINGTON, USA (28474)

16:45 **Potouroglou, M.**; Diele, K.; Kennedy, H.; Huxham, M.: SCOTLAND'S COASTAL BLUES: THE CARBON STORAGE CAPACITY OF INTERTIDAL ZOSTERA MEADOWS (28855)

17:00 **Hsu, T. C.**; Hsiao, S. Y.; Tseng, Y. F.; Shiah, F. K.; Dai, M.; Huang, J. C.; Kao, S. J.: COMPARISON NITROUS OXIDE PRODUCTION BETWEEN WATER COLUMN AND SEDIMENTS IN THE EARLY STAGE OF HYPOXIA IN THE INNER SHELF OFF CHANGJIANG ESTUARY (29336)

17:15 **Rosentreter, J. A.**; Maher, D. T.; Murray, R.; Erler, D. V.; Eyre, B. D.: DRIVERS OF HIGH PCO2 AND CH4 CONCENTRATIONS AND EVASION RATES IN MANGROVE DOMINATED ESTUARIES (28799)

042 AQUATIC GENOMICS

Chair(s): Erica Goetze , egoetze@hawaii.edu
Galice Hoarau, galice.g.hoarau@nord.no
Katja Peijnenburg, K.T.C.A.Peijnenburg@uva.nl

Location: 323 A

10:00 **Pereyra, R. T.**: THE ANATOMY OF SPECIATION IN A DEPAUPERATE ENVIRONMENT. * (30147)

10:15 **Tronholm, A.**; Leliaert, F.; Lemieux, C.; Turmel, M.; DePriest, M. S.; Bhattacharya, D.; Karol, K. G.; Fredericq, S.; Zechman, F. W.; Lopez-Bautista, J. M.: GENOMICS OF A DEEP-WATER ALGA CHALLENGES THE EARLY EVOLUTION OF THE GREEN PLANTS (29807)

10:30 **Plough, L. V.**; Fitzgerald, C.; Rhodes, A.; Plummer, A.; Pierson, J. J.: CRYPTIC DIVERSITY IN AN ESTUARINE COPEPOD: REPRODUCTIVE ISOLATION AND TRANSCRIPTOMIC RESPONSE TO SALINITY STRESS (29755)

10:45 Matthews, S.; Van Woudenberg, L.; Lenz, P. H.; **Goetze, E.**: VERTICAL GRADIENTS IN ZOOPLANKTON SPECIES RICHNESS AND COMMUNITY COMPOSITION ACROSS THE TWILIGHT ZONE IN THE NORTH PACIFIC SUBTROPICAL GYRE (29096)

044 BRIDGING THE ECO-EVOLUTIONARY GAP: PLASTIC AND ADAPTIVE RESPONSES TO CLIMATE CHANGE

Chair(s): Lorenzo Ciannelli, lciannel@coas.oregonstate.edu
Anna B. Neuheimer, abneuheimer@gmail.com

Location: 301 B

10:00 **Neuheimer, A. B.**; Ciannelli, L.; Ottersen, G.: SESSION TUTORIAL: BRIDGING THE ECO-EVOLUTIONARY GAP: PLASTIC AND ADAPTIVE RESPONSES TO CLIMATE CHANGE[T] (29217)

10:45 **Huffmyer, A. S.**; Putnam, H. M.; Gates, R. D.: PARENTAL INFLUENCE ON GROWTH, SURVIVORSHIP, AND ENERGETICS OF JUVENILE *POCILLOPORA* CORALS EXPOSED TO INCREASED TEMPERATURE (29711)

12:00 **Oomen, R. A.**; Knutsen, H.; Olsen, E. M.; Jentoft, S.; Stenseth, N. C.; Hutchings, J. A.: GENETIC VARIABILITY IN POPULATION RESPONSES OF ATLANTIC COD TO TEMPERATURE: EXPLORING THE NEXUS OF PLASTICITY AND ADAPTATION USING A TRANSCRIPTOMIC APPROACH* (29744)

12:15 **Jury, C. P.**; Newell, M.; Dobson, K.; McLachlan, R.; Marko, P.; Grottoli, A.; Toonen, R. J.: LOCAL ADAPTATION DRIVES CORAL RESILIENCE UNDER OCEAN ACIDIFICATION AND CLIMATE CHANGE (30008)

12:30 **Martiny, A. C.**; Flombaum, P.: PICOPHYTOPLANKTON LINEAGES DISPLAY CLEAR NICHE PARTITIONING BUT OVERALL POSITIVE RESPONSE TO FUTURE OCEAN WARMING (28454)

12:45 **Orio, A.**; Casini, M.: HISTORICAL SPATIOTEMPORAL DYNAMICS OF BALTIC COD AND FLOUNDER AS ANALYSED USING STANDARDISED FISHERY-INDEPENDENT DATA (28340)

14:45 **Horne, C. R.**; Hirst, A. G.; Atkinson, D.: EXAMINING PATTERNS IN BODY SIZE VARIATION WITHIN SPECIES: FROM THE LAB TO THE FIELD (28334)

15:00 **Lenz, E. A.**; van der Steeg, E. J.; Padilla-Gamiño, J. L.; Putnam, H. M.; Davidson, J. M.; Huffmyer, A. S.; Matsuda, S. B.; Gates, R. D.: SUCCESSFUL SEXUAL REPRODUCTION IN A HERMAPHRODITIC BROADCAST SPAWNING CORAL FOLLOWING BLEACHING (29750)

15:15 **Olsen, E. M.**; Villegas-Rios, D.; Freitas, C.; Moland, E.: BEHAVIOURAL RESPONSES OF ATLANTIC COD (GADUS MORHUA) TO TEMPERATURE CHANGE (29098)

045 WHAT'S THE MATTER OF BIODIVERSITY?

Chair(s): Patrick Fink, patrick.fink@uni-koeln.de
Maria Stockenreiter, stockenreiter@biologie.uni-muenchen.de

Location: 305 A/B

10:00 **Fink, P.**; Groendahl, S.: INTERACTIONS BETWEEN CONSUMER AND RESOURCE DIVERSITY UNDER CHANGING ENVIRONMENTAL CONDITIONS (29769)

10:15 **Hairston, N. G.**; Schaffner, L. R.; Miner, B. E.; Bonner, E.; Spaak, P.; Yamamichi, M.; Ellner, S. P.: *DAPHNIA* ECO-EVOLUTIONARY PROCESS MEETS THE CLEAR WATER PHASE: SEASONAL PLANKTON DYNAMICS WHEN THE CONSUMER EVOLVES (28345)

10:30 **Redmond, L. E.**; Loewen, C. J.; Vinebrooke, R. D.: A FUNCTIONAL APPROACH REVEALS ZOOPLANKTON RESPONSES TO ENVIRONMENTAL CHANGE IN MOUNTAIN LAKES (29086)

10:45 **Marzetz, V.**; Martin-Creuzburg, D.; Striebel, M.; Wacker, A.: DOES THE DIVERSITY OF PHYTOPLANKTON COMMUNITIES DRIVE ZOOPLANKTON INTO CO-LIMITATION? (28422)

12:00 **Winder, M.**; Carstensen, C.; Galloway, A. W.; Jakobsen, J.; Cloern, J. E.: PHYTOPLANKTON DIVERSITY ACROSS THE LAND-SEA INTERFACE AND ITS IMPLICATIONS FOR SECONDARY PRODUCTION (28851)

12:15 **Vicente, J.**; Moitinho-Silva, L.; Marty, M. J.; Hill, R. T.: PAIRING UP OF "HIGH MICROBIAL ABUNDANCE" AND "LOW MICROBIAL ABUNDANCE" SPONGE SPECIES IN THREE MUTUALISTIC SPONGE PAIRS OF THE CARIBBEAN (28647)

12:30 Mensens, C.; De Laender, F.; Janssen, C. R.; Sabbe, K.; **De Troch, M.**: IMPACT OF CHEMICAL STRESS AT THE BASE OF MARINE FOOD WEBS: BIOCHEMICAL SCREENING OF THE ENERGY FLOW IN A TRAIT-BASED PERSPECTIVE (29517)

12:45 **Kauppi, L. E.**; Norkko, A.; Norkko, J.: NEWS FROM THE INVASION FRONT: SUCCESSFUL INVASION INTO A LOW-DIVERSITY SYSTEM INCREASED FUNCTIONAL AND SPECIES DIVERSITY, AND ENHANCED ECOSYSTEM FUNCTIONING (29385)

THURSDAY

[T] REPRESENTS TUTORIAL PRESENTATIONS

14:30 Venail, P.; **Guan, Z.**: CURRENT STATE OF FRESHWATER PHYTOPLANKTON DIVERSITY AND ECOSYSTEM FUNCTIONING RESEARCH (29338)

14:45 **Schiaffino, M. R.**; Sabio García, C.; Saad, J. F.; Izaguirre, I.: BACTERIOPLANKTON STRUCTURE OF FISHLESS AND FISH STOCKED LAKES FROM THE PATAGONIAN STROBEL PLATEAU (ARGENTINA) (29372)

15:00 **Nalley, E. M.**; Donahue, M. J.; Heenan, A.; Karl, S. A.: HERBIVOROUS CORAL REEF FISH SPECIALIZATION AND COMMUNITY COMPOSITION IN THE PACIFIC (29979)

15:15 **Gallo, N. D.**; Navarro, E. C.; McCarthy, J.; Sellanes, J.; Yannicelli, B.; Levin, L. A.: FISH DIVERSITY IN OXYGEN-POOR ENVIRONMENTS AND IMPLICATIONS FOR TROPHIC INTERACTIONS AND DIET DIVERSITY (30098)

052 VIRUSES AND PARASITES IN FOOD WEB INTERACTIONS

Chair(s): Urania Christaki, Urania.Christaki@univ-littoral.fr
Telesphore Sime-Ngando, telesphore.sime-ngando@univ-bpclermont.fr

Location: 301 B

16:30 **Garcés, E.**; Alacid, E.; Reñé, A.; Camp, J.: MARINE PARASITISM IN HIGH-BIOMASS MICROALGAL BLOOMS (29488)

16:45 **Nagarkar, M. D.**; Palenik, B.: DIVERSITY AND DYNAMICS OF SYNDINIALES PARASITES AT A COASTAL PACIFIC SITE (30092)

17:00 **Gleason, F. H.**; Lilje, O.; Scholz, B.: THE POTENTIAL IMPACTS OF TRUE FUNGAL AND FUNGAL-LIKE PARASITES ON COMPOSITION OF HOSTS IN MARINE FOOD WEBS (29103)

17:15 **Kent, A.**; Briers, R.; Diele, K.; Pert, C.; Rueckert, S.: INVESTIGATING THE CAUSES OF RED VENT SYNDROME IN WILD ATLANTIC SALMON (*SALMO SALAR*) FROM COASTAL WATERS AROUND SCOTLAND (28871)

054 SPATIAL AND TEMPORAL TRENDS IN MARINE BIODIVERSITY

Chair(s): Andrew Barton, abarton@princeton.edu
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Derek Tittensor, Derek.Tittensor@unep-wcmc.org

Location: 305 A/B

16:30 **Bracken, M.**: COEXISTENCE, COMPLEMENTARITY, AND RESOURCE PARTITIONING IN A GUILD OF MARINE FILTER FEEDERS (28403)

16:45 **Wallingford, P. D.**; Sorte, C. J.: SHIFTING KEYSTONES: CHANGES IN PREDATOR-PREY RELATIONSHIPS ALONG A THERMAL GRADIENT (29526)

17:00 **Martin, G.**; Torn, K.; Martin, K.: DISTRIBUTION OF BENTHIC MACROALGAE SPECIES DIVERSITY IN RELATION TO SALINITY AND HABITAT QUALITY GRADIENT IN THE BALTIC SEA. (29702)

17:15 **Lewandowska, A. M.**; Freund, J.; Hillebrand, H.; Jonkers, L.; Kucera, M.: THE RATE OF BIODIVERSITY CHANGE IN MODERN AND PALEONTOLOGICAL TIME SERIES OF PLANKTONIC FORAMINIFERA (29606)

055 INNOVATIONS IN TEACHING, MENTORING, AND OUTREACH PRACTICES TO IMPROVE EDUCATION AND BROADEN PARTICIPATION

Chair(s): Robert Chen, bob.chen@umb.edu
Benjamin Cuker, benjamin.cuker@hamptonu.edu
Rachel Horak, rahorak@gmail.com
Jonathan Zehr, zehrj@ucsc.edu

Location: 314

10:00 **Matsumoto, G. I.**: SUSTAINABLE EDUCATOR PROFESSIONAL DEVELOPMENT WORKSHOPS (28448)

10:15 **Philippoff, J.**; La Valle, F.; Seraphin, K. D.: SCAFFOLDING AND SCALING UP UNDERGRADUATE ACCESS TO RESEARCH EXPERIENCES: OUR PROJECT IN HAWAII'S INTERTIDAL (OPIHI) INTERNSHIP (30139)

10:30 **Goulet, T. L.**: CLASS GENERATED COMMUNITY CLICKER CASES (CGCCC): CONNECTING SCIENCE TO STUDENTS' LIVES (29420)

10:45 **Chen, R. F.**: COASTS AND COMMUNITIES: A NOVEL TRANSDISCIPLINARY GRADUATE CORE COURSE (29018)

12:15 **Bassett, M. K.**; Clarkston, B.; Garza, C.: RECRUIT, ENGAGE AND PREPARE - USING RESEARCH EXPERIENCES FOR UNDERGRADUATES PROGRAMS TO INCREASE DIVERSITY IN THE OCEAN SCIENCES* (28530)

12:30 **Barber, P. H.**; Fong, P. M.; Cuker, B.; Gibson, D.; Habtes, S.: THE DIVERSITY PROJECT: A TRANSFORMATIVE RESEARCH-INTENSIVE PROGRAM INCREASING DIVERSITY IN MARINE SCIENCE (29231)

12:45 **Lemus, J. D.**; Ano, M.: LOKO I'A: A MOBILE APP FOR EXPLORING SCIENCE AND CULTURE (29833)

14:30 **Thompson, S. K.**; Koep, T. K.; Sindberg, G. M.; Pierret, C. K.; Cotner, J. B.: EXPLORING THE IMPACT OF INQUIRY BASED ENVIRONMENTAL SCIENCE EDUCATION ON STUDENT CONNECTEDNESS TO NATURE (29071)

14:45 **White, H. K.**; Borowiak, C.; Funari, V.; ross, j. m.: TROUBLED WATERS: TRACING GLOBALIZATION AND WASTE IN THE DELAWARE RIVER (29226)

15:00 **Castendyk, D.**; Allen, T.; Aguilar, A.; Villavicencio, H.: TRAINING UNDERGRADUATES IN LIMNOLOGY, WATERSHED MANAGEMENT AND SUSTAINABILITY THROUGH AN INDUSTRY-SPONSORED FIELD COURSE, LAKE ATITLAN, GUATEMALA (29093)

15:15 **Piera, J.**; Mominó, J. M.; Jurado, E.; Bardají, R.; Ceccaroni, L.; Cezón, K.; Villaverde, C.; Claramunt, B. L.: CITIZENS OBSERVATORIES AS INNOVATIVE LEARNING ENVIRONMENTS: OPPORTUNITIES TO BROAD CITIZEN PARTICIPATION IN ENVIRONMENTAL MONITORING (28896)

16:30 **Simoniello, C.**; Kobara, S.; Howard, M. K.; Currier, R.; Kirkpatrick, B.: THE POWER OF CONNECTION: K TO GRAY LEARNING ACROSS DISCIPLINES, GEOGRAPHY AND CULTURES (29090)

16:45 **Cotner, S.**; Hewlett, J.: REEF CHECK ECODIVERS MAKE COURSE-BASED RESEARCH GLOBALLY RELEVANT (30004)

17:00 **Graulty, M.**; Rosner, A.: TECHNIQUES FOR EXPANSION AND EVALUATION OF MARINE MAMMAL AND SEA TURTLE OUTREACH IN THE GREATER ATLANTIC REGION (30095)

17:15 Gilly, W. F.; Daniel, P. C.; Li, D. H.; **Portner, E. J.**; Rosen, H.; Arroyo Ramirez, K.; Burford, B.: SQUIDS-4-KIDS: A NOVEL OUTREACH PROGRAM FOR INCREASING OCEAN AWARENESS (30100)

057 SOURCES, TRANSFORMATIONS, AND TRANSPORT OF CARBON AND NUTRIENTS IN WATERSHEDS: INFLUENCES ON STREAM WATER QUALITY

Chair(s): Matthew Miller, mamiller@usgs.gov
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Chris T. Parsons, chris.parsons@uwaterloo.ca
R. Paul Voroney, pvoroney@uoguelph.ca

Location: 306 A

10:00 **Frossard, E.**: THE COUPLED TRANSFER OF CARBON, NITROGEN AND PHOSPHORUS FROM SOIL TO WATER[T] (29473)

10:30 **Sanford, W. E.**; Hirsch, R. M.; Blomquist, J. D.: MODELING TEMPORAL TRENDS IN DISSOLVED NUTRIENTS IN STREAMS IN AGRICULTURAL WATERSHEDS WITHIN THE CHESAPEAKE BAY WATERSHED, USA* (29649)

10:45 **Morgenstern, U.**; Daughney, C. J.; Leonard, G.: USING GROUNDWATER AGE AND CHEMISTRY TO UNDERSTAND SOURCES AND DYNAMICS OF NUTRIENTS THROUGH CATCHMENTS* (28874)

12:00 **Metson, G. S.**; Lin, J.; Harrison, J. A.; Compton, J. E.: LINKING TERRESTRIAL P INPUTS TO RIVERINE EXPORT ACROSS THE UNITED STATES (29539)

12:15 **Buquet, D.**; Anschutz, P.; Charbonnier, C.; Poirier, D.; Bujan, S.; Devaux, L.: NUTRIENT AND ALKALINITY MASS BALANCE DEFINES THE BIOGEOCHEMICAL ROLE OF EACH COMPARTMENT IN TWO SHALLOW LAKES. (28933)

12:30 **Audette, Y.**; O'Halloran, I. P.; Nowell, P. M.; Voroney, R. P.: SINK OR SOURCE? STUDY OF LEGACY PHOSPHORUS IN STREAM SEDIMENTS INFLUENCED BY AGRICULTURAL FERTILITY PRACTICES (29480)

12:45 **Nowell, P. M.**; Evans, L. J.; Sweeney, S. J.; Aspinall, J. D.; Voroney, R. P.: MODELLING THE SPECIATION OF INORGANIC PHOSPHORUS IN AGRICULTURAL SOILS: TOWARD A GEOSPATIAL PHOSPHORUS RETENTION MODEL (30114)

14:30 **Clow, D. W.**; Mast, M. A.; Penn, C.; Dornblaser, M. M.: SPATIOTEMPORAL PATTERNS IN STREAM WATER CARBON AND NITROGEN IN MOUNTAIN STREAMS (29801)

14:45 **Piehler, M. F.**; Thopson, S. P.; Gold, A. C.; White, C. L.; Schwartz, R.: COASTAL PLAIN STREAM CHROMOPHORIC DISSOLVED ORGANIC MATTER VARIES WITH WATERSHED DEVELOPMENT (29495)

15:00 **Liu, X. Q.**; Friese, K.; Rinke, K.: SEDIMENTARY ORGANIC MATTER IN TWO PRE-DAMS WITH DIFFERENT LAND-USE CATCHMENTS (28906)

15:15 **Lechtenfeld, O. J.**; Raeke, J.; Oosterwoud, M. R.; Bornmann, K.; Tittel, J.; Reemtsma, T.: LINKING THE MOBILIZATION OF DISSOLVED ORGANIC MATTER IN CATCHMENTS AND ITS REMOVAL IN DRINKING WATER TREATMENT TO ITS MOLECULAR CHARACTERISTICS (29783)

066 IN HOT WATER: THE PHYSICS AND IMPACTS OF WARMING LAKES AND RESERVOIRS

Chair(s): Peter Blanken, blanken@colorado.edu
Simon Hook, simon.j.hook@jpl.nasa.gov
John Lenters, jlenters@limno.com
Sally MacIntyre, sally.macintyre@ucsb.edu

Location: 308 A/B

16:30 **DelSontro, T.**; del Giorgio, P. A.; Prairie, Y.: A GLOBAL ESTIMATE OF METHANE EMISSIONS FROM BOREAL LAKES AND POTENTIAL IMPACTS OF WARMING (29032)

16:45 **Healey, N. C.**; Hook, S. J.; Lenters, J. D.; Soylu, M. E.; Schladow, S. G.: ANALYSIS OF LAKE EVAPORATION AT LAKE TAHOE, CALIFORNIA/NEVADA, USA (29149)

17:00 **Lenters, J. D.**: PHYSICAL MECHANISMS OF RAPID LAKE WARMING (29823)

17:15 **Sterner, R. W.**: CLIMATE-PRODUCTION COUPLINGS IN A RAPIDLY WARMING LARGE LAKE (29796)

067 ECOLOGICAL RESILIENCE, NON-LINEAR COMMUNITY DYNAMICS AND REVERSIBILITY OF STATE SHIFTS IN AQUATIC ECOSYSTEMS

Chair(s): Thomas Adam, thomascadam@gmail.com
Karen McGlathery, kjm4k@virginia.edu
Russell J. Schmitt, schmitt@lifesci.ucsb.edu
David Seekell, david.seekell@umu.se

Location: 323 A

12:00 **Detmer, T. M.**; Wahl, D. H.; Collins, S. F.; Lewis, W. M.: SIZE FREQUENCY DISTRIBUTION OF PRIMARY CONSUMERS INFLUENCES RESILIENCE OF ECOSYSTEMS TO TROPHIC CASCADES BECAUSE NON-LINEAR EFFECTS OF SIZE SELECTIVE PREDATION (29806)

12:15 **Guerrero Bolano, F. J.**; Peñaranda-Velez, V. M.; Hatten, J. A.: DECODING RESILIENCE IN THE OREGON CASCADES: AN ANALYSIS OF HISTORICAL TRENDS OF STREAMFLOW VARIABILITY (30046)

12:30 **Ives, S. C.**; May, L.; Burthe, S.; Henrys, P.; Heal, K. V.; Elliott, J. A.; Spears, B. M.: UNDERSTANDING ECOLOGICAL INSTABILITY: RESILIENCE AND REGIME SHIFTS IN SHALLOW LAKES (28689)

12:45 **Wilkinson, G. M.**; Carpenter, S. R.; Cole, J. J.; Pace, M. L.; Batt, R. D.; Buelo, C. D.; Kurtzweil, J.: STATISTICAL EARLY WARNING INDICATORS PREDICT ALGAL BLOOMS IN LAKES (28917)

14:30 **Guest, J. R.**; Edmunds, P. J.; Kuffner, I. B.; Andersson, A. J.; Barnes, B. B.; Chollett, I.; Elahi, R.; Gross, K.; Lenz, E. A.; Mitarai, S.; Mumby, P. J.; Nelson, H. R.; Parker, B. A.; Putnam, H. M.; Rogers, C. S.; Toth, L. T.; Gates, R. D.: CORAL REEF OASES IN SPACE AND TIME (29287)

14:45 **Schmitt, R. J.**; Holbrook, S. J.; Brooks, A. J.; Adam, T. C.; Davis, S. L.: AN EXPERIMENTAL APPROACH TO ASSESSING TIPPING POINTS ON CORAL REEFS (28401)

15:00 **Dudgeon, S. R.**; Rhile, E. C.; Petraitis, P. S.: EMERGENCE AND RESILIENCE OF A NEW ALTERNATIVE STATE IN THE GULF OF MAINE (29143)

15:15 **Katz, S. L.**; Scheuerell, M. D.; Ward, E. J.: ESTIMATING DYNAMIC CHANGES IN ECOLOGICAL INTERACTIONS AND COMMUNITY STABILITY FROM TIME SERIES DATA COLLECTED AT MULTIPLE KELP FOREST SITES (29896)

[T] REPRESENTS TUTORIAL PRESENTATIONS

16:30 **O'Brien, K. R.**; Waycott, M.; Maxwell, P. S.; Ferguson, A. J.; McKenzie, L. J.; Kendrick, G. A.; Kilminster, K.; Udy, J. W.; Scanes, P.; McMahon, K.; Adams, M. P.; Samper-Villarreal, J.; Dennison, W. C.: RELATIVE TIMESCALES OF RESISTANCE, RECOVERY AND DISTURBANCE DETERMINE THE RESILIENCE OF SEAGRASS ECOSYSTEMS (29243)

16:45 **Bowen, J. L.**; Kearns, P. J.; Matthew, T.; Bauer, C.; Mozdzer, T.: MICROBIAL DORMANCY AND THE IMPLIED RESILIENCE OF SALT MARSH SEDIMENTS (29457)

17:00 **Puerta, P.**; Ciannelli, L.; Rykaczewski, R.; Litzow, M.: NON-LINEAR CLIMATE RESPONSES OF DEMERSAL POPULATIONS FROM THE GULF OF ALASKA (29267)

