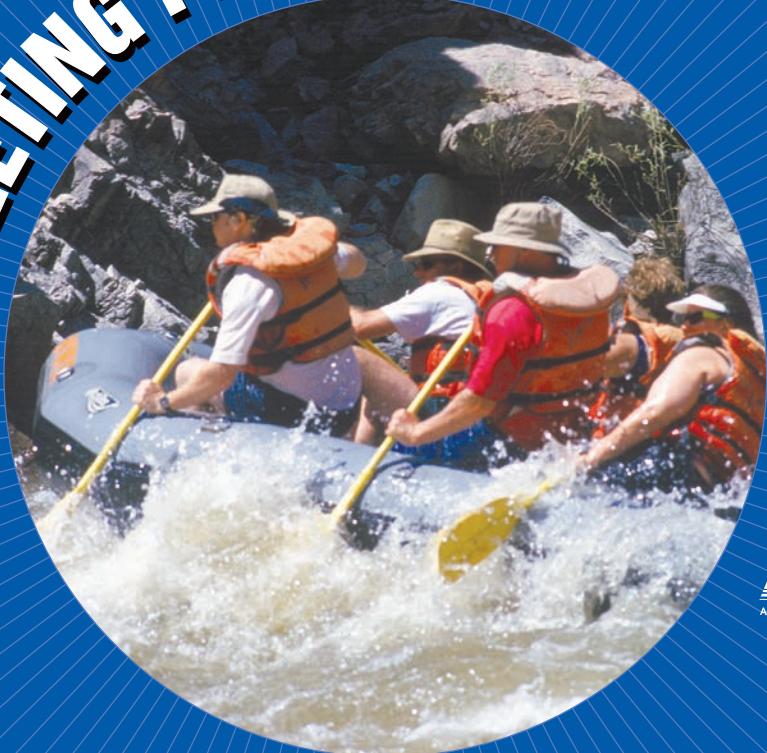


**MEETING PROGRAM**



Celebrate ASLO's return to Santa Fe by getting outside of the box for some great science and some engaging and unique events! Register and book your travel early!

Sponsored by the American Society of Limnology and Oceanography



# **WATER ROCKS!**

ASLO 2007 Aquatic Sciences Meeting  
February 4-9, 2007 • Santa Fe, New Mexico

**Plankton and Art • Mystery Sessions • Kegs and a Band • [www.aslo.org/santafe2007](http://www.aslo.org/santafe2007)**

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## MESSAGE FROM THE CO-CHAIRS

### HELLO SANTA FE!

#### Welcome to the 2007 Aquatic Sciences Meeting!

We hope you are ready to rock out with great science and fun events of all kinds this week. True to our promise to go outside of the box on this meeting, we are trying several new things.

Each day we will have a Mystery Session – an eclectic mix of innovative, integrative, and exciting abstracts for those wanting to take a chance to broaden their horizons. Wednesday will be a full day devoted to posters, award presentations, and small-group meetings and workshops. To encourage attendees to stick around for all the great talks on Friday afternoon, we will be hosting a Last Talk Lottery, in which chairs for all afternoon sessions will hand out lottery tickets for great prizes for a must-be-present-to-win drawing after the last talk.

Santa Fe is known for its art and this year, ASLO will join that tradition. Peter LeB. Williams has organized a series of events related to the theme of “Plankton and Art,” including an exhibition at the LaFonda (from Tuesday through Thursday.) Our Tuesday plenary lecture features David Thomas presenting “Plankton as an Inspiration in Art,” and there will also be two evening showings of the new film Proteus, a documentary based on Ernst Haeckel’s life and work. Finally, at a number of informal venues throughout the meeting week, we will present the Water Rocks! slideshow, which showcases the fun and excitement of aquatic sciences research.

Though one of ASLO’s most popular meeting venues, Santa Fe has its own unique logistical challenges, particularly regarding space. Plenary lectures and the ASLO award presentations will take place in the art-deco Lensic Theater. Scientific sessions will be held at three venues – the Eldorado, Hilton, and LaFonda hotels. To minimize the inevitable overlap between related sessions, we tried to place them on different days or at different times. When we exhausted those possibilities, we tried hard to group complementary sessions in the same hotel to allow easy movement between talks. We also scheduled two 15-minute breaks during both morning and afternoon sessions to allow attendees to move between locations.