17:15 **Valenzuela, J. J.**; López García de Lomana, A.; Lee, A.; Armbrust, E. V.; Orellana, M. V.; Baliga, N. S.: ASSESSMENT OF THE MARINE DIATOM THALASSIOSIRA PSEUDONANA'S RESILIENCE IN AN ACIDIFIED OCEAN (29989)

068 SPATIAL AND TEMPORAL DYNAMICS OF AQUATIC MICROBIAL COMMUNITIES

Chair(s): Sophie Clayton, sclayton@uw.edu
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Nicolas Tromas, nicolas.tromas@umontreal.ca

Location: 304 A/B

16:30 **Krabberød, A. K.**; Deutschmann, I.; Lima-Mendez, G.; Giner, C. R.; Balagué, V.; Reñé, A.; Ferrera, I.; Garcés, E.; Gasol, J. M.; Massana, R.; Logares, R.: EXPLORING THE MARINE MICROBIAL INTERACTOME OVER 10 YEARS (28964)

16:45 **Dawson, M. N.**; Beman, J. M.; Blois, J. L.; Stibor, H.; Sachs, J. P.; Behl, S.; N+McGee, T.; Meyerhoff, M.; Pondaven, P.; Schiebelhut, L. M.; Swift, H. F.; Wilson, J.: PARALLEL ECO-EVOLUTIONARY PROCESSES IN: MICROBES–MACROBES, ALLELES–TAXA, THE PAST AND PRESENT? (29913)

17:00 **Cordero, O. X.**: CONVERGENCE IN MICROBIAL COMMUNITY STRUCTURE, DYNAMICS AND FUNCTION. * (29735)

17:15 **Tromas, N.**; Taranu, Z. E.; Willis, A.; Fortin, N.; Greer, C. W.; Shapiro, B. J.: ECOLOGICAL NICHE DIMENSION AND GENETIC VARIABILITY IN SYMPATRIC CYANOBACTERIAL POPULATIONS (29789)

072 BIOTIC INTERACTIONS IN AQUATIC ECOSYSTEMS - IMPLICATIONS FOR FOOD WEBS AND ECOSYSTEM FUNCTIONING

Chair(s): Luciano Chiaverano, luciano.chiaverano@usm.edu
Adam Greer, adam.greer@usm.edu

Location: 313 A

10:00 **Joyce, P.**; Kregting, L.; Dick, J.: THE INFLUENCE OF OSCILLATORY FLOW VELOCITY ON THE CLEARANCE RATES OF NATIVE AND NON-NATIVE BIVALVES (28766)

10:15 **Phillips, J. S.**; McCormick, A. R.; Einarsson, A.; Ives, A. R.: SPATIOTEMPORAL VARIATION IN THE POSITIVE VS. NEGATIVE EFFECT OF ECOSYSTEM ENGINEERS ON BENTHIC PRODUCTION IN A SHALLOW LAKE (29866)

10:30 **Alvestad, A. H.**; Hemmingsen, W.; MacKenzie, K.; Karlsbakk, E.; Arneberg, P.: PARASITES OF NORTHEAST ATLANTIC COD (GADUS MORHUA) IN THE BARENTS SEA: EFFECTS ON REPRODUCTION. (29958)

10:45 **Timm Reinhardt, T.**; Patrick Fink, P.: COUPLING BENTHIC AND PELAGIC FOOD-WEBS – HOW COMPETITION AND RESOURCE QUALITY ALTER ECOSYSTEM FUNCTIONING (28465)

12:00 Berner, C.; **Bertos-Fortis, M.**; Pinhassi, J.; Legrand, C.: MICROBIAL INTERACTIONS IN THE BALTIC PROPER SUMMER BLOOMS UNDER FUTURE CLIMATE CONDITIONS, A MESOCOSM APPROACH (29608)

12:15 **Seiler, C.**; van Velzen, E.; Neu, T. R.; Gaedke, U.; Berendonk, T. U.; Weitere, M.: PREDATOR-PREY-DYNAMICS IN COUPLED PLANKTON-BIOFILM SYSTEMS: THE IMPORTANCE OF TRAIT VARIABILITY (29348)

12:30 **van Bree, L.**; Cocquyt, C.; Peterse, F.; De Crop, W.; Verschuren, D.; Sinninghe Damsté, J. S.: TRACING PAST AND PRESENT COMMUNITY DYNAMICS IN A SMALL, ANOXIC CRATER LAKE: A LIPID BIOMARKER STORY (29392)

12:45 **Vad, C. F.**; Lukic, D.; Horváth, Z.; Kainz, M. J.; Ptacnik, R.: EFFECTS OF CHRYSOPHYTE ALGAE ON ZOOPLANKTON SECONDARY PRODUCTION AND DIVERSITY (29869)

14:30 **Boyette, A. D.**; Greer, A. T.; Weidemann, A. D.; Jacobs, G. A.; Graham, W. M.: PHYSICAL MECHANISMS FOR FORMATION AND RESULTING LOWER-TROPHIC LEVEL INTERACTIONS WITHIN A PLANKTON THIN LAYER IN THE NORTHERN GULF OF MEXICO (29638)

14:45 **Moison, M.**; Buskey, E. J.: SUBLETHAL EFFECTS OF DISPERSED CRUDE OIL ON MARINE COPEPOD BEHAVIOR (29031)

15:15 **Nejstgaard, J. C.**; Berger, S. A.; AQUACOSM CONSORTIUM, A. C.: WORLDWIDE INVITATION TO AQUACOSM: A NETWORK OF LEADING EUROPEAN AQUATIC MESOCOSM FACILITIES CONNECTING MOUNTAINS TO OCEANS FROM THE ARCTIC TO THE MEDITERRANEAN (30138)

16:45 **Greer, A. T.**; Briseno-Avena, C.; Deary, A. L.; Cambazoglu, M. K.; Soto-Ramos, I.; Jacobs, G. A.; Hernandez, F. J.; Cowen, R. K.; Graham, W. M.: PARTNERS OR PREY? EXPLORING THE DRIVERS OF ASSOCIATIONS BETWEEN LOBSTER PHYLLOSOMA AND GELATINOUS ZOOPLANKTON IN THE NORTHERN GULF OF MEXICO (29037)

17:00 **MAYOR, E. D.**: THE ROLE OF MYSIDS IN THE TROPHIC ECOLOGY OF JUVENILE FISHES, AND THE IMPACT OF FISH PREDATION ON MYSID ABUNDANCE IN THE COASTAL LAGOONS OF MARYLAND (29603)

17:15 **Johnson, R. A.**; Gulick, A. G.; Bolten, A. B.; Bjorndal, K. A.: BLUE CARBON AND GREEN TURTLES: EFFECTS OF GRAZING ON SEAGRASS MEADOW CARBON DYNAMICS (28400)

074 CHARACTERIZING EXPLORATION IN THE WATER COLUMN

Chair(s): Kasey Cantwell, kasey.cantwell@noaa.gov
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Amanda N. Netburn, amanda.netburn@noaa.gov

Location: 313 C

14:30 **Robison, B. H.**: EXPLORING THE OCEANIC WATER COLUMN: IT'S A MATTER OF PERSPECTIVE* (29830)

14:45 **Hopcroft, R. R.**; Lindsay, D. J.: OPENING THE LID ON A HIDDEN OCEAN: A VISUAL CENSUS OF THE MACROZOOPLANKTON OVER THE ARCTIC'S CHUKCHI BORDERLANDS (29325)

15:00 **Cordes, E. E.**; D'souza, N. A.; Roman, C.; Levin, L. A.: EXPLORATION OF THE WATER COLUMN OVERLYING DEEP-SEA HYDROCARBON SEEPS (29576)

15:15 **Martini, S.**: BIOLOGICAL SURVEY IN THE WATER COLUMN USING BIOLUMINESCENCE AS AN ECOLOGICAL TRAIT (29268)

16:30 **Lindsay, D. J.**; Hopcroft, R. R.: EXPLORATION OF THE LARGEST BIOME ON EARTH: USE NOT ONE TOOL BUT A TOOLBOX* (29367)

16:45 **Phillips, B. T.**; Vasan, G.; Pieribone, V.; Sparks, J.; Berkenpas, E.; Henning, B.; Turchik, A.; Wood, R.; Gruber, D.: ADVANCEMENTS IN OBSERVING LIGHT-STIMULATED BIOLUMINESCENCE IN THE DEEP-SEA WATER COLUMN (28743)

17:00 **Andruszkiewicz, E. A.**; Starks, H. A.; Chavez, F. P.; Sassoubre, L. M.; Block, B. A.; Boehm, A. B.: BIOMONITORING OF MARINE VERTEBRATES IN MONTEREY BAY USING EDNA METABARCODING (28781)

17:15 **Yoerger, D. R.**; Breier, J. A.; German, C. R.; Govindarajan, A. F.; Katija, K.; Llopiz, J. K.; Robison, B. H.; Rock, S. M.; Wiebe, P. H.: *MESOBOT*: A NEW AUTONOMOUS ROBOT FOR MIDWATER RESEARCH AND EXPLORATION (29991)

092 CANOPIES IN AQUATIC ECOSYSTEMS: INTEGRATING FORM, FUNCTION, AND BIOPHYSICAL PROCESSES

Chair(s): Virginia Pasour, pasour@gmail.com
Julia Samson, julia@unc.edu
Brian White, bwhite@unc.edu

Location: 323 C

14:30 **Ghisalberti, M.**: THE HYDRODYNAMIC SIGNATURE OF AQUATIC CANOPIES: IMPLICATIONS FOR BIOPHYSICAL INTERACTIONS[T] (29285)

15:00 **Reidenbach, M. A.**: WAVE-CURRENT INTERACTIONS AND THEIR EFFECT ON SEDIMENT SUSPENSION WITHIN A ZOSTERA MARINA SEAGRASS BED (28477)

15:15 **Umanzor, S.**; Ladah, L.; Zertuche, J.: DENSITY AND MORPHOTYPE COMPOSITION OF MACROALGAL ASSEMBLAGES MODULATE MICROPHYTOBENTHIC SETTLEMENT (29083)

16:30 **Follett, E.**; Nepf, H.: PARTICLE RETENTION NEAR THE LEADING EDGE OF A SUBMERGED CANOPY (29600)

16:45 **Asher, S.**; Niewerth, S.; Koll, K.; Shavit, U.: VERTICAL VARIATIONS OF DRAG FORCE INSIDE A CORAL REEF (29637)

17:00 **Vilas, M. P.**; Marti, C. L.; Adams, M. P.; Oldham, C. E.; Hipsey, M. R.: MACROPHYTE-INDUCED THERMAL STRATIFICATION FEEDBACK IN SHALLOW LAKES (28649)

17:15 **Long, M. H.**: ECOSYSTEM-SCALE METABOLISM DYNAMICS IN 3-DIMENSIONAL CANOPIES USING EDDY COVARIANCE (29738)

093 ENOUGH C PLUMBING: OTHER BIOGEOCHEMICAL CYCLES AND COUPLED BIOGEOCHEMICAL CYCLES FROM MOUNTAINS TO THE SEA

Chair(s): Emily Bernhardt, emily.bernhardt@duke.edu
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Roxane Maranger, r.maranger@umontreal.ca
Emily Stanley, ehstanley@wisc.edu

Location: 306 B

12:00 **Rosi-Marshall, E. J.**; Almeida, R.; Blaszczak, J.; Grace, M.; Kelly, J. J.; Lee, S. S.; Reisinger, A. J.; Richmond, E.; Robson, S.; Walters, D. M.: PHARMACEUTICALS AND PERSONAL CARE PRODUCTS AS NOVEL CONSTITUENTS IN AQUATIC ECOSYSTEMS[T] (29703)

12:30 **Zimmer, K. D.**; Ginger, L. J.; Herwig, B. R.; Hanson, M. A.; Hobbs, W. O.; Cotner, J. B.: WATERSHED VERSUS WITHIN LAKE FACTORS AS DRIVERS OF NITROGEN DYNAMICS IN SHALLOW LAKES (29024)

12:45 **Vogt, R. J.**; del Giorgio, P. A.: GEOGRAPHIC PATTERNS IN THE MAIN POTENTIAL REGULATORS OF CHLOROPHYLL A CONCENTRATIONS IN BOREAL AQUATIC ECOSYSTEMS (29621)

14:30 **Haas, S.**; Kalvelage, T.; Normandeau, C.; LaRoche, J.; Wallace, D.: A HIGH-FREQUENCY TIME SERIES OF INORGANIC NITROGEN SPECIATION AND ISOTOPIC COMPOSITION IN A EUTROPHIC COASTAL BASIN: INSIGHTS INTO NITRIFICATION (29927)

14:45 **Russell, D. G.**; Wong, W. W.; Warry, F. Y.; Cook, P. L.: THE IMPORTANCE OF NITROGEN FIXATION TO THE BUDGET OF A TEMPERATE INTERTIDAL EMBAYMENT DETERMINED FROM DIRECT MEASUREMENTS AND A STABLE ISOTOPE MASS BALANCE (28658)

15:00 **Oakes, J. M.**; Maher, D. T.; Erler, D. V.; Mangion, P.; Eyre, B. D.: PROCESSING OF NITROGEN WITHIN A SUBTROPICAL MANGROVE FOREST: A WHOLE-ECOSYSTEM STABLE ISOTOPE LABELLING STUDY (28829)

15:15 **Aoki, L. R.**; McGlathery, K. J.: SEAGRASS RESTORATION STIMULATES NITROGEN CYCLING (28389)

16:30 **Kalvelage, T.**; Maier, M. S.; Teodoru, C.; Lehmann, M.; Wehrli, B.: FATE AND TRANSFORMATION OF RIVERINE NITRATE IN THE DANUBE DELTA (29321)

16:45 **Wing, S.**: Δ56FE IN SEABIRD GUANO REVEALS EXTENSIVE RECYCLING OF IRON IN THE SOUTHERN OCEAN ECOSYSTEM. (28440)

17:00 **Fong, A. A.**; Rost, B.; Mohr, W.; Lavik, G.; Waite, A. M.: THE PARADOX OF POLAR OCEANIC NITROGEN FIXATION (29350)

17:15 **Montoya, J. P.**; Weber, S. C.; Vogts, A.; Voss, M.: NANOSIMS CHARACTERIZATOIN OF METHANE ASSIMILATION AND N2-FIXATION IN RESPONSE TO OIL AND GAS RELEASE IN OFFSHORE WATERS (30132)

098 ANTHROPOGENIC IMPACTS AND ENVIRONMENTAL THREATS IN URBAN ECOSYSTEMS

Chair(s): Pamela Barrett, barrettp@uw.edu
Rebecca Neumann, rbneum@uw.edu

Location: 323 C

10:00 **Richmond, E. K.**; Rosi-Marshall, E. J.; Walters, D. M.; Fick, J.; Grace, M. R.: DRUGS IN BUGS: PPCPS (PHARMACEUTICAL AND PERSONAL CARE PRODUCTS) DETECTED IN STREAM FOOD WEBS ACROSS AN URBAN RURAL GRADIENT (29158)

10:15 **Gallagher, E.**; Yeh, A.; Bammler, T.; McDonald, J.; Marcinek, D.; Meador, J.: MOLECULAR AND BIOCHEMICAL BIOMARKERS REFLECT SUBLETHAL EFFECTS OF CONTAMINANTS OF EMERGING CONCERN IN JUVENILE CHINOOK SALMON FROM AN URBAN WATERWAY (29602)

10:30 **Salo, T.**; Stamm, C.; Burdon, F. J.; Rasanen, K.; Seppala, O.: RESILIENCE TO HEAT WAVES IN AN AQUATIC SNAIL: INTERACTIONS WITH MICROPOLLUTANTS (28899)

10:45 **Grubisic, M.**; Singer, G.; van Grunsven, R. H.; Bruno, M. C.; Manfrin, A.; Zimmermann, J.; Wurzbacher, C.; Monaghan, M. T.; Hoelker, F.: LIGHT POLLUTION AFFECTS BIOMASS AND COMMUNITY COMPOSITION OF FRESHWATER BENTHIC PRIMARY PRODUCERS (28840)

12:00 **Walter, B.**; van Beusekom, J.: THE EFFECT OF PHYTOPLANKTON ZOOPLANKTON INTERACTION ON THE OXYGEN BUDGET OF THE RIVER ELBE NEAR HAMBURG HARBOR (28466)

12:15 **Ruacho, A.**; Barbeau, K. A.: ANTHROPOGENIC COPPER AND COPPER-BINDING LIGANDS IN SAN DIEGO BAY (29895)

12:30 **Duval, T. P.**: STREAM WATER QUALITY ALONG A SUBURBANIZING GRADIENT IN SOUTHERN ONTARIO, CANADA (29241)

12:45 **Panelo, J. R.**: ASSOCIATION BETWEEN *STAPHYLOCOCCUS AUREUS* AND OTHER SEWAGE INDICATORS IN COASTAL WATERS OF PUAKŌ, HAWAIʻI (29246)

111 CLIMATE CHANGE

Chair(s): Jim Elser, jim.elser@umontana.edu

Location: 308 A/B

10:00 **Elser, J. J.**; Giersch, J.; Tappenbeck, T.; Muhlfeld, C.: IN THE NURSERY OF NEWBORN LAKES: EXPLORATORY DATA FROM PERIGLACIAL LAKES OF GLACIER NATIONAL PARK (MONTANA, USA). (29508)

10:15 **Welter, J. R.**; Furey, P. C.; Weigel, B.; Sander, D. R.; Bratt, A. R.; Hood, J. M.; Cross, W. F.; Benstead, J. P.; Huryn, A. D.: THE POTENTIAL IMPACT OF NITROGEN FIXATION ON STREAM ECOSYSTEMS FROM HEADWATERS TO SEA (29803)

10:30 **Warner, K. A.**; Saros, J. E.: VARIABLE RESPONSES IN LAKEWATER DISSOLVED ORGANIC CARBON TO EXTREME PRECIPITATION EVENTS (28575)

12:00 **Hinson, K. E.**; Bhatt, G.; Sommerlot, A.; Linker, L.; Shenk, G.: CLIMATE CHANGE IN CHESAPEAKE TMDL MODELING (29547)

12:15 **Braff, P. H.**; Hershner, C. H.; Havens, K. J.: EVALUATING THE VULENRABILTY OF COASTAL PLAIN HEADWATER WETLANDS TO CLIMATE CHANGE (29664)

12:30 **Couch, C. S.**; Ritson-williams, R.; Meier, O.; Hawaii Coral Bleaching Collaborative, .: DEFINING PATTERNS OF SUSCEPTIBILITY AND RECOVERY FROM UNPRECEDENTED MASS CORAL BLEACHING ACROSS THE HAWAIIAN ARCHIPELIGO (29879)

12:45 **Turner, R. E.**: SHRINKING MENHADEN WITH COASTAL WARMING (28611)

14:30 **Specht, J. A.**; Fuchs, H. L.: EFFECTS OF SEAWATER TEMPERATURE ON HARD CLAM (*MERCENARIA MERCENARIA*) ENERGETICS (29467)

14:45 **Rick, J. J.**; Wiltshire, K. H.: SYLT ROADS LTER, NORTH SEA – A DIATOM DOMINATED SYSTEM IMPACTED BY CLIMATE AND EUTROPHICATION CHANGE (1987-2013) (28430)

15:00 **Stevens, S. W.**; Johnson, R. J.; Bates, N. R.: INVESTIGATING THE INTERANNUAL AND MESOSCALE EROSION OF NORTH ATLANTIC SUBTROPICAL MODE WATER WITHIN THE SARGASSO SEA (28795)

15:15 **Kang, J.**: TEMPORAL AND SPATIAL DIFFERENTIATION OF THE CLIMATE CHANGE AT THE EAST-SOUTH CHINA SEAS AND NORTHWEST PACIFIC FOR LAST 140 YEARS (28554)

THURSDAY POSTERS

013 INTEGRATIVE RESEARCH ON ORGANIC MATTER CYCLING ACROSS AQUATIC GRADIENTS

Chair(s): Richard G. Keil, rickkeil@uw.edu
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Michael Seidel, m.seidel@uni-oldenburg.de
Nicholas D. Ward, nickdward@gmail.com

Location: Kamehameha Exhibit Hall

162 **Letourneau, M. L.**; Medeiros, P. M.: THE INFLUENCE OF HYDROLOGY ON DISSOLVED ORGANIC MATTER COMPOSITION AND DEGRADATION IN THE ALTAMAHA RIVER AND ESTUARY (28476)

163 **Johnston, S. E.**; Shorina, N.; Podgorski, D.; Bulygina, E.; Spencer, R. G.: FLUXES AND SEASONALITY OF DISSOLVED ORGANIC MATTER FROM THE SEVERNAYA DVINA RIVER, RUSSIA (28601)

164 **Senga, Y.**; Naruoka, C.; Nohara, S.: MICROBIAL FUNCTION AND CHEMICAL PROPERTIES THROUGH A WETLAND SOIL DEPTH PROFILES. (28656)

165 **Besterman, A. F.**; Wilkinson, G.; Buelo, C.; Gephart, J.; Pace, M.: COMPARING MODERN CARBON BURIAL IN AQUATIC ECOSYSTEMS (28734)

166 Griffith, A.; **Schnyder, C.**; Zercero Marin, E.; Fong, P.; Fong, C.; Barber, P.: IMPACTS OF TURBINARIA ORNATA DENSITY ON INVERTEBRATE DIVERSITY AND ABUNDANCE IN THE REEFS OF MOOREA, FRENCH POLYNESIA (28798)

167 **Kulinski, K.**; Schneider, B.; Hammer, K.: THE INFLUENCE OF ORGANIC MATTER ON THE ACID-BASE SYSTEM OF THE BALTIC SEA (28878)

168 **Barrett, A. V.**; Malcom X Shabazz Aquatic Geochemistry Team, .; Murray, P. J.; Steen, A. D.: ENVIRONMENTAL CONTROLS ON PROTEIN DEGRADATION PATHWAYS IN FRESHWATERS OF EASTERN TENNESSEE AND NORTHEASTERN PENNSYLVANIA (28963)

169 **Chen, R. F.**; Gardner, G. B.; Peri, F.: CDOM VS. SALINITY: AN INTEGRATIVE TOOL TO RAPIDLY ASSESS ORGANIC MATTER CYCLING IN NEARSHORE COASTAL WATERS (29017)

170 **Fuss, G.**; Richardson, J. S.; Lucey, W. P.: TURBIDITY CHARACTERIZATION WITH LAND USE AND NATURAL STREAM FEATURES IN DEVELOPING CATCHMENTS IN BRITISH COLUMBIA (29245)

171 **Carr, N.**: DOM DYNAMICS IN A TEMPERATE SHELF SEA (29441)

172 **Einarsdottir, K.**; Attermeyer, K.; Catalán, N.; Freixa, A.; Groeneveld, M.; Hawkes, J.; Tranvik, L.: AGING OF DISSOLVED ORGANIC MATTER DOWNSTREAM INLAND WATERS (29720)

173 **Harrison, S. J.**; Joye, S. B.: A TALE OF TWO TAYLOR TRANSECTS: LESSONS FROM A SUNKEN OIL PLATFORM IN THE NORTHERN GULF OF MEXICO (29939)

019 THE BIOLOGICAL CARBON PUMP IN THE TROPICAL PACIFIC OCEAN

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204 **Leblanc, K.**; Cornet, V.; Brunet, C.; Quéguiner, B.; Rimmelin-Maury, P.: SI CYCLE IN THE SOUTHERN TROPICAL PACIFIC (28373)

206 **Moreno, A. R.**; Hagstrom, G. I.; Primeau, F. W.; Levin, S. A.; Martiny, A. C.: MARINE PHYTOPLANKTON PHYSIOLOGY AND STOICHIOMETRY IN MAJOR OCEAN BIOMES EFFECT ON ATMOSPHERIC CO2 (29129)

207 **Matsumoto, K.**; Sasaoka, K.; Honda, M. C.: PHYTOPLANKTON BLOOM IN THE OLIGOTROPHIC SUBTROPICAL OCEAN: ONSET MECHANISMS BETWEEN WINTER AND SPRING (28404)

208 **McKenna, A. M.**; Boiteau, R. M.; Repeta, D. J.; Bruland, K. W.: MOLECULAR IDENTIFICATION OF NATURAL NICKEL AND COPPER BINDING LIGANDS IN SEAWATER BY ULTRAHIGH RESOLUTION FT-ICR MASS SPECTROMETRY (28574)

209 DUPOUY, C.; Frouin, R.; Maillard, M.; Tedetti, M.; Rodier, M.; Charriere, B.; Martias, C.; Pujo-Pay, M.; **Duhamel, S.**; Rottgers, R.; Sempere, R.: LONGITUDINAL VARIATIONS IN UV-VIS OPTICAL PROPERTIES IN THE SOUTHWEST TROPICAL PACIFIC OCEAN (OUTPACE CRUISE) (28803)

210 **Luis Valentin-Alvarado, L. E.**; Nicholas Hawco, N.; Matthew McIlvin, M. R.; Mak Saito*, M.: EXPLORING THE POTENTIAL FOR CARBONIC ANHYDRASE (CA) PROTEIN AS BIOMARKER FOR GROWTH RATE ESTIMATES OF *PROCHLOROCOCCUS* IN THE OCEAN (29167)

211 **Cruz, B. N.**; Deng, W.; Neuer, S.: HETEROTROPHIC BACTERIA AND THE AGGREGATION OF MARINE *SYNECHOCOCCUS* AND *PROCHLOROCOCCUS* (29230)

212 **Mulholland, M. R.**; Widner, B. N.; Bernhardt, P. W.; Chang, B.; Jayakumar, A.: DINITROGEN FIXATION WITHIN AND ADJACENT TO OXYGEN DEFICIENT WATERS OF THE EASTERN TROPICAL SOUTH PACIFIC OCEAN (29753)

024 SUPPORTING DATA-INTENSIVE FRESHWATER AND MARINE RESEARCH: INTEGRATING INFORMATICS, INFRASTRUCTURE, DATABASES AND OPEN SCIENCE

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237 **Ashkezari, M.**; Hill, C.; Follows, M.: MACHINE LEARNING PLATFORM TO BUILD PREDICTIVE ANALYTICS SOLUTIONS FOR MESO-SCALE EDDIES (28952)

238 **Quiñones-Meléndez, E.**; Hesser, T. J.: EVALUATION OF WAVE ENERGY DISSIPATION DERIVED FROM VIDEO IMAGERY (28980)

239 **Morales-Williams, A. M.**; Farrell, K.; McCullough, I.; Roberts, D.; Scordo, F.; Yang, Z.; Dugan, H.; Hanson, P.; Bartlett, S.; Burke, S.; Doubek, J.; Krivak-Tetley, F.; Skaff, N.; Summers, J.; Hong, G.; Weathers, K.: SOURCE OR SINK? INTEGRATING BIOGEOCHEMICAL AND LANDSCAPE PROCESSES TO MODEL LAKE CARBON BUDGETS (29210)

240 **Bardaji, R.**; Bartolomé, R.; Dañobeitia, J.; García, O.; Del Rio, J.; Piera, J.: THE MODULE FOR OCEAN OBSERVATORY DATA ANALYSIS OF EMSO (29307)

241 **Glazer, B. T.**; Lio, H.: ADDRESSING THE PROBLEM OF UNDERSAMPLED BIOGEOCHEMICAL PROCESSES THROUGH THE USE OF OPEN-SOURCE EMBEDDED SYSTEMS (29949)

242 **Howard, M. K.**; Gayanilo, F.; Kobara, S.; Currier, R. D.; Simoniello, C.; Stössel, M.; Baum, S. K.; Kirkpatrick, B.: THE GULF OF MEXICO COASTAL OCEAN OBSERVING SYTEM (GCOOS): AN INFORMATICS SYSTEM SUPPORTING MARINE RESEARCH AND EDUCATION. (29973)

243 **Berger, S. A.**; Nejstgaard, J. N.; AQUACOSM CONSORTIUM, A. C.: AQUACOSM – OFFERS WORLDWIDE ACCESS TO FRESHWATER AND MARINE MESOCOSM FACILITIES IN EUROPE (30137)

026 UNDERGRADUATE RESEARCH IN THE AQUATIC SCIENCES

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268 **Byrd, A. L.**; McIntosh, H.; Gonsior, M.; Lapham, L. L.: CHARACTERIZING FLUORESCENT DISSOLVED ORGANIC MATTER IN SEDIMENT PORE-WATERS OF THE CHESAPEAKE BAY ESTUARY (29194)

269 **Pena, M. M.**; Douglas, A. R.; Murgulet, D.: ASSESSMENT OF HISTORICAL OIL-FIELD BRINE DISCHARGE INFLUENCES ON SEDIMENT-SUPPORTED RADIONUCLIDE ACTIVITIES (29234)

270 **Richter, J. F.**; Roberson, K.; Jeffrey, C.: ASSESSMENT OF *IN SITU* DATA COLLECTION PROTOCOLS IN BUCK ISLAND REEF NATIONAL MONUMENT (BIRNM) USING BENTHIC HABITAT MAP VALIDATION (29486)

271 **Scorpio, G. P.**; O'Malley, B. P.; Stockwell, J. D.: USING FUNCTIONAL-TRAIT BASED ANALYSIS TO OBSERVE ROTIFER POPULATION DYNAMICS WITHIN A HYPERTROPHIC LAKE (29501)

272 **Bartlett, K. M.**; Clark, R.; Bauer, L.: CHARACTERIZING SPATIAL FACTORS THAT INFLUENCE CORAL DENSITY IN PUERTO RICO (29557)

273 **Dotterweich, M. M.**; Chambers, R. C.: EFFECTS OF CONSTANT AND FLUCTUATING TEMPERATURE ON EMBRYOS AND YOUNG LARVAE OF ATLANTIC SILVERSIDE (29678)

274 **Fiset, C.**; Liefer, J. D.; Irwin, A. J.; Finkel, Z. V.: MACROMOLECULAR COMPOSITION OF MACROALGAE (29723)

275 **Onos, A. A.**; Balch, W. M.: MIXOTROPHY IN THE COCCOLITHOPHORES, *PLEUROCHRYSIS* AND *EMILIANIA* (29733)

276 **Strock, J. P.**; Chambers, R. C.: EFFECTS OF ELEVATED CO_2 AND TEMPERATURE ON PREY CONSUMPTION BY RECENTLY METAMORPHOSED WINTER FLOUNDER, *PSEUDOPLEURONECTES AMERICANUS* (29737)

277 **Mitchell, E. J.**; Gearhart, T. A.; O'Malley, B. P.; Kraft, J.; Stockwell, J. D.: ARE SPRING DAPHNIA DYNAMICS CONTROLLED BY PHYTOPLANKTON QUALITY IN A HYPERTROPHIC LAKE? (29787)

278 **Lambretti, A.**; Lehman, J.; Dentinger, J.; Danford, S.; Cheng, B.; Ziebis, W.: A VIEW ON THE DYNAMICS OF BENTHIC PHOTOSYNTHETIC MATS ALONG AN INTERTIDAL RANGE (29828)

279 **Hirtle, N. O.**; Lankowicz, K.; Shahrestani, S.; Bi, H.; Fan, C.: SPATIAL AND TEMPORAL ABUNDANCE OF FORAGE FISH IN THE PATUXENT RIVER (29836)

280 **Hutcheson, W. W.**; Hoagland, P.; Jin, D.: ESTIMATING THE ECONOMIC VALUE OF ENVIRONMENTAL EDUCATION IN THE HUDSON RIVER ESTUARY (29864)

281 **Fried, H. I.**; Gilbert, N. E.; Wright, T. L.; Gay, M. T.; Steffen, M. M.: A SURVEY OF THE BACTERIAL DIVERSITY IN LAKE SHENADOAH (VIRGINIA, U.S.A.) (29900)

282 **De Pascuale, V.**; Whitaker, E. A.; Doyle, S.; Sylvan, J. B.: QUANTIFICATION OF FUNCTIONAL GENES FOR HYDROCARBON DEGRADATION IN THE MICROBIAL COMMUNITIES OF COASTAL WATER MESOCOSMS (29933)

283 **Capone Benko, R. M.**; Chambers, R. C.: ASSESSING THE VARIANCE STRUCTURE OF A FITNESS-RELATED FEATURE IN THE EARLY LIFE-STAGES OF WINTER FLOUNDER (*PSEUDOPLEURONECTES AMERICANUS*) (29938)

284 **Hirzel, A.**; Lubelczyk, L.; Tupper, B.; Poulton, N.: CELL BIOVOLUME: TESTING ACROSS SHAPES, SIZES, AND ALGORITHMS (29978)

285 **Calvitti, J.**; Gearhart, T. A.; Hansson, S.; Kraft, J.; Stockwell, J. D.: FATTY ACIDS AS AN INDICATOR OF PARTIAL DIEL VERTICAL MIGRATION IN THE MACROINVERTEBRATE MYSIS DILUVIANA (30003)

286 **Diehl, T. D.**; Garron, M.; Asaro, M. J.; Rosner, A.: SEAL AND HUMAN ENCOUNTERS: APPLYING ONLINE STORY MAPS TO FOSTER APPRECIATION AND INFORMED ACTION (30082)

287 **Simpson, Q. D.**; Reneau, P.: EVALUATING THE EASTERN MOSQUITOFISH (GAMBUSIA HOLBROOKI) AS A BIOINDICATOR SPECIES OF PAPER MILL EFFLUENT (30093)

288 **Czarnecki, J. I.**; Cornwell, J. C.: SEDIMENT SMALL CORE INCUBATION: AN ANALYSIS OF TECHNIQUES FOR MEASURING NUTRIENT FLUXES (30104)

289 **Spaulding-Astudillo, F. E.**; Cerovecki, I.; Mazloff, M.; Talley, L.; Gille, S.: THE ROLE OF POLYNYAS IN ANTARCTIC SEA ICE EXPORT FROM THE ROSS SEA (30118)

290 **Oglesby, T.**; Murray, J. A.: HOW WATER FLOW INTERACTS WITH THE RHINOPHORES IN TRITONIA TETRAQUETRA (30153)

291 **Bence, R. L.**; Cobban, A.; Rogers, D.; Edgcomb, V.: OYSTERS AS A SUSTAINABLE SOLUTION: GEOCHEMISTRY AND MICROBIAL COMMUNITY ANALYSIS AT AQUACULTURE SITES IN LITTLE POND, MA (30159)

THURSDAY

292 **Rosa Marín, A.**; Vélez Pérez, S. M.; Ocasio Rivera, E.: ANTIBIOTIC RESISTANCE AND ABUNDANCE OF GRAM - NEGATIVE BACTERIA IN AQUATIC ENVIRONMENTS OF BRACKISH LAGOONS (30162)

029 REE MARINE GEOCHEMISTRY IN THE 21ST CENTURY: A TRIBUTE TO THE PIONEERING RESEARCH OF HENRY ELDERFIELD (1943-2016)

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308 **Elmore, A. C.**; McClymont, E. L.; Kender, S.; Leng, M. J.; Greaves, M.; Elderfield, H.: MULTI-PROXY EXAMINATION OF ANTARCTIC INTERMEDIATE WATER ACROSS THE MID-PLEISTOCENE TRANSITION (28581)

309 **Ohta, A.**: INFLUENCE OF STRUCTURAL CHANGES IN REE IN SOLID AND LIQUID PHASES ON DISTRIBUTION COEFFICIENTS BETWEEN FERROMANGANESE DEPOSIT AND SEA WATER (28831)

310 **Hirotaka Nishino, H.**; Tasuku Akagi, T.: CARBONATE SCAVENGING OF RARE EARTH ELEMENTS: THE KEY TO UNDERSTANDING THEIR OCEANIC DISTRIBUTION. (29253)

038 ESTUARIES: BLUE CARBON SINKS OR GREENHOUSE GAS SOURCES?

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340 **Perry, D. C.**; Thornber, C.; Moseman-Valtierra, S.: IMPACTS OF BLOOM-FORMING ULVA AND FUCUS ON SALT MARSH VEGETATION AND GREENHOUSE GASES (28744)

341 **Maher, D. T.**; Santos, I. R.; Schulz, K. G.; Call, M.; Jacobsen, G. E.; Sanders, C. J.: BLUE CARBON OXIDATION REVEALED BY RADIOGENIC AND STABLE ISOTOPES IN A MANGROVE SYSTEM. (28782)

342 **Ridgway, S. N.**; Rozaimi, M.; Masque, P.; Smernik, R. J.; Serrano, O.; Baldock, J. A.; Lavery, P. S.: CHARACTERIZATION OF SEQUESTERED BLUE CARBON IN SOILS FROM AUSTRALIAN SEAGRASS ECOSYSTEMS (28834)

343 **Dinauer, A.**; Mucci, A.: SPATIAL VARIABILITY OF PCO2 AND GAS EXCHANGE IN THE ICE-FREE SURFACE WATERS OF A MACROTIDAL ESTUARY: THE ST. LAWRENCE ESTUARY (CANADA) (29060)

344 **Shen, P.**; Tseng, C.: DECADAL DECREASING OF THE CO2 UPTAKE WITH ENHANCED ACIDIFICATION IN THE EAST CHINA SEA (29333)

044 BRIDGING THE ECO-EVOLUTIONARY GAP: PLASTIC AND ADAPTIVE RESPONSES TO CLIMATE CHANGE

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376 **Tisthammer, K. H.**; Richmond, R. H.: ARE SMALL-SCALE GENETIC STRUCTURE OF CORALS FORMED BY ISOLATION BY ADAPTATION? AN EXAMPLE FROM HAWAII (28602)

377 **Lartaud, F.**; Peru, E.; Le Bris, N.: GROWTH RESPONSE OF COLD-WATER CORAL REEFS TO METEOROLOGICAL EVENTS: IMPACTS OF CLIMATE CHANGE TO DEEP-SEA ECOSYSTEMS (28708)

378 **Medina, M.**; Hanna, B.; Pollock, J.; Avila, V.; Prada, C.; Lopez, T.; Galindo, C.; Iglesias-Prieto, R.: CORAL HOLOBIONT MEMBERS WILL RESPOND DIFFERENTLY TO CLIMATE CHANGE (29202)

379 **Christensen, A. M.**; Dutz, J.: ASSESSING PHENOTYPIC PLASTICITY OF SALINITY TOLERANCE IN *TEMORA LONGICORNIS*. (29406)

380 **Goulet, T. L.**: CARIBBEAN GORGONIAN CORALS SUCCESSFULLY COPE WITH MULTIPLE STRESSORS (29412)

381 **Genzer, J. L.**; Bretherton, L.; Setta, S. P.; Kamalanathan, M.; Hillhouse, J.; Passow, U.; Santschi, P.; Quigg, A.: EFFECTS OF MACONDO SURROGATE OIL AND INCREASED CARBON DIOXIDE ON MARINE DIATOM, THALASSIOSIRA PSEUDONANA (30041)

045 WHAT'S THE MATTER OF BIODIVERSITY?

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383 **Karlsson, K.**; Winder, M.: GENETIC DIFFERENTIATION AND ADAPTATION TO LOCAL CONDITIONS IN BALTIC SEA COPEPOD POPULATIONS (28853)

384 **Hammerstein, S. K.**; Stockenreiter, M.; Ilic, M.; Fink, P.; Stibor, H.: MANIPULATING DIVERSITY IN NATURAL PHYTOPLANKTON COMMUNITIES – A MESOCOSM FIELD STUDY (28932)

385 **Anderson, S. I.**; Rynearson, T. A.: THERMAL TRAIT VARIABILITY IN SEASONALLY DIFFERENTIATED MORPHOLOGICALLY CRYPTIC DIATOM SPECIES (29724)

054 SPATIAL AND TEMPORAL TRENDS IN MARINE BIODIVERSITY

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436 **Ogden-Fung, C.**; Wagner, D.: ABUNDANCE AND DISTRIBUTION OF BENTHIC ORGANISMS IN MESOPHOTIC CORAL ECOSYSTEMS ACROSS THE HAWAIIAN ARCHIPELAGO (28361)

437 **Fukunaga, A.**; Kosaki, R. K.: USE OF MULTIVARIATE CONTROL CHARTS TO ASSESS THE STATUS OF FISH ASSEMBLAGES IN THE NORTHWESTERN HAWAIIAN ISLANDS (28414)

438 Jeon, H. T.; Lim, Y.; Kim, S.; **Cho, J. C.**: CULTIVATION OF HETEROTROPHIC BACTERIA FROM SEAWATERS AT RECLAMATION AREA BY DILUTION-TO-EXTINCTION BASED ON CELL-SORTER INOCULATION (28582)

439 **Juarez, D. L.**; Wang, Z.; Blinebry, S.; Johnson, Z. I.; Hunt, D. E.: COASTAL TO OFFSHORE GRADIENTS IN ENVIRONMENTAL VARIATIONS AND BACTERIAL COMMUNITY COMPOSITION (28628)

440 **Choi, D. H.**; Noh, J. H.; An, S. M.; Lee, Y.; Lee, C. M.: DAILY VARIATION OF PROKARYOTIC COMMUNITY OBSERVED DURING SPRING SEASON AT THE FIXED-POINT RESEARCH PLATFORM ESTABLISHED IN SHELF WATERS OF THE EAST CHINA SEA (28631)

441 **Hatun, H.**: THE SUBPOLAR NORTH ATLANTIC IS LOSING ITS SILICATE (28697)

THURSDAY

442 **Freeman, S. E.**; Freeman, L. A.: RAPIDLY OBTAINED ECOSYSTEM INDICATORS FROM CORAL REEF SOUNDSCAPES (28735)

443 **Yilmaz, I. N.**; Demirel, N.; Demir, V.; Vardar, D.; Yuksek, A.: THE FATE OF POSIDONIA OCEANICA MEADOWS DUE TO ANTHROPOGENIC PERTURBATIONS IN THE VICINITY OF A BUSY TOURISTIC TOWN IN THE SOUTHERN AEGEAN SEA. (28867)

444 **Lange, P. K.**; Brewin, R. J.; Tarran, G. A.; Zubkov, M. V.; Bouman, H. A.: DISTRIBUTION OF *PROCHLOROCOCCUS* IN THE ATLANTIC OCEAN ESTIMATED FROM SATELLITES (29153)

445 **Young, E. L.**; Smith, C. R.; Halanych, K. M.; Amon, D. J.: BIODIVERSITY, CONNECTIVITY & ECOSYSTEM FUNCTION OF DEEP-SEA ORGANIC-RICH WHALE-BONE AND WOOD-FALL HABITATS: A COMPARATIVE EXPERIMENTAL APPROACH (29257)

446 **Knight, K. T.**; Moss, J. A.; Snyder, R. A.; Henrikkson, N.; Jeffrey, W. H.: TEMPORAL CHANGES IN BACTERIOPLANKTON COMMUNITY STRUCTURE ON THE NORTHWEST FLORIDA SHELF (29260)

447 **Jungbluth, M. J.**; Kersten, O.; Goetze, E.; Vetter, E.: MEROPLANKTON DIVERSITY FROM ABYSSAL DEPTHS IN THE EASTERN TROPICAL PACIFIC (29302)

448 Vagle, S.; Lemon, D.; **Buermans, J.**; Stone, M.; Clarke, M.: HIGH-FREQUENCY MULTI-FREQUENCY ACOUSTICAL BACKSCATTER OBSERVATIONS FROM SMALL MOVING VESSEL TO INVESTIGATE FISH-ZOOPLANKTON INTERACTIONS IN TIDALLY MIXED AREA (29605)

449 **Henrikkson, N. L.**; Snyder, R. A.; Moss, J. A.; Jeffrey, W. H.: MICROBIAL BIOGEOGRAPHY IN THE WATER COLUMN AND SEDIMENTS OF THE NORTHEASTERN GULF OF MEXICO (29840)

450 **Wöger, J.**; Eder, W.; Kinoshita, S.; Hohenegger, J.; Briguglio, A.: POPULATION DYNAMICS OF LARGER BENTHIC FORAMINIFERA FROM SESOKO (JAPAN) AND THE USE OF GROWTH STUDIES FOR EVALUATING LABORATORY EXPERIMENTS (29853)

055 INNOVATIONS IN TEACHING, MENTORING, AND OUTREACH PRACTICES TO IMPROVE EDUCATION AND BROADEN PARTICIPATION

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451 **Weigelhofer, G.**; Pölz, E.; Hein, T.: SUCCESSFUL BIOGEOCHEMICAL EXPERIMENTS WITH HIGH SCHOOL STUDENTS IN CITIZEN SCIENCE PROJECTS (28578)

452 **DeStasio, B. T.**; DeStasio, E. A.; Stinson, L. A.; Lewellyn, E.: LISTENING TO MARGINALIZED STUDENT PERSPECTIVES: BROADENING PARTICIPATION IN INTRODUCTORY BIOLOGY AND AQUATIC SCIENCES (28700)

453 **Kelley, B. C.**: AN INTEGRATED APPROACH TO TRAINING THE NEXT GENERATION OF OCEAN SCIENTISTS AND POLICY DEVELOPERS (28742)

454 **Brice, D.**; Appelgate, B.; Knox, R.; Mauricio, P.: IN THE FOOTSTEPS OF ROGER REVELLE AND SALLY RIDE: A STEM PARTNERSHIP BETWEEN SIO AND ONR, BRINGING OCEAN SCIENCE INTO THE MIDDLE SCHOOL CLASSROOM (29239)

455 L'Astorina, A.; Pugnetti, A.; **Giardino, C.**; Bresciani, M.; D'Alelio, D.; Oggioni, A.; Mazzocchi, M. G.; Rogora, M.; Bergami, C.; Matteucci, G.: TRAVELLING THROUGH ITALIAN ECOSYSTEMS AND BIODIVERSITY IN ORDER TO BROADEN CITIZENS' PARTICIPATION TO ECOLOGICAL RESEARCH (29352)

457 **Horodysky, A. Z.**: PROJECT OANEURO: QUANTIFYING THE EFFECTS OF OCEAN ACIDIFICATION ON NEUROBIOLOGY IN MARINE FISHES VIA INQUIRY-BASED EXPERIENTIAL LEARNING WITH UNDERGRADUATES (29719)

458 Mascart, T.; tkindt, T.; **De Troch, M.**; Roelofs, M.; Vanreusel, A.; Deprez, T.: THE ONLINE BLUE TRAINING ONE-STOP-SHOP PLATFORM: MARINETRAINING.EU (29749)

459 Wheeler, L.; **Dustan, P.**: PALOLO WATERSHED STEWARDSHIP PROGRAM (29952)

460 **Guidry, M. W.**; Tsang, T.: ASSESSMENT IN PARADISE: USING DATA TO DRIVE UNDERGRADUATE GEOSCIENCE INITIATIVES AND PROGRAMMATIC CHANGES (30128)

057 SOURCES, TRANSFORMATIONS, AND TRANSPORT OF CARBON AND NUTRIENTS IN WATERSHEDS: INFLUENCES ON STREAM WATER QUALITY

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474 **Miller, M. P.**; Tesoriero, A. J.; Hood, K.: ESTIMATION OF TIME-VARIABLE FLOW AND NITRATE LOADING TO STREAMS FROM THREE FLOW PATHS USING HIGH FREQUENCY WATER QUALITY DATA (28411)

475 **Tesoriero, A. J.**; Terziotti, S.; Abrams, D. B.: ASSESSING STREAM VULNERABILITY TO LEGACY NITRATE SOURCES (28635)

476 **Porcal, P.**; Kopacek, J.: PHOTOCHEMICALLY INDUCED CHANGES IN P AND N SPECIATION IN FRESH WATER (28862)

477 **Thompson, S. K.**; Cotner, J. B.: STOICHIOMETERY OF WATER EXTRACTABLE ORGANIC MATTER IN NORTH AMERICAN GRASSLANDS (29059)

478 **Kirkkala, T. H.**; Ventelä, A. M.: CHALLENGES OF NUTRIENT LOAD REDUCTION IN THE CATCHMENT OF LAKE PYHÄJÄRVI (SW FINLAND) IN FLUCTUATING CLIMATE (29377)

479 **Ouellette, L. A.**; O'Halloran, I. P.; Audette, Y.; Nowell, P. M.; Voroney, R. P.: CHEMICAL CHARACTERIZATION OF WATER AND SEDIMENT P IN THE GRAND RIVER WATERSHED - IMPLICATION FOR PREDICTION OF P LOADING DUE TO AGRICULTURE (29826)

481 **Smith, R. M.**; Follstad-Shah, J. J.; Gabor, R.: SOURCES AND PROCESSING OF NITROGEN IN AN EFFLUENT-DOMINATED RIVER (30130)

067 ECOLOGICAL RESILIENCE, NON-LINEAR COMMUNITY DYNAMICS AND REVERSIBILITY OF STATE SHIFTS IN AQUATIC ECOSYSTEMS

Chair(s): Thomas Adam, thomascadam@gmail.com
Karen McGlathery, kjm4k@virginia.edu
Russell J. Schmitt, schmitt@lifesci.ucsb.edu
David Seekell, david.seekell@umu.se

Location: Kamehameha Exhibit Hall

527 **Lamothe, K. A.**; Jackson, D. A.; Somers, K. M.: USING GRADIENT SIMULATIONS TO AID IN RESILIENCE METRIC DEVELOPMENT (28397)

528 **Pisapia, C.**: CORAL RECOVERY IN THE CENTRAL MALDIVES ARCHIPELAGO SINCE THE LAST MAJOR MASS-BLEACHING, IN 1998 (29073)

529 **Lee, T. S.**; Toft, J. D.: ASSESSING EFFECTIVENESS OF SHORELINE ARMORING REMOVAL ON THE PUGET SOUND COASTLINES' AQUATIC & TERRESTRIAL INVERTEBRATE COMMUNITIES (29502)

530 **Adam, T. C.**; Holbrook, S. J.; Schmitt, R. J.; Brooks, A. J.: EXPERIMENTAL TEST OF ALTERNATIVE STABLE STATES ON A CORAL REEF (29537)