With talks in multiple venues, we have events scheduled each evening to bring everyone together – while allowing ample time to sample all the great restaurants Santa Fe has to offer. The meeting will open with a reception on Sunday night. Monday and Wednesday nights we are keeping it simple by providing “Kegs and a Band” (wine and soft drinks also available). Monday’s band, Café Moca, will be playing Salsa, and our own Fred Lipschultz has graciously agreed to give Salsa lessons before the band starts! Bring your dancing shoes, discuss the great talks you heard that day, or just kick back and relax. Finally, if you have had enough high culture after a few days, on Thursday night, ASLO is going bowling!

For those who are about to rock, we salute you!

#### **Deborah Bronk and Jim Elser**

ASLO 2007 Aquatic Sciences Meeting Co-Chairs,  
on behalf of the planning committee

## SCIENTIFIC PROGRAM

The scientific program includes plenary lectures, contributed and special sessions, involving both oral and poster presentations, plus optional workshops and town hall meetings. The meeting runs for five full days, Monday through Friday. There will be coffee breaks to allow discussion and movement between the venues.

Please continue to check the conference web site – <http://www.aslo.org/santafe2007> – for up-to-date information.

## PLENARY ADDRESSES

There will be plenary talks on Monday, Thursday, and Friday mornings and Tuesday evening.

### “GENOMICS: FROM MEDICINE TO THE ENVIRONMENT”

Monday, February 5, 2007 - 8:30-9:15am



**J. Craig Venter, J. Craig Venter Institute, Rockville, MD**

*Biography:* J. Craig Venter, Ph.D., is regarded as one of leading scientists of the 21st century for his invaluable contributions in genomic research and is one of the country's most frequently cited scientists. He is Founder, Chairman, and CEO of the J. Craig Venter Institute, a not-for-profit, research and support organization dedicated to human, microbial, plant and environmental genomic research, to the exploration of social and ethical issues in genomics, and to seeking alternative energy solutions through genomics. The J. Craig Venter Institute has two divisions, The Institute for Genomic Research (TIGR), founded by Dr. Venter in 1992; and The Center for the Advancement of Genomics (TCAG).

Venter began his formal education after a tour of duty as a Navy Corpsman in Danang, Vietnam, from 1967 to 1968. After earning both a Bachelor's degree in Biochemistry and a Ph.D. in Physiology and Pharmacology from the University of California at San Diego, he was appointed professor at the State University of New York at Buffalo and the Roswell Park Cancer Institute. In 1984, he moved to the National Institutes of Health campus where he pioneered a revolutionary new strategy for rapid gene discovery. At TIGR, he and his team decoded the genome of the first free-living organism, the bacterium *Haemophilus influenzae*, using his new whole genome shotgun technique. TIGR has sequenced more than 50 genomes to date using Dr. Venter's techniques.

In 1998, Dr. Venter founded Celera Genomics to sequence the human genome. The successful completion of this research culminated with the February 2001 publication of the human genome in the journal, *Science*. He and his team at Celera also sequenced the fruit fly, mouse, and rat genomes. Dr. Venter and his team at the Venter Institute continue to blaze new trails in genomics research and have recently published several important papers covering such areas as environmental genomics, synthetic genomics and the sequence and analysis of the dog genome.

Dr. Venter is the author of more than 200 research articles and is the recipient of numerous honorary degrees, public honors, and scientific awards. These include the 2001 Paul Ehrlich and Ludwig Darmstaedter Prize and the 2002 Gairdner Foundation International Award. Dr. Venter is a member of numerous prestigious scientific organizations including the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Society for Microbiology. In 2004 Dr. Venter was one of the first 38 people to be selected by Desmond Tutu as part of his "Hands that Shape Humanity" world exhibition.