074 CHARACTERIZING EXPLORATION IN THE WATER COLUMN

Chair(s): Kasey Cantwell, kasey.cantwell@noaa.gov
Michael Ford , michael.ford@noaa.gov
Amanda N. Netburn, amanda.netburn@noaa.gov

Location: Kamehameha Exhibit Hall

565 **Castendyk, D.**; Thibeault, S.; Straight, B.; Filiatreault, P.: AERIAL DRONES THAT PROFILE AND SAMPLE THE WATER COLUMN SAVE COSTS AND IMPROVE SAFETY: A CASE STUDY FROM THE 100-M-DEEP PAMOUR PIT LAKE, ONTARIO, CANADA (29009)

566 **Baker, E. T.**; Resing, J. A.: PROBING THE SEAFLOOR FROM THE WATER COLUMN (29067)

567 **Netburn, A. N.**; Bagge, L.; Gallo, N.; Ford, M.; Girguis, P.; Raineault, N.: RECENT ADVANCES IN MIDWATER EXPLORATION AND RESEARCH USING DEEP SUBMERGENCE VEHICLES (29179)

568 **Closek, C. J.**; Starks, H. A.; Walz, K. R.; Andruszkiewicz, E. A.; Michisaki, R. P.; Yamahara, K. M.; Boehm, A. A.; Chavez, F. P.: TRACKING BIODIVERSITY IN MONTEREY BAY BY METABARCODING ENVIRONMENTAL DNA (EDNA) (29591)

569 **Govindarajan, A. F.**; Copley, N.; Breier, J.; Wares, J. P.; Bucklin, A.: METAGENETIC ZOOPLANKTON ANALYSES TO EXPLORE WATER COLUMN BIODIVERSITY (29701)

570 Gilly, W. F.; Berkenpas, E.; Daniel, P. C.; Li, D. H.; Portner, E. J.; Robinson, C.; **Henning, B.**: "DRIFTCAM": A BUOYANCY-CONTROLLED LAGRANGIAN CAMERA-PLATFORM FOR EXPLORING MESOPELAGIC SCATTERING LAYERS (30086)

092 CANOPIES IN AQUATIC ECOSYSTEMS: INTEGRATING FORM, FUNCTION, AND BIOPHYSICAL PROCESSES

Chair(s): Virginia Pasour, pasour@gmail.com
Julia Samson, julia@unc.edu
Brian White, bwhite@unc.edu

Location: Kamehameha Exhibit Hall

641 **Johnson, C. J.**; Dann, L. E.; Cowles, D. L.: HOW DOES THE GREEN EELGRASS ISOPOD PROTECT ITS TISSUE AGAINST HIGHLY FLUCTUATING OXYGEN CONDITIONS? (29115)

642 **Dann, L. E.**; Johnson, C. J.; Cowles, D. L.: DOES PENTIDOTEA RESECATA HEMOLYMPH PROTECT THE ISOPOD FROM OXIDATIVE STRESS? (29116)

643 **Anderson, S. J.**; Hunnicutt, F. E.; Cowles, D. L.: ACTIVITY LEVELS OF *PENTIDOTEA RESECATA* SUPPORT CONCLUSION THAT THE ANIMAL IS PHOTOSYNTHETIC (29128)

093 ENOUGH C PLUMBING: OTHER BIOGEOCHEMICAL CYCLES AND COUPLED BIOGEOCHEMICAL CYCLES FROM MOUNTAINS TO THE SEA

Chair(s): Emily Bernhardt, emily.bernhardt@duke.edu
John Harrison, john_harrison@wsu.edu
Roxane Maranger, r.maranger@umontreal.ca
Emily Stanley, ehstanley@wisc.edu

Location: Kamehameha Exhibit Hall

644 **Carlson-Perret, N. L.**; Erler, D. V.; Eyre, B. D.: NITROGEN FIXATION IN SUBTROPICAL SEAGRASSES (28655)

645 Bresnahan, P. J.; Holleman, C. R.; MacVean, L.; Sylvester, Z.; Novick, E.; Downing-Kunz, M.; **Senn, D.**: METABOLIC VARIABILITY IN A NITROGEN-ENRICHED, URBANIZED ESTUARY (30035)

646 **Holleman, R.**; Bresnahan, P.; MacVean, L.; Senn, D.: NITROGEN CYCLING IN AN ENRICHED, URBANIZED ESTUARY (29948)

098 ANTHROPOGENIC IMPACTS AND ENVIRONMENTAL THREATS IN URBAN ECOSYSTEMS

Chair(s): Pamela Barrett, barrettp@uw.edu
Rebecca Neumann, rbneum@uw.edu

Location: Kamehameha Exhibit Hall

650 **Anderson, J. T.**; McCoard, K. R.; Billings, A. A.: RIPARIAN WILDLIFE RESPONSE TO STREAM RESTORATION (28348)

651 **Barrett, P. M.**; Hull, E. A.; King, C. E.; Gawel, J. E.; Neumann, R. B.: BIOACCUMULATION OF ARSENIC IN AQUATIC FOOD WEBS OF CONTAMINATED LAKES IN THE PUGET SOUND LOWLAND (28416)

652 **Mullen, K. R.**; Newell, S. E.; Hammerschmidt, C. R.: UPSTREAM SOURCES INHIBIT BENTHIC PHOSPHORUS REMOBILIZATION IN THE LOWER GREAT MIAMI RIVER, SOUTHWEST OHIO (28924)

653 **Schroer, W. F.**; Benitez-Nelson, C.; Smith, E.; Ziolkowski, L.: COASTAL STORMWATER DETENTION PONDS: SEDIMENT ACCUMULATION AND NUTRIENT SEQUESTRATION (29040)

655 Slone, L. A.; McCarthy, M. J.; Myers, J. A.; Hammerschmidt, C. R.; **Newell, S. E.**: DO LOWER GREAT MIAMI RIVER SEDIMENTS OFFSET OR EXACERBATE NUTRIENT LOADING? (29466)

656 **Strandberg, U.**; Bhavsar, S.; Arts, M. T.: INTEGRATING HUMAN HEALTH ASPECTS IN FISHERIES MANAGEMENT (29518)

657 **Sandusky, C. C.**; Egerton, T. A.: INVESTIGATING RECRUITMENT PATTERNS OF BENTHIC DIATOM COMMUNITIES IN A RESTORED TIDAL SALT MARSH IN SOUTHEAST VIRGINIA (29531)

111 CLIMATE CHANGE

Chair(s): Jim Elser, jim.elser@umontana.edu

Location: Kamehameha Exhibit Hall

668 **Szymczak-Zyla, M.**; Krajewska, M.; Mazur-Marzec, H.; Ceglowska, M.; Witak, M.; Filipkowska, A.; Lubecki, L.; Kowalewska, G.; Ciesielski, T. M.; Breedveld, G. D.; Oen, A. M.; Ardelan, M. V.; Jenssen, B. M.: PRESENT AND PAST-MILLENNIA PHYTOPLANKTON BLOOMS IN TWO DIFFERENT EUROPEAN COASTAL AREAS (28567)

669 **Swaney, D. P.**; Howarth, R. W.: HYDROLOGICAL IMPACTS OF IPCC-PROJECTED CLIMATIC CHANGE ON THE HUDSON RIVER AND ITS ESTUARY (28925)

670 **Yoshimura, T.**; Wakaki, S.; Kuroda, J.; Yamazaki, T.; Takagi, H.; Kimoto, K.; Sakuramoto, Y.; Ishikawa, T.; Ohkouchi, N.: A CHANGE IN THE NET CARBONATE INPUT DURING THE QUATERNARY DEDUCED FROM THE $^{88}SR/^{86}SR$ RECORD (29312)

672 **Burpee, B.**; Slemmons, K.; Anderson, D.; Saros, J.: GLACIALLY-DERIVED NITROGEN INCREASES TEMPORAL COHERENCE OF ALGAL COMMUNITY CHANGES IN ALPINE LAKES (29599)

673 **Titelboim, D.**; Sadekov, A.; Almogi-Labin, A.; Herut, B.; Kucera, M.; Schmidt, C.; Hyams-Kaphzan, O.; Abramovich, S.: EFFECT OF FUTURE WARMING ON BENTHIC FORAMINIFERAL CALCIFICATION: MG/CA EVIDENCES FROM FIELD STUDY ON EXTREMELY HEAT TOLERANT SPECIES (29620)

674 **Jagoe, C. H.**; Hernandez, W. J.; Cardona-Maldonado, M.; Armstrong, R.; Caldwell, P.; Casley, E.; Johnson, E.; Apeti, D.; Kaplan, M.; Skirving, W.; Strong, A.; Warner, R. A.: COLLABORATIVE RESEACH AND TRAINING TO IMPROVE CORAL REEF SCIENCE AND MANAGEMENT BY NOAA'S EDUCATIONAL PARTNERSHIP PROGRAM FOR MINORITY SERVING INSTITUTIONS (29805)

675 **Schaeffer, E. D.**; Testa, J. M.; Gel, Y. R.; Lyubchich, V.: ENHANCED DATA ANALYSIS USING MODERN DYNAMIC SPATIO-TEMPORAL CLUSTERING (29821)

115 PHYSICS IN AQUATIC SYSTEMS

There is no Chair information currently available for this session.

Location: Kamehameha Exhibit Hall

684 **Al Senafi, F.**; Anis, A.: WIND DRIVEN FLOW DYNAMICS OFF THE COAST OF KUWAIT (28399)

685 **Zhang, T.**; Yankovsky, A.: INTERNAL WAVE GENERATION BY SEMIDIURNAL KELVIN WAVES (28435)

686 **Anis, A.**; Al Senafi, F.: FORTNIGHTLY AND MONTHLY TIDAL SIGNALS IN THE ARABIAN GULF FROM ANALYSIS OF HIGH RESOLUTION SEA SURFACE TEMPERATURE DATA (28550)

687 **Ramos, M.**; Dewitte, B.; Concha, E.; Campos, C.; Bravo, L.: NATURAL SEA LEVEL VARIABILITY IN THE SOUTHEASTERN PACIFIC (29117)

FRIDAY ORALS

001 AIR-WATER, SEDIMENT-WATER, AND MACROPHYTE-FACILITATED GAS EXCHANGE IN INLAND AND COASTAL SYSTEMS

Chair(s): Marco Aurelio dos Santos, aurelio@ppe.ufrj.br
David Ho, david.ho@hawaii.edu
Damien Maher, Damien.Maher@scu.edu.au

Location: 306 A

14:30 **Grinham, A.**; Dunbabin, M.; Albert, S.: UNRAVELLING DRIVERS OF METHANE EMISSIONS IN A SUBTROPICAL FRESHWATER RESERVOIR (29418)

14:45 Beaulieu, J. J.; Balz, D. A.; **Waldo, S.**; Bisbe, K.; Nietch, C. T.; Pemberton, A.; Platz, M.; White, K.: REGIONAL ASSESSMENT OF METHANE EMISSION RATES FROM RESERVOIRS IN THE MIDWESTERN UNITED STATES (29793)

15:00 **McDonald, R. K.**; Dinsmore, K. J.; Billett, M. F.; Skiba, U.; Evans, C. D.; Waldron, S.: THE ROLE OF WATER LEVEL FLUCUATION ON GHG DYNAMICS IN A TEMPERATE UK RESERVOIR (28897)

15:15 **Tremblay, A.**; del Giorgio, P.: GROSS GHG EMISSIONS FROM THE NEWLY-CREATED ROMAINE-2 RESERVOIR IN BOREAL QUEBEC (CANADA) (29583)

16:30 **Peixoto, R. B.**; Marotta, H.; Enrich-Prast, A.; Bastviken, D.: INFLUENCE OF MACROPHYTES ON CARBON BALANCE FROM TROPICAL FLOODPLAIN LAKES (29715)

16:45 **Laruelle, G. G.**; Landschützer, P.; Gruber, N.; Regnier, P.: HIGH-RESOLUTION MONTHLY PCO2 CLIMATOLOGY FOR THE GLOBAL CONTINENTAL SHELF SEAS, DERIVED FROM A TWO-STEP NEURAL NETWORK INTERPOLATION (29560)

17:00 **Marescaux, A.**; Thieu, V.; Borges, A. V.; Garnier, J.: CARBON DIOXIDE EVASION FROM THE SEINE RIVER: DRIVERS ANALYSIS AND SPATIOTEMPORAL RECONSTRUCTION (29550)

17:15 Hotchkiss, E. R.; **del Giorgio, P. A.**: INTEGRATING GAS EXCHANGE ALONG A MAJOR BOREAL RIVER (29663)

005 CORAL MICROBIOMES: SHALLOW, MESOPHOTIC, DEEP-SEA

Chair(s): Tracy Ainsworth, tracy.ainsworth@jcu.edu.au
Christina Kellogg, ckellogg@usgs.gov

Location: 306 A

10:00 **Ainsworth, T. D.**: CORAL BLEACHING AND THE CORAL MICROBIOME (29298)

10:15 **Hernandez-Agreda, A. I.**; Bongaerts, P.; Leggat, W.; Ainsworth, T. D.: PERSISTENCE AND FUNCTIONAL IMPORTANTANCE: IDENTIFYING BACTERIA LIKELY TO BE PROMOTORS OF CORALS' SUCCESS (29426)

10:30 **Nelson, C. E.**; Fox, M. D.; Oliver, T. A.; Remple, K. L.; Quinlan, Z. A.; Donahue, M. J.; Putnam, H. M.: CORAL MICROBIOME RESPONSE TO INORGANIC NUTRIENT ENRICHMENT (29858)

10:45 Teja Annapareddy, S.; Bhakta, S. P.; Grimes, M.; Mcdonald, S. A.; Amitkumar Pandya, D.; **Santiago-Vazquez, L. Z.**: WERE BACTERIA INVOLVED IN THE 2016 MASS DIE-OFF AT THE EAST FLOWER GARDEN BANKS IN THE GULF OF MEXICO? A CASE STUDY USING SPONGES X. NUTANS AND A. CLATHRODES (29080)

12:00 Etnoyer, P.; **Vill, C.**; Shuler, A.; Greig, T.; Frometa, J.: PHYLOGENETICS OF GORGONIAN OCTOCORALS IN THE GULF OF MEXICO MESOPHOTIC ZONE AND THE IMPLICATIONS FOR RESTORATION FROM DEEPWATER HORIZON OIL SPILL (29182)

12:15 **Hicks, D. W.**; Jordan, L. M.; Figueroa, D. F.: MESOPHOTIC FISH COMMUNITIES OF RELIC REEFS OFF THE SOUTH TEXAS COAST (29854)

12:30 **Meistertzheim, L. A.**; Lartaud, F.; Arnaud-Haond, S.; Kalenitchenko, D.; Bessalam, M.; Le Bris, N.; Galand, P.: Patterns of bacteria-host associations suggest different ecological strategies between two reef building cold-water coral species (28445)

12:45 **Kellogg, C. A.**: COMPARISON OF THE MICROBIOMES OF SEVEN SPECIES OF DEEP-SEA CORALS (28577)

010 LOUDER THAN WORDS: CHEMICAL COMMUNICATION STRUCTURES MARINE ECOSYSTEMS

Chair(s): Elizabeth Harvey, elizabeth.harvey@skio.uga.edu
Kristen Whalen, kwhalen1@haverford.edu

Location: 323 B

14:30 **Lambert, B. S.**; Raina, J.; Fernandez, V.; Rinke, C.; Frenk, S.; Hugenholtz, P.; Tyson, G.; Seymour, J.; Stocker, R.: EXAMINING THE RESPONSE OF AQUATIC MICROORGANISMS TO EPHEMERAL CHEMICAL PATCHES USING IN SITU MICROFLUIDIC TECHNIQUES (28425)

14:45 **Poulin, R. X.**; Lavoie, S.; Siegel, K. J.; Weissburg, M. J.; Kubanek, J. M.: UNDERSTANDING THE CHEMICAL BASIS FOR PREDATOR DETECTION AND AVOIDANCE IN MARINE INVERTEBRATES. (28350)

15:00 **von Elert, E.**; Effertz, C.; Fink, P.; Christjani, M.: MIND THE GAPE – DIETARY QUALITY DETERMINES THE STRENGTH OF ANTI-PREDATOR DEFENCE (28740)

15:15 **Shemi, A.**; Alcolombri, U.; Frada, M.; Tawfik, D. S.; Vardi, A.: THE SIGNALING ROLE OF THE ALGAL DIMETHYL SULFIDE-RELEASING ENZYME DURING PREDATOR-PREY INTERACTIONS (28359)

16:30 **Van Alstyne, K. L.**; Sutton, L.; Gifford, S. A.: EAVESDROPPING SEAWEEDS: A WATERBORNE ROS (HYDROGEN PEROXIDE) DIFFERENTIALLY SIGNALS THE PRODUCTION OF DMSP AND DOPAMINE ALONG A TIDAL GRADIENT (29794)

16:45 **Pruett, J. L.**; Weissburg, M. J.: HYDRODYNAMIC SENSORY AND PHYSICAL STRESSORS MODIFY CHEMICALLY MEDIATED PREY RESPONSE TO PREDATION RISK (28363)

17:00 **Charpentier, C. L.**; Cohen, J. H.; Wright, A. J.: MORPHOLOGICAL RESPONSES TO PREDATOR KAIROMONES IN MARINE CRAB LARVAE VARY WITH SPECIES AND SIZE (28408)

011 PLASTIC FLOWING FROM LAND TO SEA: SOURCES, IMPACTS AND MITIGATION OF MACRO- AND MICROPLASTICS ACROSS A SPECTRUM OF AQUATIC ECOSYSTEMS

Chair(s): Luisa Galgani, luisa.galgani@icloud.com
Nanna B. Hartmann, nibh@env.dtu.dk
Steven A. Loiselle, loiselle@unisi.it
Martin Wagner, wagner@bio.uni-frankfurt.de

Location: 313 B

10:00 **Kramm, J.**; Völker, C.; Kerber, H.; Zimmermann, L.: HOW TO COPE WITH PLASTIC WASTE IN THE ENVIRONMENT? FINDING SOLUTIONS THROUGH A TRANSDISCIPLINARY RESEARCH APPROACH (28937)

10:15 **Simon, M.**; van Alst, N.; Stephansen, D. A.; Vollertsen, J.: MICROPLASTIC IN WASTEWATER AND ITS REMOVAL IN ADVANCED ACTIVATED SLUDGE TREATMENT PLANTS (28885)

10:30 **Gilbert, H. L.**: STRATIGRAPHIC RECORD OF MICROPLASTIC POLLUTION IN THE ANACOSTIA RIVER WATERSHED (30151)

10:45 **Laforsch, C.**; Imhof, H.; Schrank, I.; Loeder, M.: FROM ALPINE REGIONS TO DENSE POPULATED AREAS: A COMPARISON OF MICROPLASTIC CONTAMINATION BETWEEN 15 RIVERS ACROSS GERMANY (29813)

12:00 Hendrickson, E.; Schreiner, K.; **Minor, E. C.**: MICROPLASTICS IN THE WATER-COLUMN AND SEDIMENTS OF WESTERN LAKE SUPERIOR AS DETERMINED VIA MICROSCOPY, PYR-GC/MS, AND FTIR (28770)

12:15 **Choy, A.**; Katija, K.; Sherlock, R. E.; Sherman, A. D.; Van Houtan, K.; Robison, B. H.: BETWEEN THE SURFACE AND THE SEAFLOOR: THE ROLE OF DEEP MIDWATER ECOSYSTEMS IN CYCLING OCEANIC PLASTIC POLLUTION (29161)

12:30 Zhao, S. Y.; Danley, M.; Ward, E. J.; Li, D.; **Mincer, T. J.**: QUANTIFICATION OF PLASTIC DEBRIS HARBORED IN MARINE SNOW (28721)

12:45 **Kaiser, D.**; Kowalski, N.; Oberbeckmann, S.; Waniek, J. J.: PROVING A PARADIGM: BIOFILMS ENHANCE MICROPLASTIC DEPOSITION (29341)

14:30 **Kirstein, I. V.**; Gullans, E.; Ücker, M.; Heimbach, T.; Wichels, A.; Gerdts, G.: THE PLASTISPHERE – UNVEILING POLYMER SPECIFIC MICROORGANISMS (28875)

14:45 **Dussud, C.**; Hudec, C.; Coudane, J.; Elineau, A.; Ghiglione, J. F.: BACTERIAL COMMUNITIES LIVING ON PLASTIC LITTERS IN THE MEDITERRANEAN SEA (29296)

15:00 **Kesy, K.**; Oberbeckmann, S.; Müller, F.; Klaeger, F.; Hentzsch, A.; Mothes, S.; Labrenz, M.: THE FATE AND STABILITY OF THE MICROPLASTIC-ASSOCIATED BACTERIAL ASSEMBLAGES AFTER PASSING THE GUT OF MARINE INVERTEBRATES (29386)

15:15 **Peters, C. A.**; Bratton, S. P.: HIGH FREQUENCIES OF MICROPLASTIC INGESTION BY SIX MARINE FISH SPECIES FROM THE TEXAS GULF COAST (28774)

16:30 **Yokota, K.**; Mehlrose, M.; Hastings, C.; Davidson, E. G.; Waterfield, H. A.: HOW DO MICROPLASTICS FROM PERSONAL CARE PRODUCTS INTERACT WITH LAKE PHYTOPLANKTON? DO THEY DIFFER FROM ANALYTIC-GRADE CALIBRATION BEADS? (28495)

16:45 **Lönnstedt, O. M.**; Eklöv, P.: MICROPLASTIC PARTICLES INFLUENCE LARVAL FISH ECOLOGY (28887)

17:00 **Hartmann, N. B.**; Bodin, J.; Rist, S.; Mayer, P.; Schmidt, S. N.; Meibom, A.; Jensen, L. S.; Baun, A.: EXPLORING THE ROLE OF MICROPLASTICS AS VECTORS FOR CO-POLLUTANTS IN THE ENVIRONMENT (29411)

17:15 **Galgani, L.**; Engel, A.; Donati, A.; Rossi, C.; Loiselle, S. A.: PLASTIC MAY ACCELERATE OCEAN'S DE-OXYGENATION IN SURFACE WATERS (28943)

016 ADVANCES IN AQUATIC META-OMICS: CREATING TOOLS FOR MORE ACCURATE CHARACTERIZATION OF MICROBIAL COMMUNITIES

Chair(s): Brook Nunn, brookh@uw.edu
Emma Timmins-Schiffman, emmats@uw.edu

Location: 323 C

10:00 **Petras, D.**; Koester, I.; Stephens, B.; Da Silva, R. R.; Aluwihare, L.; Dorrestein, P. C.: DEVELOPMENT OF AN HIGH RESOLUTION LC-MS/MS WORKFLOW FOR THE HIGH THROUGHPUT ANALYSIS OF DISSOLVED METABOLITES IN MARINE ENVIRONMENTS. (29721)

10:15 **Mende, D. R.**; Aylward, F. O.; Bryant, J. A.; Eppley, J. M.; Nielsen, T.; DeLong, E. F.: HIGH RESOLUTION PROFILING OF MARINE MICROBIAL COMMUNITIES REVEALS POPULATION DISTRIBUTIONS ACROSS THE WATER COLUMN AT STATION ALOHA (29224)

10:30 **Joye, S. B.**; Saxton, M. A.; Montenegro, T. P.; Kleindienst, S.: USING OMICS APPROACHES TO TRACK THE RESPONSE OF MICROBIAL HYDROCARBON DEGRADERS TO NATURAL AND ANTHROPOGENIC HYDROCARBON INPUTS (30146)

10:45 **Timmins-Schiffman, E. B.**; Mikan, M. P.; Ting, Y. S.; Harvey, H. R.; Nunn, B. L.: DEMONSTRATION OF BACTERIAL PEPTIDE ASSAYS TO DETERMINE ACTIVE PROCESSES IN SEDIMENTS AND PARTICLE TRAPS (29259)

12:00 Laffy, P. W.; **Wood-Charlson, E. M.**; Turaev, D.; Weynberg, K. D.; Botte, E. S.; van Oppen, M. J.; Webster, N. S.; Rattei, T.: HOLOVIR: TAXONOMIC AND FUNCTIONAL ANALYSIS OF VIRUSES IN MARINE HOST-ASSOCIATED COMMUNITIES (28833)

12:15 **Pelletier, E.**; Carradec, Q.; the Tara Oceans Consortium, ..; Wincker, P.: FIRST GLIMPSE OF BROAD SCALE EUKARYOTIC PLANCTONIC POPULATION GENOMICS DIVERSITY AND FUNCTIONAL BEHAVIOUR FROM THE TARA OCEANS SAMPLING. (28979)

12:30 **Cohen, L. J.**; Alexander, H.; Brown, C. T.: REASSEMBLING 600+ MARINE TRANSCRIPTOMES: AUTOMATED PIPELINE DEVELOPMENT AND EVALUATION (29893)

12:45 **Yilmaz, P.**; Quast, C.; Gerken, J.; Beccati, A.; Peplies, J.; Gloeckner, F. O.: THE SILVA RIBOSOMAL RNA DATABASES AND SERVICES - RELIABLE RESOURCES FOR OMICS DIVERSITY ANALYSIS (28499)

021 CROSSING DISCIPLINARY BOUNDARIES ACROSS THE FRESHWATER-MARINE CONTINUUM TO ADVANCE THE UNDERSTANDING OF HARMFUL ALGAL BLOOMS (HABS)

Chair(s): Bryan Brooks, bryan_brooks@baylor.edu
Christopher Gobler, christopher.gobler@stonybrook.edu
Raphael Kudela, kudela@ucsc.edu
J. Thad Scott, thad_scott@baylor.edu
Jeffery Steevens, jeffery.a.steevens@erdc.usace.army.mil
Alan Wilson, wilson@auburn.edu

Location: 323 B

10:00 **Buelo, C. D.**; Pace, M. L.; Carpenter, S. R.: EVALUATING SPATIAL INDICATORS OF PHYTOPLANKTON BLOOMS (28754)

10:15 **Kudela, R. M.**; Peacock, M. B.; Senn, D.; Gibble, C. M.; Sylvester, Z.; Cloern, J. E.: BLURRED LINES: MULTIPLE FRESHWATER AND MARINE TOXINS AT THE LAND-SEA INTERFACE (28967)

FRIDAY

10:30 **Bukaveckas, P. A.**; Moy, N. J.; Dodson, J.; Tassone, S. J.; Bulluck, L. P.: PRESENCE AND PERSISTENCE OF THE CYANOTOXIN MICROCYSTIN IN AQUATIC AND RIPARIAN CONSUMERS. (28522)

10:45 **Rober, A. R.**; Walls, J. T.; Rubenstein, E. M.; Wyatt, K. H.: HOT AND TOXIC: TEMPERATURE REGULATES TOXIN RELEASE BY CYANOBACTERIA (29157)

12:00 **Jupitz, M. C.**; Kimmel, D. G.; Field, E. K.: THE EFFECTS OF TEMPERATURE ON MICROCYSTIN-LR TOXICITY TO *BOSMINA LONGIROSTRIS*: FOOD WEB IMPLICATIONS IN THE CHOWAN RIVER, NORTH CAROLINA (29019)

12:15 **Larson, J. H.**; Evans, M. A.; Kennedy, R.; Bailey, S.; Schaeffer, J.; Duris, J. W.; Givens, C. E.; Stelzer, E. A.; Loftin, K. A.; Lenaker, P.; Richardson, W. B.: CYANOBACTERIA IMPACTS ON INVERTEBRATE GROWTH AND DYNAMICS IN THE GREAT LAKES (29533)

12:30 **Scott, J. T.**; Joos, A.: THE ROLE OF NITROGEN FIXATION IN TOXIC CYANOBACTERIAL BLOOMS: INDIRECT, DIRECT, OR NO EFFECTS? (29574)

12:45 **Kranz, S. A.**; Bercel, T.: CARBON ACQUISITION AND PHOTOPHYSIOLOGY OF THE MARINE DINOFLAGELLATE KARENIA BREVIS UNDER A RANGE OF CO2 CONCENTRATIONS (29452)

026 UNDERGRADUATE RESEARCH IN THE AQUATIC SCIENCES

Chair(s): David Fields, dfields@bigelow.org
Elizabeth Rom, elrom@nsf.gov

Location: 306 B

16:30 **Scott, A. A.**; Davis, G.; Cholewiak, D.; Van Parijs, S.; Baumgartner, M.: RECENT NORTH ATLANTIC RIGHT WHALE ACOUSTIC PRESENCE ALONG THE WESTERN NORTH ATLANTIC COAST (29163)

16:45 Stanley, J.; **Shelledy, K. N.**; Van Parijs, S. M.: COD CONVERSATIONS: TEMPORAL PATTERNS OF GADIDAE FISH CALLS IN STELLWAGEN BANK NATIONAL MARINE SANCTUARY (SBNMS) (29669)

17:00 **Tillotson, N. A.**; Tumolo, B. B.; Phillips, S.; Flinn, M. B.: INFLUENCE OF ENVIRONMENTAL FACTORS ON LARVAL FISH PHENOLOGY IN A LARGE-RIVER RESERVOIR (29499)

17:15 **Hunter, A. J.**: CORALS OF OPPORTUNITY AS A RESTORATION TOOL FOR HAWAII'S CORAL REEFS (29492)

032 DOM REACTIVITY: UNDERLYING MECHANISMS AND PROCESSES

Chair(s): Gerhard Herndl, gerhard.herndl@univie.ac.at
Cristina Romera-Castillo, cristina.romera-castillo@univie.ac.at

Location: 306 B

10:00 **Repeta, D. J.**; Ferrón, S.; Sosa, O.; Johnson, C.; Repeta, L.; Acker, M.; DeLong, E.; Karl, D.: BACTERIAL DEGRADATION OF DISSOLVED ORGANIC MATTER EXPLAINS THE MARINE METHANE PARADOX (29396)

10:15 **Lin, H.**; Repeta, D. J.; Xu, L.; Boiteau, R. M.; Rappé, M. S.: A FATE FOR REFRACTORY MARINE DISSOLVED ORGANIC MATTER: INSIGHTS FROM CARBON ISOTOPIC COMPOSITIONS AND 1H-NMR SPECTRA OF RIDGE FLANK HYDROTHERMAL SAMPLES (30060)

10:30 **Johnson, W. M.**; Arnold, W. A.; Kido Soule, M. C.; Longnecker, K.; Van Mooy, B.; Kujawinski, E. B.: LINKS BETWEEN METABOLITE DYNAMICS ON SINKING PARTICLES AND DOM (29573)

10:45 **Shen, Y.**; Benner, R.: HUNGER GAMES IN THE OCEAN: HOW DOES DISSOLVED ORGANIC MATTER ESCAPE FROM MICROBES? (28736)

12:00 **Koch, B. P.**; Ksionzek, K. B.; Lechtenfeld, O. J.; McCallister, S. L.; Schmitt-Kopplin, P.; Geuer, J. K.; Geibert, W.: ORGANIC SULFUR IN THE OCEAN: BIOGEOCHEMISTRY OF A PETAGRAM INVENTORY (28922)

12:15 **Bercovici, S. K.**; Koch, B. P.; McCallister, S. L.; Schmitt-Kopplin, P.; Lechtenfeld, O. J.; Hansell, D. A.: MOLECULAR AGEING OF DISSOLVED ORGANIC MATTER IN THE FAR NORTH PACIFIC (29237)

12:30 **Huynh, N. Q.**; Carlson, C. A.; Opalk, K. L.; Wear, E. K.: ESTIMATING DOC AVAILABILITY WITH MARINE BIOREACTORS (29091)

12:45 Noriega-Ortega, B. E.; Wienhausen, G.; Simon, M.; Dittmar, T.; **Niggemann, J.**: BACTERIAL EXOMETABOLOMES CONTRIBUTE TO THE CHEMODIVERSITY OF MARINE DISSOLVED ORGANIC MATTER (29320)

14:30 **Frank, A. H.**; Reinthaler, T.; Hansman, R. L.; Herndl, G. J.: CHANGES IN THE DEEP OCEAN'S BACTERIAL COMMUNITY COMPOSITION IN RELATION TO DISSOLVED ORGANIC MATTER SUPPLY. (28428)

14:45 **Pedler Sherwood, B.**; Repeta, D. J.; DeLong, E. F.: METABOLIC MAPS OF SEMI-LABILE DISSOLVED ORGANIC MATTER DEGRADATION DRAWN FROM MICROBIAL COMMUNITY OMICS AND BACTERIAL GENE KNOCKOUT STUDIES (30015)

15:00 **Vidal-Melgosa, S.**; Engel, A.; Willats, W.; Hehemann, J.: HIGH-THROUGHPUT SCREENING OF THE STRUCTURE OF POLYSACCHARIDES PRESENT IN DIATOMS AND ALGAL BLOOMS (29401)

15:15 **Yamaguchi, T.**; Sato, M.; Hashihama, F.; Ehama, M.; Shiozaki, T.; Takahashi, K.; Furuya, K.: DISTRIBUTION PATTERNS OF LABILE PHOSPHORIC ESTERS AND ALKALINE PHOSPHATASE ACTIVITIES IN THE SUBTROPICAL NORTH PACIFIC OCEAN (29118)

047 UNRAVELING DEEP OCEAN ENIGMAS: DEEPWATER ENVIRONMENTS AS AN OCEAN EXPLORATION FRONTIER

Chair(s): Daniele De Corte, daniele.de.corte@univie.ac.at
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Joseph P. Montoya, montoya@gatech.edu
Ajit Subramaniam , ajit@ldeo.columbia.edu

Location: 323 C

14:30 **Sintes, E.**; De Corte, D.; Yokokawa, T.; Amano-Sato, C.; Nunoura, T.; Herndl, G. J.: CHARACTERIZING THE ACTIVE BACTERIAL COMMUNITIES OF THE DEEP OCEAN (28505)

14:45 **Baltar, F.**; Lundin, D.; Palovaara, J.; Lekunberri, I.; Reinthaler, T.; Herndl, G. J.; Pinhassi, J.: PROKARYOTIC RESPONSES TO AMMONIUM AND ORGANIC CARBON REVEAL ALTERNATIVE CO2 FIXATION PATHWAYS AND IMPORTANCE OF ALKALINE PHOSPHATASE IN THE MESOPELAGIC* (28417)

FRIDAY

15:00 **Suominen, S.**; Villanueva, L.; Besseling, M.; Sinninghe Damste, J. S.: SEDIMENT MICROBIAL COMMUNITY SUCCESSION ACROSS A GRADIENT OF ORGANIC CARBON CONCENTRATION CONNECTED TO THE ARABIAN SEA OXYGEN MINIMUM ZONE. (28909)

15:15 **Rich, J. J.**; Fernandez-Gonzalez, N.: INFLUENCE OF ORGANIC DETRITUS AND STARVATION ON THE DISTRIBUTION OF BACTERIAL TAXONOMIC GROUPS IN MARINE SEDIMENTS (29838)

16:30 **Spietz, R. K.**; Morris, R.: POST-ERUPTIVE LAVA FLOWS ALTER DEEP-SEA MICROBIAL COMMUNITIES (29447)

16:45 **Tabata, H. G.**; Watanabe, H.; Sun, J.; Lan, Y.; Cai, Z.; Qian, P.: POPULATION STRUCTURE OF HADAL TRENCH AMPHIPODS (28869)

17:00 **Beckwith, M.**; Gallo, N. D.; Barry, J. P.; Levin, L. A.: AN ROV STUDY OF DEEP-SEA DEMERSAL FISH COMMUNITIES UNDER EXTREME HYPOXIC CONDITIONS IN THE GULF OF CALIFORNIA (29962)

048 CROSSING THE SCIENCE-POLICY BRIDGE: SUCCESSES AND CHALLENGES INFORMING POLICY AND MANAGEMENT DECISIONS

Chair(s): Michael R Allen, mra142@gmail.com
Adrienne Sponberg, sponberg@aslo.org

Location: 313 C

12:00 **Allen, M. R.**; Clark, J. C.: APPLYING THE SEA GRANT MODEL TO THE BLUE CRAB FISHERY IN THE CHESAPEAKE BAY (29598)

12:15 **Jenkins, L. D.**: USING FUTURE VISIONING IN A SOCIAL–ECOLOGICAL SYSTEMS RAPID ASSESSMENT OF FISHING GEAR SUBSTITUTION TO REDUCE BYCATCH AND HABITAT IMPACTS (28385)

12:30 **Vollmer, D.**; Shaad, K.; Regan, H. M.; Souter, N. J.; Farrell, T.; Andelman, S. J.: "DEFRAGMENTING" FRESHWATER SOCIAL-ECOLOGICAL SYSTEMS: A CONCEPTUAL MODEL AND APPLICATION OF THE FRESHWATER HEALTH INDEX (29342)

12:45 **Warner, K. A.**; Lowell, B.; Hirshfield, M.: A CASE STUDY OF FISH SPECIES SUBSTITUTIONS IN THE UNITED STATES TO ADVANCE SEAFOOD TRACEABILITY POLICY REQUIREMENTS (29449)

14:30 **Martinez, F. A.**; Turner, E.; Jordan, T.; Lodge, D. M.; Richmond, R. H.: FROM ADAPTIVE MANAGEMENT TO ADAPTIVE SCIENCE: MUTUAL BENEFITS AT THE SCIENCE-MANAGEMENT INTERFACE (29994)

14:45 **Tonolla, D.**: EVALUATION AND APPLICATION OF RESTORATION MEASURES TO REDUCE HYDROPOWER IMPACTS ON RIVER ECOSYSTEMS – TWO CASE STUDIES FROM THE SWISS ALPS (28905)

15:00 **Galgani, L.**; Loiselle, S. A.; Figliomeni, B.; Rustioni, M.: A CITIZEN-SCIENTIST OBSERVATORY FOR THE STEWARDSHIP OF LOCAL FRESHWATER RESOURCES: RESULTS FROM CITIZEN AND STUDENT VOLUNTEERS IN THE ARNO RIVER BASIN, ITALY (28501)

15:15 **Bittler, K. M.**: A CASE STUDY: HOW SCIENCE AND PUBLIC INPUT IMPACT ENVIRONMENTAL DECISION MAKING (28429)

16:30 **Woelfle-Erskine, C. A.**: BETTER PREDICTION THROUGH JUSTICE-SEEKING COLLABORATION : FEMINIST STS QUERIES BEAVER-SALMON WATERSCAPES (29819)

16:45 **Staehr, P. A.**; Sheikh, M.; Rashid, R.; Ussi, A.; Suleiman, M.; Omar, M.; Kloiber, U.; Dahl, K.; Tairova, Z.: MANAGING HUMAN PRESSURES TO RESTORE ECOSYSTEM HEALTH OF ZANZIBAR COASTAL WATERS (28877)

17:00 **Bradie, J.**; Mudroch, P.; Bailey, S.: BRIDGING THE GAP BETWEEN SCIENCE AND MANAGEMENT: AN APPLICATION FOR SHIPPING INSPECTORS TO APPLY SCIENTIFIC KNOWLEDGE TO INFORM REAL-TIME MANAGEMENT DECISIONS (29844)

17:15 **Falinski, K.**; Most, R.; Wiggins, C.: HAWAIIAN FISHPONDS AS MODEL SYSTEMS LINKING LAND AND SEA, SCIENCE AND COMMUNITY, TO IMPROVE RESTORATION SUCCESS (30062)

049 FROM THE MOUNTAINS TO THE SEA: FLUXES, TRANSFORMATIONS, AND IMPACTS OF LAND-DERIVED MATERIALS IN THE COASTAL ZONE

Chair(s): David Butman, dbutman@uw.edu
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Eric Heinen De Carlo, edecarlo@soest.hawaii.edu
Olivier Rouxel, rouxel@hawaii.edu

Location: 304 A/B

10:00 **Johannesson, K. H.**; Prouty, N. G.; Chevis, D. A.; Swarzenski, P. W.; Telfeyan, K. C.; White, C. D.; Burdige, D. J.: FROM SHIELD VOLCANO TO THE SEA: RARE EARTH ELEMENTS BEHAVIOR IN A COASTAL BASALT AQUIFER (28741)

10:15 **Merschel, G.**; Bau, M.; Dantas, E. L.: SIMULATING THE BEHAVIOR OF REE, FE AND DOC DURING MIXING OF ORGANIC AND INORGANIC NANOPARTICLE-RICH RIVER WATERS IN TROPICAL ESTUARIES (28462)

10:30 **Oldham, V. E.**; Jensen, L.; Miller, M.; Luther, G. W.: REVISITING MN AND FE REMOVAL IN HUMIC RICH ESTUARIES (28533)

10:45 **Sirois, M.**; Barber, A.; Couturier, M.; Gélinas, Y.; Chaillou, G.: ARE FE-OXIDES INTERACTING WITH OC ALONG A SALINITY GRADIENT AT THE LAND-SEA INTERFACE? EXAMPLE OF THE MARTINIQUE BEACH (ILES-DE-LA-MADELEINE, QUEBEC, CANADA) (29036)

12:00 **Bogard, M.**; Striegl, R.; Dornblaser, M.; Stets, E.; Quay, P.; Holtgrieve, G.; Butman, D.: ECOSYSTEM METABOLISM OF BOREAL/SUBARCTIC LAKES UNDERGOING RAPID ENVIRONMENTAL CHANGE: INSIGHTS FROM OXYGEN ISOTOPIC ANALYSES (29907)

12:15 **Montagna, P. A.**; Hu, X.; Palmer, T.; Wetz, M.: EFFECT OF FRESHWATER INFLOW ON BIOGEOCHEMISTRY OF ESTUARIES AT REGIONAL AND LOCAL SCALES (29056)

12:30 **Regnier, P.**; Laruelle, G. G.; Lauerwald, R.; Hastie, A.; Landschützer, P.; Guenet, B.; Weyhenmeyer, G.; Sobek, S.; Hartmann, J.; Ciais, P.; Gruber, N.: FATE OF CARBON AND CO2 EXCHANGE AT THE AIR-WATER INTERFACE ALONG THE LAND-OCEAN AQUATIC CONTINUUM (29782)

12:45 **Shearman, R. K.**; Saldias, G.; Pierce, S.; Goni, M.; White, A.: SPATIAL VARIABILITY OF WINTERTIME FRESHWATER CONDITONS OFF OREGON (30158)

14:30 **Attermeyer, K.**; Catalán, N.; Einarsdóttir, K.; Freixa, A.; Groeneveld, M.; Hawkes, J.; Tranvik, L. J.: FLOCCULATION IN THE BOREAL AQUATIC CONTINUUM (29337)

FRIDAY

* REPRESENTS INVITED PRESENTATIONS

14:45 **Dahlgren Stråât, K.**; Mörth, C. M.; Undeman, E.: SIMULATING THE CLIMATIC EFFECTS ON ORGANIC CARBON (PARTICULATE AND DISSOLVED) LOAD IN THE BALTIC SEA DRAINAGE BASIN (28842)

15:00 **Nadell, S. A.**; Howarth, R. W.; Wilkin, J. L.: MODELING POTENTIAL CLIMATE-DRIVEN PHYTOPLANKTON BLOOMS IN THE HUDSON RIVER ESTUARY (28777)

15:15 **van Beusekom, J.**; Riethmüller, R.; Schwichtenberg, F.; Callies, U.; Cox, T.: PRIMARY PRODUCTION ESTIMATES IN A SHALLOW TIDAL BASIN FROM CONTINUOUS OXYGEN MEASUREMENTS AND HYDRODYNAMIC EXCHANGE MODELS (29388)

16:30 **Douglas, A. R.**; Abdulla, H.; Jemison, C.; Murgulet, D.: MOLECULAR CHARACTERIZATION OF DISSOLVED ORAGNIC MATTER IN SURFACE AND GROUNDWATER IN A HIGHLY DISTURBED SEMI-ARID SECONDARY BAY (29227)

16:45 **Bryant, R. B.**; Allen, A. L.; Buda, A. R.; Kleinman, P. J.; Boyer, E. W.; Hashem, F. M.; King, M. D.; Tzilkowski, S. S.; Kibet, L. C.; Klick, S. A.; Saporito, L. S.; May, E. B.: TERRESTRIAL SOURCES OF UREA: ALLOCHTHONOUS OR AUTOCHTHONOUS? (29035)

17:00 **Hargan, K. E.**; Clyde, N.; Kempe, L.; Gilchrist, G.; Mallory, M.; Smol, J. P.; Blais, J. M.: COMMON EIDERS AS ECOSYSTEM ENGINEERS: QUANTIFYING THE IMPORTANCE OF AVIAN NUTRIENT TRANSFER FROM OCEANS TO COASTAL ARCTIC ISLANDS IN HUDSON STRAIT (28962)

050 CURRENTS AND MATERIAL TRANSPORT AT THE OCEAN SURFACE

Chair(s): Mark Bourassa, mbourassa@fsu.edu
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Steven Morey, smorey@fsu.edu
Nicolas Wienders, nwienders@fsu.edu

Location: 305 A/B

14:30 **Broström, G.**; Drivdal, M.; Sutherland, G.; Röhrs, J.: VERTICAL DISTRIBUTION OF BUOYANT PARTICLES IN THE SEA: VARIABILITY AND SUGGESTION FOR SAMPLING STRATEGY AND IMPACT ON TRANSPORT (29610)

14:45 **Morey, S. L.**; Wienders, N.; Dukhovskoy, D. S.: OBSERVATIONS OF VERTICAL DEPENDENCE OF CURRENTS NEAR THE OCEAN SURFACE FROM SATELLITE-TRACKED DRIFTERS (28750)

15:00 **Bourassa, M. A.**; SHi, Q.: THE WINDS AND CURRENTS MISSION (29545)

15:15 **Fu, L. L.**; Morrow, R.: MAPPING SEA SURFACE HEIGHT AND CURRENTS WITH RADAR INTERFEROMETRY: THE SWOT MISSION (29107)

16:30 **Staneva, J.**; Alari, V.; Breivik, O.; Ricker, M.; Schrum, C.: PARTICLE TRANSPORT MODEL SENSITIVITY ON WAVE-INDUCED PROCESSES (29076)

16:45 **Lebreton, L.**; Reisser, J.; Sainte-Rose, B.: MODELLING FLOATING PLASTIC ORIGIN, TRANSPORT AND ACCUMULATION IN THE WORLD'S OCEAN (30157)

17:00 **Garcia-Ladona, E.**; Jimenez-Madrid, J. A.; Isern-Fontanet, J.; Garcia-Olivares, A.; Ballabrera-Poy, J.; García Sotillo, M.: SEA SURFACE CURRENTS A KEY VARIABLE TO IMPROVE MARINE ENVIRONMENTAL ASSESMENT AND FORECASTS IN MARINE EMERGENCIES (29569)

17:15 **Griffin, D.**: SURFACE DRIFT AND THE SEARCH FOR MH370 (29300)

051 TOWARD GREATER SYNTHESIS: OCEAN COLOR IMAGERY AND BIOGEOCHEMICAL/ECOSYSTEM NUMERICAL MODELING

Chair(s): Mark Baird, Mark.Baird@csiro.au
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Colleen Mouw, cbmouw@mtu.edu
Cecile Rousseaux, Cecile.S.Rousseaux@nasa.gov
Jeremy Werdell, jeremy.werdell@nasa.gov

Location: 314

10:00 **Ciavatta, S.**: ASSIMILATION OF OCEAN COLOUR TO IMPROVE THE SIMULATION OF MARINE ECOSYSTEMS: EXPERIENCES IN THE NORTH WEST EUROPEAN SHELF -SEA* (28949)

10:15 **Baird, M. E.**; Jones, E. M.; Mongin, M.; Skerratt, J.: USE OF REMOTE-SENSING REFLECTANCE TO CONSTRAIN A DATA ASSIMILATING MARINE BIOGEOCHEMICAL MODEL OF THE GREAT BARRIER REEF. (29393)

10:30 **DeVries, T.**; Weber, T. S.: THE EXPORT AND FATE OF ORGANIC MATTER IN THE OCEAN: NEW CONSTRAINTS FROM COMBINING SATELLITE AND OCEANOGRAPHIC TRACER OBSERVATIONS (29817)

10:45 **Shulman, I.**; Moline, M. A.; Penta, B.; Anderson, S.; Sakalaukus, P.; Messié, M.; Rowley, C.; Ladner, S.: MODELING AND OBSERVATIONAL STUDIES OF PHYSICAL, BIO-OPTICAL AND BIOLUMINESCENCE POTENTIAL PROPERTIES. (28583)

12:00 **Hickman, A. E.**; Sathyendranath, S.; Evers-King, H.; Martinez-Vicente, V.; Dutkiewicz, S.: ASSESSING REASONS FOR DISPARITY BETWEEN SATELLITE-DERIVED BIOGEOCHEMICAL MEASUREMENTS AND OUTPUT FROM NUMERICAL MODELS* (28994)

12:15 **Álvarez, E.**; Völker, C.: CHLOROPHYLL TO CARBON RATIOS DERIVED FROM AN ECOSYSTEM MODEL WITH EXPLICIT PHOTODAMAGE (29496)

12:30 **Van Oostende, N.**; Dussin, R.; Stock, C. A.; Barton, A. D.; Curchitser, E.; Dunne, J. P.; Ward, B. B.: SIMULATING THE DYNAMIC RANGE OF CHLOROPHYLL CONCENTRATION FROM OLIGOTROPHIC OCEAN GYRES TO COASTAL UPWELLING SYSTEMS (28641)

12:45 **Siegel, D. A.**: ZOOPLANKTON FROM SPACE (28643)

14:30 **Hammond, M. L.**; Beaulieu, C.; Sahu, S.; Henson, S.: CONSTRAINING TRENDS IN OCEAN COLOUR USING BIOGEOCHEMICAL MODELS (29651)

14:45 **Mouw, C. B.**; Barnett, A.; Dutkiewicz, S.: GLOBAL SHIFTS IN PHYTOPLANKTON COMMUNITY SIZE STRUCTURE IN RESPONSE TO ENVIRONMENTAL CONTROLS (29774)

15:00 **Leitner, A. B.**; Neuheimer, A. B.; Drazen, J. C.: UNRAVELING THE MYSTERY OF SEAMOUNT ENHANCED PRIMARY PRODUCTION: A GLOBAL ANALYSIS OF SATELLITE CHLOROPHYLL DATA AROUND SEAMOUNTS (30020)

15:15 **Ferreira, S. A.**; Banas, N.: LINKING PHENOLOGY AND PRODUCTIVITY TO CALANUS COPEPODS ACROSS THE NORTHEAST PACIFIC THROUGH SATELLITE OCEAN COLOR (28562)

16:30 **Roesler, C. S.**; Vellucci, V.; Uitz, J.; Antoine, D.; Claustre, H.; Drapeau, S. D.; Ras, J.: CONSTRUCTING IN SITU DATA SETS FOR PHYTOPLANKTON FUNCTIONAL TYPE PRODUCT VALIDATION (29835)

FRIDAY

16:45 **Galí, M.**; Devred, E.; Levasseur, M.; Babin, M.: MARINE DIMETHYLSULFIDE EMISSION DIAGNOSED WITH A NEW REMOTE SENSING ALGORITHM. IS IT INCREASING AS ARCTIC SEA ICE RECEDES? (29567)

17:00 **Schulien, J. A.**; Hair, J. W.; Hostetler, C. A.; Halsey, K.; Twardowski, M. S.; Behrenfeld, M. J.: VERTICAL STRUCTURE IN THE PHYTOPLANKTON BIOMASS, UNDERWATER LIGHT FIELD, AND NET PRIMARY PRODUCTION USING HIGH SPECTRAL RESOLUTION LIDAR (28372)

17:15 **Wei, J.**; Lee, Z.; Armstrong, R. A.; Chen, R. F.; Garcia, R.; Sheldon, P.; Peri, F.; Shang, Z.: REMOTE SENSING OF WATER PROPERTIES FROM LANDSAT-8 OLI MEASUREMENTS IN SHALLOW AND DEEP COASTAL WATERS (29665)

052 VIRUSES AND PARASITES IN FOOD WEB INTERACTIONS

Chair(s): Urania Christaki, Urania.Christaki@univ-littoral.fr
Telesphore Sime-Ngando, telesphore.sime-ngando@univ-bpclermont.fr

Location: 301 B

10:00 **Beckett, S. J.**; Weitz, J. S.: ROBUSTNESS AND BIASES IN ESTIMATING VIRAL-INDUCED PLANKTON MORTALITY (29104)

10:15 **Edwards, K. F.**; Steward, G. F.: DRIVERS OF TRAIT VARIATION ACROSS PHYTOPLANKTON VIRUSES (28950)

10:30 **Floge, S. A.**; Fields, D. M.; Waller, J. D.; Sullivan, M. B.: EVALUATING THE 'VIRAL SHUNT': DO VIRUSES ENHANCE OR REDUCE NUTRIENT FLOW TO HIGHER TROPHIC LEVELS? (28688)

10:45 **Sheyn, U.**; Rosenwasser, S.; Lehahn, Y.; Barak, N.; Schatz, D.; Vardi, A.: ASSESSMENT OF HOST AND VIRUS GENE EXPRESSION PROVIDES A SENSITIVE PROXY FOR VIRAL INFECTION DURING A COCCOLITHOPHORE BLOOM IN THE OCEAN (28381)

12:00 **Schvarcz, C. R.**; Steward, G. F.: GENOMIC CHARACTERIZATION OF A NOVEL GIANT VIRUS INFECTING TETRASELMIS GREEN ALGAE (29873)

12:15 **Aylward, F. O.**; Vislova, A.; Mende, D. R.; Eppley, J. M.; Romano, A. E.; Den Uyl, P. A.; Nielsen, T.; DeLong, E. F.: METAGENOMIC AND TRANSCRIPTOMIC INSIGHTS INTO THE DAILY RHYTHMS AND TEMPORAL DYNAMICS OF ABUNDANT VIRUSES IN THE NORTH PACIFIC (29203)

12:30 **Carlson, M. G.**; Hulata, Y.; Ribalet, F.; Armbrust, E. V.; Lindell, D.: OCEANIC REGIME SHIFTS PROVIDE DIFFERENT NICHES FOR CYANOBACTERIAL VIRUS FAMILIES (29428)

12:45 **Laber, C. P.**; Zelzion, E.; Nissimov, J.; Shiraiwa, Y.; Bhattacharya, D.; Bidle, K. D.: NO BLOOM IS SAFE! OBSERVATION OF COCCOLITHOVIRUS INFECTED EMILIANIA HUXLEYI BLOOMS EXPANDS FROM THE ATLANTIC TO THE PACIFIC (29281)

053 TINY BUT MIGHTY: THE ROLE OF MICROZOOPLANKTON IN AFFECTING LOWER AND UPPER FOOD-WEB DYNAMICS

Chair(s): Nicole Aberle-Malzahn, nicole.aberle-malzahn@ntnu.no
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Karen E. Selph, selph@hawaii.edu

Location: 301 B

14:30 **Hansen, P. J.**: THE ROLE OF MICROZOOPLANKTON IN THE MARINE MICROBIAL FOOD WEB[T] (28443)

15:00 **Stibor, H.**; Pondaven, P.; Behl, S.: NUTRIENT DEPENDENCY OF TOP-DOWN EFFECTS: A FIELD TEST WITH MARINE PHYTOPLANKTON AND MICROZOOPLANKTON GRAZING. (29400)

15:15 **Alvarez-Fernandez, S.**: COMMON RESPONSES OF PLANKTON COMMUNITIES TO OCEAN ACIDIFICATION: THE ROLE OF NUTRIENT LIMITATION. (28892)

16:30 **Mathews, L. E.**; Faithfull, C.; Nelson, C.: NUTRITION & ELEMENTAL STOICHIOMETRY OF MICROZOOPLANKTON LIFE STAGES IN A CHANGING CLIMATE (29132)

16:45 **Moorthi, S. D.**; Schmitt, J.; Hodapp, D.; Ryabov, A.; Tsakalakis, I.; Blasius, B.; Hillebrand, H.: UNIFYING ECOLOGICAL STOICHIOMETRY AND METABOLIC THEORY TO PREDICT INTERACIVE EFFECTS ON TROPHIC INTERACTIONS IN A MARINE PLANKTONIC FOOD WEB (28976)

17:00 **Bils, F.**; Moyano, M.; Aberle, N.; Hufnagl, M.; Alvarez-Fernandez, S.; Peck, M. A.: EXPLORING THE MICROZOOPLANKTON-ICHTHYOPLANKTON LINK: A COMBINED FIELD AND MODELING STUDY OF ATLANTIC HERRING (CLUPEA HARENGUS) IN THE IRISH SEA (29370)

17:15 Campbell, R. G.; **Ashjian, C. J.**; Sherr, E. B.; Sherr, B. F.: MESOZOOPLANKTON ARE NOT HERBIVORES: THE IMPORTANCE OF MICROZOOPLANKTON IN MESOZOOPLANKTON DIETS AND IN ARCTIC AND SUB-ARCTIC TROPHIC LINKAGES (30058)

054 SPATIAL AND TEMPORAL TRENDS IN MARINE BIODIVERSITY

Chair(s): Andrew Barton, abarton@princeton.edu
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Derek Tittensor, Derek.Tittensor@unep-wcmc.org

Location: 323 A

10:00 **Brainard, R. E.**; Timmers, M.; Reardon, K.; Oliver, T.; Vargas-Angel, B.; Williams, I.; Paulay, G.; Toonen, R.; Knowlton, N.; Meyer, C.; Ransome, E.; Rohwer, F.: INTEGRATED, INTERDISCIPLINARY ASSESSMENT AND LONG-TERM MONITORING OF BIODIVERSITY OF CORAL REEF ECOSYSTEMS ACROSS THE PACIFIC ISLANDS (29266)

10:15 **Spalding, H. L.**; Conklin, K.; Tsuda, R.; Kosaki, R.; Wagner, D.; Smith, C.; Sherwood, A.: BIODIVERSITY OF MESOPHOTIC MACROALGAE ACROSS THE HAWAIIAN ARCHIPELAGO: BIOGEOGRAPHIC INSIGHTS FROM THE DEEP (30085)

10:30 **Gabriel Reygondeau, G.**: CURRENT SPATIAL PATTERN OF GLOBAL AND MULTI-TAXONOMIC MARINE BIODIVERSITY* (28759)

10:45 **Lacroix-Lepage, C.**; Lesage, V.; Archambault, P.; Mosnier, A.; Gosselin, J.: SPATIAL ANALYSIS OF MARINE MAMMAL ASSEMBLAGES IN THE ESTUARY AND GULF OF ST LAWRENCE (CANADA) (28992)

12:00 **Smith, S. L.**: UNTANGLING THE CONTRIBUTIONS OF PHYSIOLOGICAL ACCLIMATION AND INTER-SPECIFIC COMPETITION FOR MODELLING SIZE-BASED PHYTOPLANKTON COMMUNITIES (30027)

FRIDAY

* REPRESENTS INVITED PRESENTATIONS

12:15 **Allen, S. R.**; Henson, S.; Hickman, A.; Beaulieu, C.; Doncaster, C. P.; Johns, D.: LONG-TERM STABILITY OF PHYTOPLANKTON COMMUNITY COMPOSITION IN THE NORTH EAST ATLANTIC (28927)

12:30 **Rii, Y. M.**; Lindh, M. V.; Church, M. J.: DIVERSITY AND DYNAMICS OF EUKARYOTIC PICOPLANKTON IN THE NORTH PACIFIC SUBTROPICAL GYRE (29187)

12:45 **Jeffrey, W. H.**; Moss, J. A.; Pakulski, J. D.; Snyder, R. A.: MICROBIAL PLANKTON DO NOT FOLLOW A LATITUDINAL GRADIENT IN DIVERSITY (29236)

14:30 **Victorero, L.**; Broad, E.; Sym, E.; Taylor, M.; Robinson, L.; Huvenne, V.: THE BIODIVERSITY AND SPATIAL DISTRIBUTION OF COLD-WATER CORALS ON EQUATORIAL- ATLANTIC SEAMOUNTS (29555)

14:45 **Gilarranz, L. J.**; Mora, C.; Bascompte, J.: ANTHROPOGENIC EFFECTS ON THE PERSISTENCE OF CARIBBEAN-REEF-FISH COMMUNITIES. MOVING FORWARD. (28512)

15:00 **Counsell, C. W.**; Donahue, M. J.: SPATIAL AND TEMPORAL VARIATION IN POCILLOPORA-ASSOCIATED COMMUNITIES IN HAWAI'I (29889)

15:15 **Ellis, J. I.**; Anlauf, H.; Kurten, S.; Lozano Cortes, D.; Alsaffar, Z.; Curdia, J.; Jones, B.; Carvalho, S.: IMPROVING COASTAL MANAGEMENT BY ASSESSING CORAL REEF AND SOFT SEDIMENT BIODIVERSITY PATTERNS AT REGIONAL SCALES (28489)

16:30 **García-Comas, C.**; Chiba, S.; Sugisaki, H.; Hashioka, T.; Smith, S. L.: SPECIES-LEVEL FUNCTIONAL TRAITS AFFECT DIFFERENTLY SPECIES-RANKING IN SUBARCTIC AND SUBTROPICAL COMMUNITIES OF COPEPODS (29335)

16:45 **Iglesias-Rodriguez, M. D.**; Matson, P. G.; Ladd, T. M.; Welch, Z. S.: BIOGEOCHEMICAL IMPLICATIONS OF MORPHOTYPE SUCCESSION IN COCCOLITHOPHORES (29961)

17:00 **Rynearson, T. A.**; Canesi, K. L.: NEW METHODS AND AN OLD TIME SERIES REVEAL TEMPORAL TRENDS IN DIVERSITY AMONG MORPHOLOGICALLY CRYPTIC DIATOM SPECIES. (29764)

17:15 **López-Figueroa, N. B.**; Gibson, D. M.; Rodríguez-Santiago, A. E.; Walters, T.; Frischer, M. E.: SPATIAL AND TEMPORAL TRENDS OF THE ZOOPLANKTON COMMUNITIES IN THE SOUTH ATLANTIC BIGHT (SAB) (29277)

059 ECOLOGICAL IMPACTS OF EL NIÑO 2015-16

Chair(s): Sally J. Holbrook, sally.holbrook@lifesci.ucsb.edu
Mark D. Ohman, mohman@ucsd.edu

Location: 313 A

10:00 **Di Lorenzo, E.**: A FRAMEWORK TO UNDERSTAND AND QUANTIFY THE DIVERSITY OF ENSO IMPACTS[T] (30166)

10:30 Hopcroft, R. R.; **Strom, S. L.**; Coyle, K. O.; Danielson, S. L.: THREE IN A ROW: CONTINUED WARM CONDITIONS ALONG THE GULF OF ALASKA'S SEWARD LINE (29983)

10:45 **Stephens, B. M.**; Aluwihare, L. I.; Wankel, S. D.; White, M. E.; Valencia, B.: STABLE ISOTOPE-BASED NITROGEN BUDGET FOR THE CALIFORNIA CURRENT ECOSYSTEM DOMAIN DURING THE 2014 BLOB AND 2015-2016 EL NINO: FROM SOURCE NUTRIENTS TO FOOD WEBS (29566)

12:00 **Beatty, J. L.**; Freibott, A.; Taylor, A. G.; Selph, K. E.; Landry, M. R.: EL NIÑO IMPACT ON MICROPLANKTON COMMUNITY STRUCTURE IN THE SOUTHERN CALIFORNIA CURRENT (29000)

12:15 **Matson, P. G.**; Gotschalk, C.; Ladd, T. M.; Siegel, D. A.; Washburn, L.; Iglesias-Rodriguez, M. D.: FORMATION AND PROPAGATION OF A NOVEL COCCOLITHOPHORE BLOOM IN THE SANTA BARBARA CHANNEL (29818)

12:30 **Sanchez-Velasco, L.**; Beier, E.; Godinez-Sandoval, V. M.; Santamaria-Del-Angel, E.; Barton, E. D.; Jimenez-Rosenberg, S. P.; Marinone, S. G.: HYDROGRAPHIC AND FISH LARVAE DISTRIBUTION DURING "EL NIÑO 2015-2016" IN THE NORTHERN PART OF THE SHALLOW OXYGEN MINIMUM ZONE OFF THE EASTERN TROPICAL PACIFIC (29022)

12:45 **Patris, S.**; Ucharm, G.; Bell, L. J.; Dawson, M. N.: 2015/2016 EL NIÑO IMPACTS ON JELLYFISH LAKE, PALAU (29308)

14:30 **Reed, D.**; Washburn, L.; Rassweiler, A.; Miller, R.; Bell, T.; Harrer, S.: EL NIÑO COUPLED WITH ANOMALOUS OCEAN WARMING CHALLENGE SENTINEL STATUS OF GIANT KELP AS AN INDICATOR OF CLIMATE CHANGE (28409)

14:45 **Witman, J. D.**; Smith, F.; Brandt, M.; Banks, S.; Moore, E.; Alitieri, A. H.; Lamb, R. W.: ASYMMETRIC, LARGE-SCALE COMMUNITY RESPONSES TO ENSOS IN GALAPAGOS SUBTIDAL ECOSYSTEMS (28679)

15:00 **Hill, M. S.**; Hill, A. L.; Lawson, B.; Cain, J. W.; Kvam, P.: MASS BLEACHING IN A CLIONAID SPONGE IN 2015: EXPLORING ECOLOGICAL AND EVOLUTIONARY CONSEQUENCES OF DYNAMIC AND ERRATIC INTRACELLULAR SYMBIOSES. (29525)

15:15 **Neal, B. P.**; Work, T. M.; Williams, G. J.; Price, N. N.: CORALLINE FUNGAL DISEASE (CFD) PEAK OCCURRENCE COINCIDES WITH THE 2015-2016 EL NINO EVENT ON THE CORAL REEFS OF PALMYRA ATOLL (29151)

16:30 **Montefalcone, M.**; Oprandi, A.; Morri, C.; Bianchi, C. N.: CORAL REEFS OF THE MALDIVES DECLINE ONCE AGAIN AFTER THE EL NIÑO EVENT OF 2015-2016 (28847)

16:45 **McNally, S. P.**; Claar, D.; Tietjen, K.; Carilli, J.; Baum, J.: BLEACH AND SURVIVE: NUTRITIONAL STATUS OF KIRITIMATI ATOLL CORAL COMMUNITIES THROUGH A NATURAL BLEACHING EVENT (29684)

17:00 **Wall, C. B.**; Ritson-Williams, R.; Gates, R. D.: ENERGETIC AND ISOTOPIC ANALYSIS OF TWO SPECIES OF THERMALLY STRESSED AND RECOVERED CORALS (29792)

17:15 **Courtney, T. A.**; Andersson, A. J.; De Carlo, E. H.; Page, H. N.; Koester, I.; Terlouw, G.; Tabata, R.; Bahr, K. D.; Rodgers, K. S.: CORAL BLEACHING IMPACTS ON REEF-SCALE NET CALCIFICATION AND NET COMMUNITY PRODUCTION IN KANE'OHE BAY, HI (29006)

066 IN HOT WATER: THE PHYSICS AND IMPACTS OF WARMING LAKES AND RESERVOIRS

Chair(s): Peter Blanken, blanken@colorado.edu
Simon Hook, simon.j.hook@jpl.nasa.gov
John Lenters, jlenters@limno.com
Sally MacIntyre, sally.macintyre@ucsb.edu

Location: 313 C

10:00 **Hampton, S. E.**; Powers, S. M.; Gallloway, A. W.; Labou, S. G.; Ozersky, T.; Stanley, E. H.; Woo, K. H.: GLOBAL SYNTHESIS OF WINTER PLANKTON AND NUTRIENT DATA FROM SEASONALLY ICE COVERED LAKES (30070)

FRIDAY

[T] REPRESENTS TUTORIAL PRESENTATIONS

10:15 **Ventelä, A. M.**; Kirkkala, T.; Karjalainen, J.; Marjomäki, T.; Keskinen, T.; Kotamäki, N.; Lathrop, R. C.; Deng, J.; Sarvala, J.: ECOLOGICAL CONSEQUENCES OF INCREASING WATER TEMPERATURE IN LARGE AND SHALLOW LAKE PYHÄJÄRVI (SW FINLAND, NORTH EUROPE) (29368)

10:30 **Harris, T. D.**; Jones, J. R.; Graham, J. L.; Obrecht, D.: RELATIONS BETWEEN NUTRIENTS, TEMPERATURE, AND MICROCYSTIN IN 15 MISSOURI RESERVOIRS (29471)

10:45 **Daniels, M. E.**; Danner, E. M.: COUPLING WATERSHED AND RESERVOIR MODELS FOR COLD-WATER CHINOOK SALMON HABITAT MANAGEMENT (30010)

076 PARTICLES AS MICROBIAL HOTSPOTS FROM THE COAST TO THE OPEN OCEAN IN THE ANTHROPOCENE

Chair(s): Astrid Gaerdes, astrid.gaerdes@leibniz-zmt.de
Eva-Maria Zetsche, Eva-maria.zetsche@gu.se
Hans-Peter Grossart, hgrossart@igb-berlin.de

Location: 305 A/B

10:00 Kegler, H. F.; Jennerjahn, T. C.; Kegler, P.; Jompa, J.; **Gärdes, A.**: INTENSIVE NUTRIENT UPTAKE AND ORGANIC PARTICLE AGGREGATION MITIGATE EUTROPHICATION IN CORAL REEF ECOSYSTEMS (29328)

10:15 **Steiner, P. A.**; Sintes, E.; De Corte, D.; Yokokawa, T.; Ivancic, I.; Paliaga, P.; Najdek, M.; Herndl, G. J.: SEASONAL PHYLOGENETIC AND FUNCTIONAL SUCCESSION OF BACTERIAL COMMUNITIES IN MARINE SNOW IN THE ADRIATIC SEA (28423)

10:30 **Bachmann, J.**; Heimbach, T.; Iversen, M. H.; Grossart, H. P.; Gärdes, A.: PARTICLE ATTACHED MICROBIOLOGY OFF THE COAST OF NORTH WEST AFRICA (28738)

10:45 **Suter, E. A.**; Pachiadaki, M.; Edgcomb, V.; Scranton, M. I.; Taylor, G. T.: PARTICLE-ASSOCIATED MICROBES CONTRIBUTE TO CRYPTIC CYCLING OF SULFUR AND NITROGEN (29743)

12:00 **Cardenas, A.**; Pogoreutz, C.; Raedecker, N.; Wild, C.; Voolstra, C.; Gärdes, A.: COMMUNITY COMPOSITION AND EXTRACELLULAR ENZYME PRODUCTION ASSOCIATED WITH BACTERIOPLANKTON IN CORAL REEF MESOCOSMS (29677)

12:15 **Jennings, M. K.**; Passow, U.; Wozniak, A. S.; Hansell, D. A.: DISTRIBUTION OF TRANSPARENT EXOPOLYMER PARTICLES (TEP) ACROSS AN ORGANIC CARBON GRADIENT (28745)

12:30 **Flintrop, C. M.**; Iversen, M. H.: USING CRYOSECTIONING TO EXAMINE BACTERIAL COLONIZATION DYNAMICS IN MARINE SNOW- WHAT CAN WE LEARN FROM INCREASED SPATIAL RESOLUTION? (29604)

12:45 **Hunter, J. E.**; Fredricks, H. F.; Behrendt, L.; Smriga, S.; Yawata, Y.; Sengupta, A.; Alcolombri, U.; Stocker, R.; Van Mooy, B.: SINGLE PARTICLE LIPIDOMICS: MICROSCALE LIPID ANALYSIS OF ORGANIC MATTER DEGRADATION IN SINKING PARTICULATE MATTER (30067)

083 TOWARDS UNDERSTANDING AND MANAGING MARINE ECOSYSTEMS AS COMPLEX ADAPTIVE SYSTEMS

Chair(s): Jorn Bruggeman, jbr@pml.ac.uk
Ketil Malde, ketil.malde@imr.no
Michael St. John , mstjo@aqua.dtu.dk

Location: 302 A/B

10:00 **Hagstrom, G. I.**; Levin, S. A.: MARINE ECOSYSTEMS AS COMPLEX ADAPTIVE SYSTEMS: EMERGENT PATTERNS, CRITICAL TRANSITIONS, AND PUBLIC GOODS (28955)

10:15 **Malde, K.**; Handegard, N. O.: DEEP LEARNING AND BIG DATA CHALLENGES IN MARINE SCIENCES (29331)

10:30 **Bruggeman, J.**: CAPTURING SPECIES SUCCESSION AND EVOLUTION IN LARGE-SCALE BIOGEOCHEMICAL MODELS (28945)

10:45 **St. John, M. A.**: CAN WE PREDICT THE EMERGENT PROPERTIES OF MARINE SYSTEMS, A WAY FORWARD? (28916)

12:00 **Subbey, S.**; Frank, A. S.; Planque, B.: THE (UN)PREDICTABILITY OF POPULATION DYNAMIC TRAJECTORIES (29409)

12:15 **Denson, L. S.**; Babcock, E. A.: OCEANOGRAPHIC INFLUENCES ON THE SPATIAL STRUCTURE OF FISH EARLY LIFE HISTORY AND SUBSEQUENT STOCK ASSESSMENT PARAMETERS (28763)

12:45 **Murphy, J. W.**; Spies, N. P.; Richmond, R. H.: WORKING TO ADDRESS ANTIOXIDANT DEFENSES AND RESPONSES IN A DEGRADED WATERSHED (28724)

084 SCALES OF VARIABILITY IN AQUATIC ENVIRONMENTS: ARE SOME MORE IMPORTANT THAN OTHERS?

Chair(s): Chris Patrick, christopher.patrick@tamucc.edu
Kelly Robinson, Kelly.Robinson@oregonstate.edu
Beth Stauffer, stauffer@louisiana.edu

Location: 302 A/B

14:30 **Anlanger, C.**; Noss, C.; Weitere, M.; Risse-Buhl, U.; Lorke, A.: SPATIAL SCALES OF HYDRAULIC AND MORPHOLOGICAL HABITAT DIVERSITY IN GRAVEL BED STREAMS (29448)

14:45 **Sassenhagen, I.**; Lozano-Duque, Y.; Gao, Y.; Erdner, D. L.: TEMPORAL AND SPATIAL POPULATION STRUCTURE OF *GAMBIERDISCUS CARIBAEUS* IN THE GREATER CARIBBEAN REGION (28456)

15:00 **Pineda, J.**; Reyns, . N.; Lentz, S.: MULTIPLE PROCESSES AND SCALES IN NEARSHORE LARVAL TRANSPORT INFERRED FROM LARVAL SETTLEMENT AND HIGH RESOLUTION PHYSICAL MEASUREMENTS (29906)

15:15 **Donahue, M. J.**; Silbiger, N. J.; Remple, K. L.; Fox, M. D.; Quinlan, Z. A.; Sevilla, J.; Putnam, H. M.; Nelson, C. E.: FROM ORGANISMS TO ECOSYSTEM PROCESSES: ADDITIVE AND NON-ADDITIVE SCALING IN CORAL REEF RESPONSE TO NUTRIENT ADDITION (30034)

16:30 **Stauffer, B. A.**: SUB-MESOSCALE VARIABILITY IN PHYTOPLANKTON ASSEMBLAGES IN PRODUCTIVE BAYS OF SOUTH LOUISIANA (29856)

16:45 **Schälicke, S.**; Raatz, M.; Bach, M.; Wacker, A.; Koussoroplis, A.: HUNGRY FOR NUTRIENTS IN HETEROGENEOUS ENVIRONMENTS: TEMPORAL NUTRIENT VARIANCE AND COVARIANCE EFFECTS ON THE PERFORMANCE OF CO-LIMITED INDIVIDUALS (28677)

17:00 **Robinson, K. L.**; Luo, J. Y.; Sponaugle, S.; Cowen, R. K.: SCALES OF VARIATION IN PATCH STRUCTURE AMONG LARVAL FISH, THEIR PREY, AND THEIR PREDATORS IN A SUBTROPICAL, WESTERN BOUNDARY CURRENT ECOSYSTEM (29964)

FRIDAY

17:15 **Kellner, J. B.**; Ji, R.; Thorrold, S.; Jones, B.; Choukroun, S.; Berumen, M. L.; Jones, G. P.; Planes, S.: MODELING MARINE METAPOPULATION CONNECTIVITY: UNDERSTANDING OCEANOGRAPHIC AND LIFE HISTORY INTERACTIONS ACROSS MULTIPLE SPATIAL SCALES (29756)

091 LONG-TERM PERSPECTIVES ON AQUATIC RESEARCH

Chair(s): Stephanie Hampton, s.hampton@wsu.edu
Bob Howarth, howarth@cornell.edu
Mark Ohman, mohman@ucsd.edu

Location: 308 A/B

10:00 **Pace, M. L.**; Wilkinson, G. M.; Carpenter, S. R.: LONG TERM ECOLOGICAL RESEARCH AND REPRODUCIBILITY: LESSONS FROM WHOLE LAKE EXPERIMENTS* (28969)

10:15 **Gaiser, E. E.**; Corsi, I.; Nodine, E.; Swain, H. M.: LONG-TERM RAINFALL CYCLES CONTROL LAKE PLANKTON DYNAMICS, DIVERSITY AND METABOLISM IN A LOW LATITUDE LAKE: AN ANALOG FOR FUTURE HIGH LATITUDE LAKES (29427)

10:30 **Cuhel, R. L.**; Aguilar, C.: INTERTWINED EXPRESSION OF EPISODIC ECOLOGICAL AND METEOROLOGICAL EVENTS IN A 20-YEAR CONTINUUM OF REPRODUCIBLE SEASONAL CYCLES FOR THE GREAT LAKE MICHIGAN (28818)

10:45 **Shatwell, T.**; Köhler, J.: LONG TERM EFFECT OF DECREASED NITROGEN LOADING ON PHYTOPLANKTON IN A SHALLOW LAKE (29760)

12:00 **Meyer-Jacob, C.**; Michelutti, N.; Paterson, A. M.; Bindler, R.; Smol, J. P.: USING MONITORING AND PALEOLIMNOLOGICAL DATA TO TRACK THE EFFECTS OF ACIDIFICATION AND LAND USE ON LAKE-WATER ORGANIC CARBON LEVELS IN NE NORTH AMERICA (29645)

12:15 **Mariani, M.**; Fletcher, M. S.; Saunders, K.; Gadd, P.; Zawadzki, A.; Chisari, R.: LONG-TERM AQUATIC ECOSYSTEMS' RESPONSES TO HYDRO-CLIMATIC FLUCTUATIONS AND TERRESTRIAL VEGETATION DYNAMICS IN SOUTHEAST AUSTRALIA (28504)

12:30 **Leavitt, P. R.**; Bogard, M. J.; Bunting, L.; Donald (1), D. B.; Donald (2), D. B.; Finlay, K.; Hall, R. I.; Hayes, N. M.; McGowan, S.; Swarbrick, V. J.; Patoine, A.; Rusak, J. A.; Simpson, G. L.; Vogt, R. J.; Limnology Field Team, 1.: REGULATION OF LAKE PRODUCTION AND PHYTOPLANKTON COMMUNITY COMPOSITION BY FLUXES OF NITROGEN – A SYNTHESIS OF 25 YEARS OF ECOSYSTEM ECOLOGY (29142)

12:45 **Leiva, C.**; Mateo, M. A.; Serrano, O.; Martinez, A.: BIOLOGICAL PROXIES IN THE POSIDONIA OCEANICA (L. DELILE) SEDIMENTARY RECORD PROVIDE INFORMATION ON ECOSYSTEM PALEO-PRODUCTIVITY. (28666)

14:30 **Houser, J. H.**; Bierman, D. W.; Burdis, R. M.; Casper, A. F.; DeLain, S. A.; Drake, D. C.; Fischer, J. R.; Giblin, S. M.; Moore, M. J.; Solomon, L. E.; Pendleton, R. M.; Kreiling, R. M.; Jankowski, K. J.: USING SPATIALLY EXTENSIVE, LONG-TERM DATA TO UNDERSTAND THE STRUCTURE AND FUNCTION OF A CHANGING, FLOOD-PLAIN RIVER SYSTEM (29779)

14:45 **Staniec, A. R.**; Vlahos, P.: DISSOLVED OXYGEN AND TEMPERATURE TRENDS IN LONG ISLAND SOUND (28999)

15:00 Philippoff, J.; Cox, T. E.; Foster, M. S.; La Valle, F.; Mino, P.; Gonzalez, A.; **Spalding, H. L.**: A 25 YEAR PERSPECTIVE REVEALS PAST AND RECENT SHIFTS IN TROPICAL NEARSHORE ALGAL ASSEMBLAGES (30102)

15:15 Miner, C. M.; **Gilbane, L.**; Raimondi, P. T.: LARGE-SCALE IMPACTS OF SEA STAR WASTING DISEASE AND RECENT RECRUITMENT PATTERNS FOR PISASTER OCHRACEUS (30165)

16:30 **Uye, S.**; Ikeda, H.; Takao, M.; Okawachi, H.; Hayashi, M.; Shimizu, M.; Setou, T.: BLOOMS AND NON-BLOOMS OF THE GIANT JELLYFISH *NEMOPILEMA NOMURAI* IN THE EAST ASIAN MARGINAL SEAS: 11-YEAR MONITORING USING SHIPS OF OPPORTUNITY (28349)

16:45 **Sherlock, R. E.**; Reisenbichler, K. R.; Messié, M.; Walz, K. R.; Schlining, B.; Robison, B. H.: THE DYNAMICS AND SEASONALITY OF THE MIDWATER COMMUNITY OF MONTEREY BAY: EXPLORATION OF A TWENTY-TWO YEAR MESOPELAGIC TIME-SERIES (29800)

17:00 **Reisenbichler, K. R.**; Chaffey, M. R.; Cazenave, F.; McEwen, R. S.; Henthorn, R. G.; Sherlock, R. E.; Thomas, H.; Robison, B. H.: THE DEVELOPMENT OF AN AUV VIDEO MODULE FOR PELAGIC WATER COLUMN SURVEYS: A SUSTAINABLE PATH FORWARD FOR MIDWATER TIME-SERIES STUDIES (30088)

17:15 Smith, Jr., K. L.; McGill, P. R.; **Huffard, C. L.**; Ruhl, H. A.; Sherman, A. D.; Henthorn, R. G.: PERSISTENCE MONITORING OF EPISODIC CARBON DEPOSITION EVENTS IN THE ABYSSAL NE PACIFIC: WHAT ARE WE MISSING? (28780)

FRIDAY POSTERS

001 AIR-WATER, SEDIMENT-WATER, AND MACROPHYTE-FACILITATED GAS EXCHANGE IN INLAND AND COASTAL SYSTEMS

Chair(s): Marco Aurelio dos Santos, aurelio@ppe.ufrj.br
David Ho, david.ho@hawaii.edu
Damien Maher, Damien.Maher@scu.edu.au

Location: Kamehameha Exhibit Hall

1 **Kuhn, M. A.**; Lundin, E.; Giesler, R.; Karlsson, J.: CARBON EMISSION FROM THAW PONDS LARGELY OFFSET THE LAND CARBON SINK OF DISCONTINUOUS PERMAFROST MIRES (28775)

2 **Jin, H.**; Yoon, T. K.; Begum, M. S.; Park, J. H.: IMPACTS OF RIVER IMPOUNDMENT AND POLLUTION ON DISSOLVED GREENHOUSE GASES IN A HIGHLY MODIFIED RIVER SYSTEM (28866)

3 **Ortiz-Suslow, D. G.**; Haus, B. K.; Graber, H. C.: THE ROLE OF WIND FORCING ON THE OCEAN SURFACE IN THE COASTAL ZONE (29012)

4 **Sanchez, M. L.**; del Giorgio, P.; Mordente, A.; Sinistro, R.; Lombardo, R.; O`Farrell, I.; Izaguirre, I.: SHALLOW LAKES FROM PAMPEAN PLAIN (ARGENTINA): SINK OR SOURCE OF GREENHOUSE GASES? (29051)

5 **Radu, D. D.**; Duval, T. P.: GREENHOUSE GAS FLUXES FROM A TEMPERATE PEATLAND UNDER VARIABLE PRECIPITATION REGIMES (29249)

6 **Madinger, H. L.**; Hall, R. O.: ESTIMATING GAS EXCHANGE IN STREAMS USING EXPERIMENTAL ARGON ADDITIONS (29922)

7 **Ho, D. T.**; De Carlo, E. H.; Schlosser, P.: AIR-SEA GAS EXCHANGE IN A SUBTROPICAL CORAL REEF ECOSYSTEM (30005)

8 **McTammany, M. E.**; Faulkner, K. R.; Reese, S. P.; Hayes, B. R.: SEASONAL AND INTERANNUAL VARIABILITY IN DAILY NET ECOSYSTEM PRODUCTION AND CO_2 FLUX OF THE SUSQUEHANNA RIVER (30143)

005 CORAL MICROBIOMES: SHALLOW, MESOPHOTIC, DEEP-SEA

Chair(s): Tracy Ainsworth, tracy.ainsworth@jcu.edu.au
Christina Kellogg, ckellogg@usgs.gov

Location: Kamehameha Exhibit Hall

84 **Sturm, A. B.**; Loerzel, A.; Raymundo, L.: EXAMINING PHYSICAL DAMAGE AND CORAL DISEASE ALONG HUMAN USE GRADIENTS IN TUMON BAY, GUAM (28620)

85 **Bernasconi, R.**; Stat, M.; Huggett, M.; Koenders, A.: GEOGRAPHICAL PATTERNS OF POTENTIAL CO-OCCURRENCE BETWEEN CORAL, SYMBIODINIUM AND BACTERIA (28845)

86 **Matsuda, S. B.**; Gates, R. D.: ASSESSING LANDSCAPE VARIABILITY OF *SYMBIODINIUM* ACROSS INDIVIDUAL CORAL COLONIES (*MONTIPORA CAPITATA*) IN KANEOHE BAY (29136)

011 PLASTIC FLOWING FROM LAND TO SEA: SOURCES, IMPACTS AND MITIGATION OF MACRO- AND MICROPLASTICS ACROSS A SPECTRUM OF AQUATIC ECOSYSTEMS

Chair(s): Luisa Galgani, luisa.galgani@icloud.com
Nanna B. Hartmann, nibh@env.dtu.dk
Steven A. Loiselle, loiselle@unisi.it
Martin Wagner, wagner@bio.uni-frankfurt.de

Location: Kamehameha Exhibit Hall

137 **Pinto, M.**; Sintes, E.; Harrison, J.; Langer, T.; Herndl, G. J.: ACTIVITY OF THE "PLASTISPHERE" IN THE NORTH ADRIATIC SEA (28407)

138 **Brandon, J. A.**; Freibott, A.; Taylor, A.; Ohman, M. D.: THE ABUNDANCE AND DISTRIBUTION OF NANOPLASTICS IN THE CALIFORNIA CURRENT AND THE NORTH PACIFIC SUBTROPICAL GYRE, IMAGED WITH A NOVEL METHOD (28541)

139 **Warmack, J. L.**; Omand, M. M.: SINKING MICROFIBERS ON THE NEW ENGLAND CONTINENTAL SHELF BREAK (28720)

140 **Not, C. A.**; Ho, N. H.: MICROPLASTIC DENSITY IN HONG KONG COASTAL WATERS: CURRENT STATE AND PRINCIPAL DRIVERS (29211)

141 **White, H. K.**: MICROPLASTICS IN THE DELAWARE RIVER WATERSHED (29221)

142 **Rist, S. E.**; Baun, A.; Hartmann, N. B.: A TASTE OF PLASTIC – QUANTIFYING MICRO- AND NANOPLASTIC INGESTION AND INTERACTIONS WITH FEEDING IN DAPHNIA MAGNA (29384)

143 **Masura, J. E.**; Baker, J. E.: SPATIAL AND TEMPORAL DISTRIBUTION OF MICROPLASTICS IN SURFACE WATERS OF PUGET SOUND (29612)

145 Sorokopud-Jones, M.; Wuerz, M.; Hudson, J. M.; **Huebner, J. D.**; Loadman, N. L.: EFFECT OF MICROPLASTICS ON LIFE HISTORY TRAITS IN 2 FRESHWATER MODEL ORGANISMS: *DAPHNIA MAGNA* AND *ORYZIAS LATIPES* (29899)

016 ADVANCES IN AQUATIC META-OMICS: CREATING TOOLS FOR MORE ACCURATE CHARACTERIZATION OF MICROBIAL COMMUNITIES

Chair(s): Brook Nunn, brookh@uw.edu
Emma Timmins-Schiffman, emmats@uw.edu

Location: Kamehameha Exhibit Hall

192 **Marechal, C.**; Jueterbock, A.; Hoarau, G.: COMPARISON OF THE SEAGRASS AND BROWN ALGAE MICROBIOME IN THE ARCTIC FJORD SKJERSTADFJORDEN, NORWAY (28923)

193 **Riffle, M.**; Timmins-Schiffman, E.; May, D. H.; Nunn, B. L.: ANALYSIS AND VISUALIZATION OF PROTEIN FUNCTION ENRICHMENT BETWEEN META-OMIC SAMPLES (29956)

194 **Anderson, M. R.**; Coleman, M. L.: ARE RARE TAXA MORE ACTIVE? THE CHALLENGE OF INFERRING ACTIVITY-ABUNDANCE RELATIONSHIPS FROM TRANSCRIPT/GENE RATIOS (30079)

021 CROSSING DISCIPLINARY BOUNDARIES ACROSS THE FRESHWATER-MARINE CONTINUUM TO ADVANCE THE UNDERSTANDING OF HARMFUL ALGAL BLOOMS (HABS)

Chair(s): Bryan Brooks, bryan_brooks@baylor.edu
Christopher Gobler, christopher.gobler@stonybrook.edu
Raphael Kudela, kudela@ucsc.edu
J. Thad Scott, thad_scott@baylor.edu
Jeffery Steevens, jeffery.a.steevens@erdc.usace.army.mil
Alan Wilson, wilson@auburn.edu

Location: Kamehameha Exhibit Hall

213 **Hunt, B. L.**; Baltzer, K. L.; Robertson, A.: BIOACCUMULATION AND DEPURATION OF CARIBBEAN CIGUATOXINS IN THE ZEBRAFISH, *DANIO RERIO* (28769)

214 **Basterretxea, G.**; Torres-Serra, F. C.; Alacid, E.; Font-Muñoz, J. S.; Camp, J.; Garces, E.: CROSS-SHORE ENVIRONMENTAL GRADIENTS IN THE MEDITERRANEAN COAST (28835)

215 **Van Dam, B. R.**; Tobias, C.; Paerl, H. W.; Zhu, G.: DIURNAL AND EPISODIC DRIVERS OF STABLE CARBON ISOTOPES AND DISSOLVED GASSES IN THE HYPEREUTROPHIC LAKE TAIHU, CHINA (29065)

218 **Rappa, V.**; Stumpf, R.; Tomlinson, M.; Dupuy, D.; Briggs, T.; Meredith, A.; Wynne, T.; Lamb, B.; Tzortziou, M.: FINDING HARMFUL ALGAE IN FLORIDA AND LAKE ERIE WITH HIGH RESOLUTION SATELLITES (29622)

220 **Egerton, T. A.**; Skiles, B. K.; Smigo, M.; Reece, K. S.; Smith, J. L.: MONITORING AND MANAGEMENT OF ALGAL BLOOMS IN VIRGINIA: AN INTERAGENCY APPROACH TO FRESHWATER AND COASTAL HABS IN RECREATIONAL AND SHELLFISH WATERS. (29653)

221 **Millman, W. S.**; Wiesner, K. M.; Gibala-Smith, L. A.; Sandusky, C.; Egerton, T. A.: BIOTIC AND ABIOTIC FACTORS INFLUENCING SUCCESSION OF MAJOR PHYTOPLANKTON TAXA IN AN URBAN ESTUARY IN SOUTHEAST VIRGINIA, USA (29682)

222 **Yap-Dejeto, L. G.**; Durante, Y. C.; Tan, I. L.: DISTRIBUTION OF *PYRODINIUM BAHAMENSE* VAR. *COMPRESSUM* AND OTHER DINOFLAGELLATE CYSTS IN SURFACE SEDIMENTS OF CANCABATO BAY, LEYTE, PHILIPPINES (29054)

223 **Tatters, A. O.**; Howard, M. D.; Webb, E. A.; Caron, D. A.: HETEROGENEITY OF TOXIN-PRODUCING CYANOBACTERIA AT A SEASONAL CREEK/OCEAN INTERFACE (29770)

224 **Spoo-Chupka, M. K.**: COPPER-BASED ALGAECIDES FOR TREATMENT OF NUISANCE AND HARMFUL CYANOBACTERIA BLOOMS: BLUNT TOOL OF PRECISION MANAGEMENT (29908)

225 **Hill, B. N.**; Corrales, J.; Scott, W. C.; Brooks, B. W.: SUBLETHAL TOXICITY OF THE HARMFUL HAPTOPHYTE *PRYMNESIUM PARVUM* TO TWO COMMON FISH SPECIES (30042)

226 **Kramer, B. J.**; Gobler, C. J.: THE RESPONSE OF TOXIC FRESHWATER CYANOBACTERIA TO CHANGES IN TEMPERATURE, CO_2, AND NITROGEN LIMITATION (30047)

227 **Shultz, D. M.**; Hayashi, K.; Kudela, R. M.: DIARRHETIC SHELLFISH POISONING TOXIN CONCENTRATIONS AND DINOPHYSIS ABUNDANCE IN MONTEREY BAY, CALIFORNIA (30059)

032 DOM REACTIVITY: UNDERLYING MECHANISMS AND PROCESSES

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Location: Kamehameha Exhibit Hall

319 **Ogawa, H.**; Tomita, M.: THE CHARACTERISTICS OF DEGRADATION OF DISSOLVED ORGANIC MATTER RELEASED BY SEAGRASS AND MACROALGAE (29290)

320 **Romera-Castillo, C.**; Bercovici, S. K.; Koch, B. P.; Jaffé, R.; Hansell, D. A.; Herndl, G.: ANTIOXIDANT ACTIVITY OF DISSOLVED ORGANIC MATTER FROM THE OPEN OCEAN (29313)

321 **Bif, M. B.**; Brand, L. A.; Hansell, D. A.: PRODUCTION AND CONSUMPTION OF ORGANIC CARBON IN CULTURES AND NATURAL POPULATIONS: ENVIRONMENTAL FACTORS CONTROLLING THE BIOREACTIVITY (29408)

322 **Acker, M.**; Berube, P. M.; Hogle, S. L.; Johnson, C. G.; Chisholm, S. W.; Repeta, D. J.: PROCHLOROCOCCUS AS A SOURCE OF ESTER PHOSPHONATES (30057)

047 UNRAVELING DEEP OCEAN ENIGMAS: DEEPWATER ENVIRONMENTS AS AN OCEAN EXPLORATION FRONTIER

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386 **Buchwald, C.**; Homola, K.; Estes, E.; Spivak, A.; Wankel, S. D.: NITROGEN CYCLING IN OLIGOTROPHIC DEEP-SEA SEDIMENTS: INSIGHTS FROM THE 15N AND 18O STABLE ISOTOPES OF NITRATE AND NITRITE IN POREWATERS (28748)

387 **Ogene, O. C.**; Le, J. T.; Levin, L. A.: SUBSTRATE-ANIMAL RELATIONSHIPS AT THE DEL MAR METHANE SEEP (28812)

048 CROSSING THE SCIENCE-POLICY BRIDGE: SUCCESSES AND CHALLENGES INFORMING POLICY AND MANAGEMENT DECISIONS

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Location: Kamehameha Exhibit Hall

388 **Ogene, O. C.**; Douglass, J. G.: PLASTIC BAGS AND PEOPLE'S OPINIONS (29047)

389 **Kolic, P. E.**; Freeman, A. M.: DEVELOPING METHODS OF ASSESSMENT FOR RESTORATION PROJECTS IN COASTAL LOUISIANA (29112)

390 **PARK, M.**: MANAGING COASTAL ENVIRONMENT BASED ON SCIENCE IN THE WEST COAST OF KOREA (29429)

391 Steensgaard, I. M.; **Hartmann, N. B.**; Rist, S.; Syberg, K.; Boldrin, A.; Hansen, S. F.: SCIENCE-BASED RECOMMENDATIONS ON ADRESSING EUROPEAN REGULATORY GAPS ALONG THE LIFE CYCLE OF PLASTIC BAGS (29522)

FRIDAY

T REPRESENTS TUTORIAL PRESENTATIONS

392 **Ciannelli, L.**; Conway, F. D.; Jones, J.; Spalding, A. K.: RISK AND UNCERTAINTY QUANTIFICATION AND COMMUNICATION IN MARINE SCIENCE AND POLICY DECISIONS (29911)

393 **Boyette, A. B.**; Parra, S. M.; Soto-Ramos, I.; Shiller, A. M.; Weidemann, A. D.; Joye, S. B.; Deary, A. L.; Cambazoglu, M. K.; Miles, T. N.; Book, J. W.; Graham, W. M.: CHARACTERIZATION OF STRATIFIED COASTAL WATERS IN RESPONSE TO A WINTER MISSISSIPPI RIVER FLOOD AND THE OPENING OF THE BONNET CARRE SPILLWAY, LOUISIANA (30090)

049 FROM THE MOUNTAINS TO THE SEA: FLUXES, TRANSFORMATIONS, AND IMPACTS OF LAND-DERIVED MATERIALS IN THE COASTAL ZONE

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Olivier Rouxel, rouxel@hawaii.edu

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394 **Paine, J. K.**; Peucker-Ehrenbrink, B.; Galy, V.; Voss, B.; Venditti, J.; Haught, D.; Marsh, S.; Gillies, S.: SEDIMENT SOURCES AND TRANSPORT IN THE FRASER RIVER (28364)

395 **Economy, L. M.**; Wiegner, T. N.: RAINFALL DRIVEN SHIFTS IN *STAPHYLOCOCCUS AUREUS* IN HILO BAY, HAWAI`I (28634)

396 **Wang, K.**; Chen, J.; Ni, X.; Zeng, D.; Li, D.; Glibert, P. M.; Jin, H.; Huang, D.; Qiu, W.: REAL-TIME MONITORING OF NUTRIENTS IN THE CHANGJIANG ESTUARY REVEALS SHORT-TERM NUTRIENT-ALGAL BLOOM DYNAMICS (28648)

397 **Knor, L. A.**; Bau, M.; Rouxel, O.; Tepe, N.; DeCarlo, E. H.: BASALT WEATHERING AND ITS CONTRIBUTION TO TRACE METAL COMPOSITION OF STREAM WATER IN O'AHU, HAWAI'I (29127)

398 **Moore, L. E.**; Goñi, M. A.; Alegria, E. A.; Welch, K. A.; Lebon, K.; White, A.; Watkins-Brandt, K.; Davidson, L.: WINTERTIME PARTICLE COMPOSITIONAL ANALYSIS OF THE OCEANIC-COASTAL RIVER INTERFACE ALONG THE OREGON COAST (29204)

399 **Rouxel, O. J.**: THE AQUATIC GEOCHEMISTRY OF IRON ISOTOPES IN RIVERS AND COASTAL WATERS (29214)

400 **Booth, H. S.**; Manning, M. M.: ASSESSING THE SUNSCREEN SHEEN: DETERMINING THE PRESENCE OF FOUR ORGANIC UV-FILTERS FROM FOUR SITES AT THE HANAUMA BAY MARINE LIFE CONSERVATION DISTRICT (29292)

402 **Hoyett, Z. J.**; Jagoe, C.; McLaughlin, S.; Leight, A. K.; Gonsalves, L. C.: SPATIO-TEMPORAL VARIATION OF NUTRIENTS IN THE CHOPTANK RIVER COMPLEX: CORRELATION BETWEEN LAND USE AND WATER QUALITY (29345)

403 **Beebe, C. A.**; Frank, K.; Nelson, C.; Alegado, R. A.: INVESTIGATING ECOSYSTEM SERVICES OF A HAWAIIAN FLOODED AGROECOSYSTEM (29398)

404 **Lacroix, F.**; Ilyina, T.: NUTRIENT REGIME CHANGES IN THE COASTAL OCEAN DRIVEN BY LAND DERIVED FLUXES IN A GLOBAL MODEL (29736)

405 **Barbeau, K. A.**; Ruacho, A.; Kahru, M.: SHELF SOURCES OF IRON IN THE SOUTHERN CALIFORNIA CURRENT SYSTEM (29765)

406 **Alegria, E.**; Corvi, E.; Goñi, M.; Moore, L.; Watkins-Brandt, K.; Welch, K.; White, A.: DISTRIBUTION OF PARTICULATE AND DISSOLVED ORGANIC MATTER AND NUTRIENTS ALONG THE OREGON MARGIN DURING THE WINTER SEASON (29996)

456 **Terlouw, G.**: INTER-ANNUAL PCO_2 TRENDS ON CORAL REEFS OF HAWAII (30168)

050 CURRENTS AND MATERIAL TRANSPORT AT THE OCEAN SURFACE

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Nicolas Wienders, nwienders@fsu.edu

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407 **Beletsky, R.**; Beletsky, D.; Rutherford, E. S.; Sieracki, J. L.; Bossenbroek, J. M.; Chadderton, W. L.; Wittmann, M. E.; Lodge, D. M.: SPREAD OF AQUATIC INVASIVE SPECIES BY CURRENTS IN THE GREAT LAKES (28538)

408 **Castelao, R.**; Luo, H.; Rennermalm, A.; Tedesco, M.; Bracco, A.; Yager, P.; Mote, T.: OCEANIC TRANSPORT OF SURFACE MELTWATER FROM THE SOUTHERN GREENLAND ICE SHEET (28572)

410 **Dukhovskoy, D. S.**; Morey, S. L.; Bourassa, M. A.: IMPACT OF REPRESENTATION OF THE OCEAN SURFACE CURRENTS ON SIMULATED OIL DRIFT TRAJECTORIES (28931)

411 **Haus, B. K.**; Ortiz-Suslow, D. G.; Laxague, N. J.; Mehta, S.; Dai, H.; Shao, M.; Lund, B.: OBSERVING THE AIR-SEA INTERFACE IN COASTAL OCEAN FRONTAL ZONES (28995)

412 **Zarate, L. A.**; DiMarco, S. F.; Whilden, K.; Knap, A.; Walpert, J.: A HIGH-FREQUENCY RADAR OCEANIC CURRENT MONITORING SYSTEM FOR THE TEXAS COAST: ENHANCEMENT TO THE TEXAS AUTOMATED BUOY SYSTEM (29109)

413 **Whilden, K. A.**; Zarate, L. A.; DiMarco, S. F.; Knap, A. H.: PRINCIPAL COMPONENT ANALYSIS OF HIGH FREQUENCY RADAR DATA OFF THE TEXAS COAST TO ANALYZE OCEAN SURFACE CURRENT STRUCTURE (29201)

414 **Maximenko, N. A.**; MacFadyen, A.; Kamachi, M.; Hafner, J.: MODELING THE DRIFT OF MARINE DEBRIS GENERATED BY THE 2011 TSUNAMI IN JAPAN AND SYNTHESIS WITH OBSERVATIONS (29935)

051 TOWARD GREATER SYNTHESIS: OCEAN COLOR IMAGERY AND BIOGEOCHEMICAL/ECOSYSTEM NUMERICAL MODELING

Chair(s): Mark Baird, Mark.Baird@csiro.au
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Jeremy Werdell, jeremy.werdell@nasa.gov

Location: Kamehameha Exhibit Hall

415 **Rousseaux, C. S.**; Gregg, W. W.: DERIVING PHYTOPLANKTON COMPOSITION FROM GLOBAL SIMULATED HYPERSPECTRAL DATA (28711)

FRIDAY

* REPRESENTS INVITED PRESENTATIONS

416 **Catlett, D.**; Siegel, D.; Guillocheau, N.: DERIVATIVE ANALYSIS DEMONSTRATES THE POTENTIAL AND LIMITATIONS FOR DERIVING PHYTOPLANKTON COMMUNITY STRUCTURE FROM HYPERSPECTRAL OCEAN COLOR OBSERVATIONS (29075)

417 **Gray, M. W.**; Brady, D. C.; Snyder, J.; Martin, T.; Whittemore, B.; Miller, K.: ENHANCED AQUACULTURE PRODUCTION THROUGH REMOTE SENSING, FIELD STUDIES, AND INDUSTRY PARTNERSHIPS (29135)

418 **Carberry, L.**; Roesler, C. S.: CHLOROPHYLL FROM SPACE: CONSTRUCTING A ROBUST VALIDATION DATA SET IN TIDALLY IMPACTED WATERS (29520)

419 **Penta, B.**; deRada, S.; McCarthy, S.; Lawson, A.; Gould, R.; Shulman, I.: SYNTHESIS OF OCEAN COLOR PRODUCTS AND IN-SITU DATA WITH A MARINE ECOSYSTEM MODEL TO CREATE DAILY ECOSYSTEM CLIMATOLOGIES (29747)

420 **Subramaniam, A.**; Juhl, A.; Bracco, A.; Montoya, J. P.: REMOTE SENSING OF PHYTOPLANKTON FUNCTIONAL TYPES IN THE NORTHERN GULF OF MEXICO – FACT OR FICTION? (29771)

421 **Brown, C. W.**; Moore, T. S.; Dutkiewicz, S.: PROJECTING THE ENVIRONMENTAL HABITAT FOR BLOOMS OF THE COCCOLITHOPHORE *EMILIANIA HUXLEYI* IN THE NORTH ATLANTIC (29867)

422 **Penta, B.**; deRada, S.; McCarthy, S.; Lawson, A.; Gould, R.; Shulman, I.: SYNTHESIS OF OCEAN COLOR PRODUCTS AND IN-SITU DATA WITH A MARINE ECOSYSTEM MODEL TO CREATE DAILY ECOSYSTEM CLIMATOLOGIES (30163)

052 VIRUSES AND PARASITES IN FOOD WEB INTERACTIONS

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423 Li, L.; **Monchy, S.**; Gerphagnon, M.; Delgado-Viscogliosi, P.; Viscogliosi, E.; Sime-Ngando, T.; Christaki, U.: METATRANSCRIPTOME ANALYSES TO GAIN A COMPREHENSIVE INSIGHT INTO TAXONOMIC AND FUNCTIONAL DYNAMICS DURING CHYTRID EPIDEMICS IN AN AQUATIC ECOSYSTEM (28426)

424 Rachik, S.; Genitsaris, S.; Breton, E.; Li, L. L.; Sime-Ngando, T.; Monchy, S.; **Christaki, U.**: SYMBIONTS AND DECOMPOSERS IN A MESO-EUTROPHIC COASTAL SYSTEM WITH MARKED PHYTOPLANKTON SUCCESSION (28479)

425 **Sime-Ngando, T.**; Jobard, M.; Rasconi, S.: MATCHING GENOTYPIC AND PHENOTYPIC DIVERSITY TO ECOLOGICAL FUNCTIONS IN FRESHWATER FUNGAL COMMUNITIES (28510)

426 **Nigro, O. D.**; Rappe, M.; Jungbluth, S.; Steward, G. F.: ARCHAEAL VIRUSES AND HOST CONNECTIONS WITHIN THE OCEANIC BASEMENT (30126)

427 **Fuchsman, C. A.**; Carlson, M. C.; Prieto Garcia, D.; Rocap, G.: AUTOCHTHONOUS ORGANIC MATTER CYCLING INFLUENCED BY LOCALLY ADAPTED CYANOPHAGE PHYLOTYPES IN THE EASTERN TROPICAL NORTH PACIFIC OXYGEN MINIMUM ZONE (30044)

053 TINY BUT MIGHTY: THE ROLE OF MICROZOOPLANKTON IN AFFECTING LOWER AND UPPER FOOD-WEB DYNAMICS

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Karen E. Selph, selph@hawaii.edu

Location: Kamehameha Exhibit Hall

428 Arias, A.; **Calbet, A.**; Saiz, E.: DIEL FEEDING RHYTHMS IN MICROZOOPLANKTON: EFFECTS OF PREY CONCENTRATION, PREY CONDITION, AND GRAZER NUTRITIONAL HISTORY (28516)

429 **Freibott, A.**; Valencia, B.; Rabines, A.; McCrow, J. P.; Selph, K. E.; Allen, A. E.; Landry, M. R.: TAXON-SPECIFIC PHYTOPLANKTON MORTALITY DUE TO MICROZOOPLANKTON GRAZING IN THE SOUTHERN CALIFORNIA CURRENT DURING THE 2014 BLOB AND 2016 EL NIÑO (29002)

430 **Sitta, K. A.**; Callahan, T. J.; Reed, M.; Mortensen, R.; Doll, C.; Greenfield, D. I.: TOP-DOWN AND BOTTOM-UP CONTROLS ON PHYTOPLANKTON ASSEMBLAGES IN TWO SOUTH CAROLINA ESTUARIES (29007)

431 **Cosgrove, S.**; Buskey, E. J.: ANALYSIS OF THE COMMUNITY OF PLANKTONIC PROTOZOA FOLLOWING EXPOSURE TO PHYSICALLY AND CHEMICALLY DISPERSED CRUDE OIL (29020)

432 **López Abbate, C.**; Molinero, J. C.; Barría de Cao, M. S.; Perillo, G. M.; Hoffmeyer, M. S.: LONG TERM CHANGES OF TINTINNIDS COMMUNITY IN AN ESTUARINE SYSTEM FROM THE SW ATLANTIC OCEAN (29456)

433 **Yang, E.**; Lee, Y.; Lee, S.: THE TROPHIC ROLE OF MICROZOOPLANTKON IN THE AMUNDSEN SEA, WESTERN ANTARCTICA (29586)

434 **Connell, P. E.**; Stukel, M. R.; Kelly, T. B.; Fuhrman, J. A.; Hammond, D. E.; Caron, D. A.: MICROBIAL CARBON FLUXES AT A COASTAL OCEAN SITE: AN INVERSE ECOSYSTEM MODELING ANALYSIS (29679)

435 Horn, H. G.; Boersma, M.; Alvarez-Fernandez, S.; Riebesell, U.; **Aberle, N.**: MICROZOOPLANKTON COMMUNITIES IN A HIGH CO2 WORLD: DOES OCEAN ACIDIFICATION MATTER? (29732)

059 ECOLOGICAL IMPACTS OF EL NIÑO 2015-16

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489 **Meltzer, H. S.**: USING EL NIÑO AS A PREVIEW OF CLIMATE CHANGE IMPACTS TO SOUTHERN CALIFORNIA COASTAL LAGOONS (28343)

490 **Holbrook, S. J.**; Burkepile, D. E.; Adam, T. C.; Brooks, A. J.; Schmitt, R. J.; Shantz, A. A.: IMPACT OF NUTRIENT ENRICHMENT ON CORAL BLEACHING, MORTALITY, AND RECOVERY DURING THE 2015-16 EL NINO (28439)

491 **Lamb, R. W.**; Smith, F.; Aued, A. W.; Salinas de León, P.; Suarez, J.; Witman, J. D.: EL NIÑO DRIVES HABITAT FILTERING AND WIDESPREAD DISEASE IN A TROPICAL MARINE FISH COMMUNITY (29016)

492 **Cairo, B.**; Lopez, J.; Mackey, K.: ASSESSING ENSO'S ROLE IN THE PRESENCE OF PROCHLOROCOCCUS ALONG SOUTHERN CALIFORNIA'S COASTLINE (29078)

FRIDAY

493 **Rivera, S. R.**; Rasina, B.; Azam, F.; Aluwihare, L. I.: COMPARING BACTERIAL ABUNDANCE IN THE CALIFORNIA CURRENT ECOSYSTEM REGION ACROSS EL NIÑO, BLOB, AND NORMAL YEARS (29262)

494 **Ucharm, G.**; Patris, S.; Bell, L. J.; Dawson, M. N.: MIXING OF A MEROMICTIC LAKE, GOBY LAKE, PALAU (29315)

495 **Kelly, T. B.**; Stukel, M. R.: IMPACTS OF EL NINO ON EXPORT PRODUCTION IN THE CALIFORNIA CURRENT ECOSYSTEM (29416)

496 **Yeemin, T.**; Sutthacheep, M.; Ruangthong, C.; Pengsakun, S.; Samsuvan, W.: IMPACTS OF THE 2016 CORAL BLEACHING EVENT IN THE GULF OF THAILAND (29435)

497 **Ohman, M. D.**; Aluwihare, L.; Barbeau, K. A.; Goericke, R.; Kahru, M.; Landry, M. R.; Rudnick, D. L.; Send, U.; Stukel, M. R.: RESPONSE OF THE CALIFORNIA CURRENT PELAGIC ECOSYSTEM TO EL NINO 2015-16 (29631)

498 **Hetherington, E. D.**; Kurle, C. M.: INVESTIGATING EFFECTS OF ANOMALOUS OCEANOGRAPHIC CONDITIONS ON PELAGIC FOOD WEB DYNAMICS IN THE CALIFORNIA CURRENT USING STABLE ISOTOPE ANALYSES (29862)

499 **Fagan, A. J.**; Martiny, A. C.: THE EFFECT OF AN ENSO ON COASTAL NUTRIENTS AND PARTICULATE ORGANIC MATTER CONCENTRATIONS AND RATIOS (29894)

500 **Dustan, P.**; Milner, C.; Currier, K.; Wheeler, L.; Alling, A.: EL NINO 2015-2015: WHAT A DIFFERENCE A YEAR MADE TO THE CORAL REEFS OF MENJANGAN ISLAND, BALI BARAT NATIONAL PARK, INDONESIA (29947)

076 PARTICLES AS MICROBIAL HOTSPOTS FROM THE COAST TO THE OPEN OCEAN IN THE ANTHROPOCENE

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574 **Takeuchi, M.**; Okamoto, M.; Doubell, M.; Yamazaki, H.; Jackson, G.: IN-SITU OBSERVATIONS OF MARINE AGGREGATES; FORMATION OF AGGREGATES AND TURBULENCE (28811)

575 **Svensson, J. R.**; Marshall, D. J.; Kourtchenko, O.; Godhe, A.; Ploug, H.: DECONSTRUCTING BIODIVERSITY: THE RELATIVE ROLES OF EVENNESS AND RICHNESS ON COMMUNITY ASSEMBLY AND INVASION (30154)

084 SCALES OF VARIABILITY IN AQUATIC ENVIRONMENTS: ARE SOME MORE IMPORTANT THAN OTHERS?

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Beth Stauffer, stauffer@louisiana.edu

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611 **Deininger, A.**; Faithfull, C.; Karlsson, J.; Bergström, A. K.: A MATTER OF TIMING - SEASONALITY EFFECTS ON PELAGIC FOOD WEB AFTER WHOLE LAKE N ENRICHMENT IN OLIGOTROPHIC BOREAL LAKES IN SWEDEN (28509)

612 **Gunther, L. A.**; Kiffney, P. M.; Jones, E. L.: RECOLONIZATION OF JUVENILE COHO SALMON, *ONCORHYNCHUS KISUTCH*, IN THE CEDAR RIVER WATERSHED: TEMPORAL AND SPATIAL DYNAMICS (28619)

614 **Enge, A. J.**; Quell, G.; Nagy, M.; Heinz, P.: THRIVING UNDER STRESS – BENTHIC FORAMINIFERA FROM THE OXYGEN MINIMUM ZONE IN THE EASTERN ARABIAN SEA (29111)

615 **Flinn, M. B.**; Jent, D. G.; Parker, S. P.: THE EFFECT OF CONTRASTING HABITATS ON MACROINVERTEBRATE PATTERNS OF BIODIVERSITY IN AN ARCTIC WATERSHED (29745)

616 **Wiltsie, D.**; Green, J.; Vander Borgh, M.; Fensin, E.; Aziz, T.; Obenour, D.; Smithheart, J.; Schnetzer, A.: CYANOBACTERIAL DYNAMICS IN JORDAN LAKE, NORTH CAROLINA (29905)

617 **Reyns, N.**; Pineda, J.; Lentz, S.: VARIABILITY IN NEARSHORE LARVAL TRANSPORT: CHANGES IN LARVAL CONCENTRATION AND IMPORTANCE OF VERTICAL SCALES (29936)

091 LONG-TERM PERSPECTIVES ON AQUATIC RESEARCH

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Bob Howarth, howarth@cornell.edu
Mark Ohman, mohman@ucsd.edu

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630 **Smith, N. N.**; Driscoll, C. P.; Weschler, A.: MORBILLIVIRUS IN MARINE MAMMALS (28548)

631 **Bugica, K.**; Sterba-Boatwright, B.; Wetz, M. S.: LONG-TERM WATER QUALITY TRENDS IN TEXAS ESTUARIES: RELATIONSHIPS WITH CLIMATIC VARIABILITY AND WATERSHED LAND USE CHANGE (28797)

633 **QU, X.**; ZHANG, M.; LIU, X.; PENG, W.; CAI, Q.: LONG-TERM AND SHORT-TERM CHANGES IN MACROINVERTEBRATE COMMUNITIES FOLLOWING CONSTRUCTION OF SMALL DAMS (28865)

634 **Knudson, T. M.**; Kain, A.: ZOOPLANKTON FECUNDITY IN RESPONSE TO HYDROLOGICAL OPERATIONS IN LAKE ROOSEVELT, WASHINGTON (28990)

635 **Buskey, E. J.**; Scheef, L.; Hyatt, C. J.: EFFECTS OF DROUGHT AND PULSED FRESHWATER INFLOWS ON GROSS PRIMARY PRODUCTION AND COMMUNITY RESPIRATION IN THE MISSION ARANSAS ESTUARY (29061)

636 **Pezner, A. K.**; Chen, G.; Rynearson, T. A.: ZOOPLANKTON BIODIVERSITY AND COMMUNITY COMPOSITION IN RESPONSE TO ENVIRONMENTAL CHANGE IN NARRAGANSETT BAY (29176)

637 **Olafsdottir, S. R.**; Valdimarsson, H.: TIME SERIES OBSERVATIONS, 1983-2016, OF NUTRIENTS AND INORGANIC CARBON IN HIGH LATITUDE NORTH ATLANTIC (29395)

638 **Saar, K.**; Ott, I.: LONG-TERM TRENDS OF WATER PROPERTIES IN ESTONIAN SMALL LAKES (29403)

639 **Marino, R.**; Hayn, M.; Duskey, E.; Howarth, R. W.: PATTERNS IN THREE LONG-TERM DATA SETS ELUCIDATE THE IMPORTANCE OF EPIPHYTIC N-FIXATION AS A NITROGEN SOURCE IN A SHALLOW COASTAL BAY (29632)

640 **McGill, P. R.**; Henthorn, R. G.; Bird, L. E.; Huffard, C. L.; Klimov, D. V.; Smith, Jr., K. L.: SEDIMENTATION EVENT SENSOR: EARLY INSIGHTS INTO VARIABILITY OF SINKING PARTICULATE MATTER AT HOURLY RESOLUTION, AND FUTURE EVENT DETECTION (29731)

FRIDAY

* REPRESENTS INVITED PRESENTATIONS

AUTHOR INDEX

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

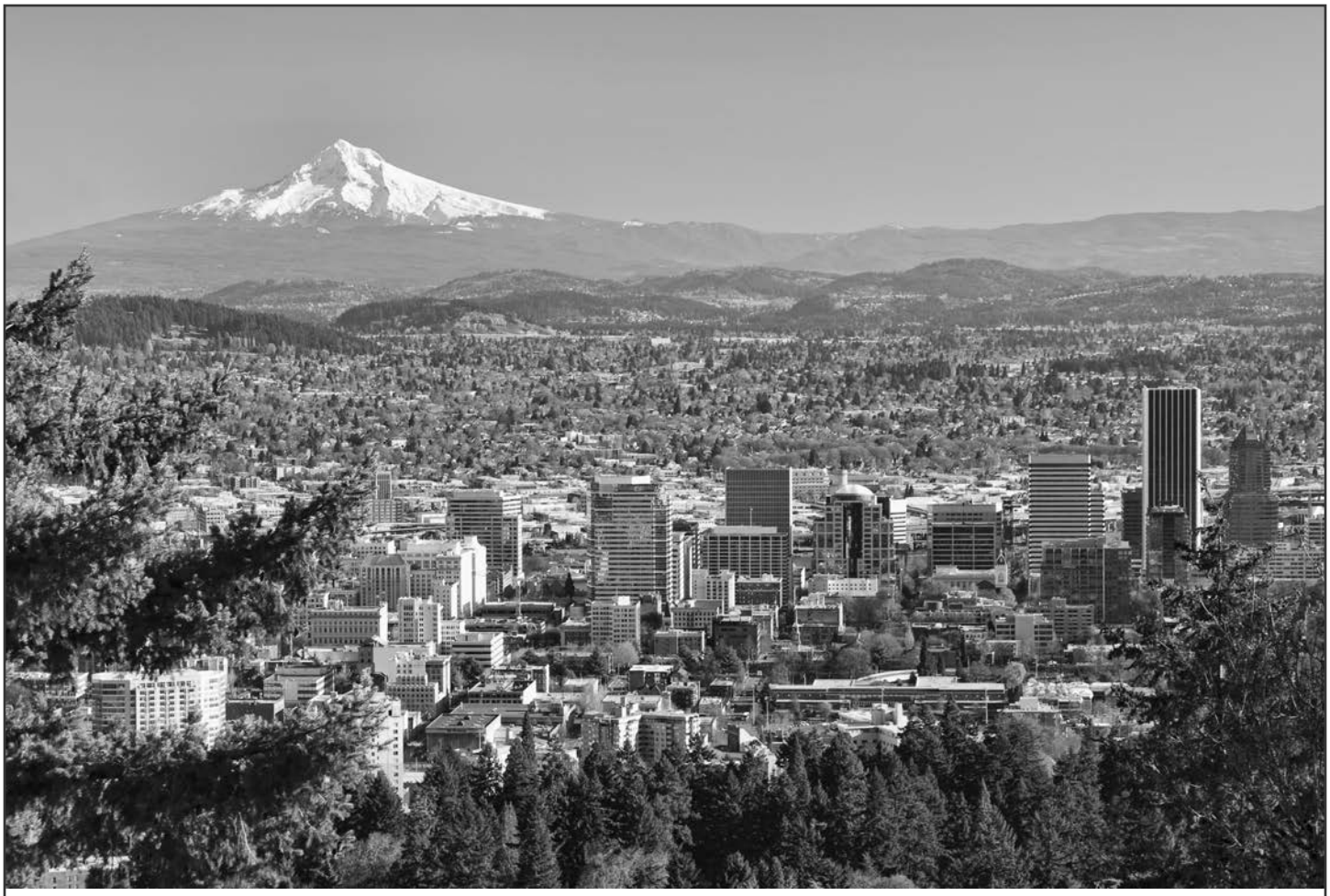
V

W

X

Y

Z



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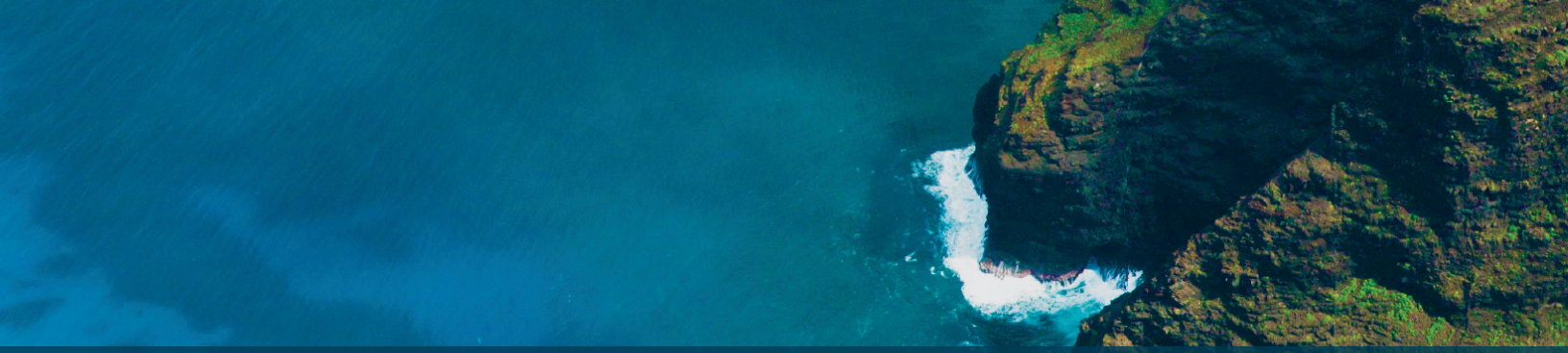

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