## **"PLANKTON AS AN INSPIRATION IN ART"**

Tuesday, February 6, 2007 - 7:30-8:30pm

**David Thomas, University of Wales, Bangor, United Kingdom**

*Presentation:* The lecture, which will be part of ASLO's outreach program, will be designed for a general audience. It will take Poincaré's (a 19th century mathematician who initiated the study of fractals) stance that there is beauty in nature because of the harmony in its component parts. The lecture will start with a consideration of the beauty and richness of shape, form, and movement in nature, drawing examples from a range of marine forms. It will then pick up the work of Ernst Haeckel, and in particular his influence in architecture and design. This will lead to the recent work by the biologist Christian Hamm on the structural properties of the silica structures surrounding microscopic algae and the architecture of Frei Otto, most famous for his organic structures in the Munich Olympic Stadium. The talk will then move to other groups of plankton and the ways these organisms have excited the imaginations of the wood carver and jeweller – Louise Hibbert and Sarah Parker-Eaton. In its conclusion, the lecture will return to highlighting how scientists and artists need the same skills to appreciate the complexity of the subjects they are trying to interpret by their very different methods of expression.

*Biography:* David Thomas is Professor in Marine Biogeochemistry at the School of Ocean Sciences, University of Wales, Bangor, UK. He obtained his Ph.D. from the University of Liverpool for the study of salt tolerances in Cladophora. Between 1989 and 1996, he held four research scientist posts in Germany at the University of Bremen, Alfred Wegener Institute, Bremerhaven, University of Oldenburg, and Centre for Marine Tropical Ecology, Bremen. He has become increasingly interested in the public understanding of science, and was awarded a British Association Science and Technology Media Fellowship in 1999. Since 2001, Thomas has been involved in an innovative collaboration with designer-makers Sarah Parker-Eaton and Louise Hibbert in a project called "Plankton Art."

## **"PREPARING FOR A CHANGING WORLD: THE ROLE OF THE GEOSCIENCE EDUCATION"**

Thursday, February 8, 2007 - 8:30-9:15am

**Heather Macdonald, The College of William and Mary,  
Williamsburg, VA**

*Presentation:* This is a time of great change as science becomes more interdisciplinary: we have new technological capabilities, and we work in an increasingly global community. Developing, recruiting, and retaining top students, scientists, and engineers is one of the main

recommendations of the recent report, "Rising Above The Gathering Storm." What, then, are effective strategies for preparing students for a future of rapid change and supporting scientists in the early stages of their career? Geoscience education can help faculty teach by providing insights from research on learning, deeper understanding of effective teaching strategies, high-quality instructional materials that promote data-rich, inquiry-based learning, and ideas for promoting adaptive learning. Faculty have a critical role to play in preparing their students for professional careers, and the mentoring of students and early-career scientists is important. The professional development program for geoscience faculty, On the Cutting Edge, supports faculty by providing an integrated series of workshops and thematic online resource collections at <http://serc.carleton.edu/NAGTWorkshops>. Other resources, including those about building strong departments, are available through the Science Education Resource Center (<http://serc.carleton.edu>). These resources that bring faculty up to date in geoscience content and pedagogy and that provide opportunities for networking can help us work as individuals, as departments, and as a community to better prepare students for a changing world.

*Biography:* Heather Macdonald is a professor and chair of the Geology Department at The College of William and Mary, and has played a leadership role in the national geoscience education community for many years. She has been president of the National Association of Geoscience Teachers, chair of the Geological Society of America's Geoscience Education Committee, chair of the SEPM K-12 Education Committee, and a member of the AGU Committee on Education and Human Resources. She is one of the leaders of On the Cutting Edge, a professional development program for current and future geoscience faculty (<http://serc.carleton.edu/NAGTWorkshops>). As a part of On the Cutting Edge, she has focused on resources for geoscientists early in their career such as Teaching, Research, and Managing Your Career for Early Career Faculty and Preparing for an Academic Career: Workshops for Graduate Students and Post-doctoral Fellows. She is also involved in the project, Building Strong Geoscience Departments, which provides resources for geoscience departments to improve their academic programs and presence on campus.

## **"TSUNAMIS: A JOURNEY THROUGH THEIR MANIFESTATION AND AFTERMATH"**

Friday, February 9, 2007 - 8:30-9:15am

**Harindra Joseph Fernando, Arizona State University,  
Tempe, AZ**

*Presentation:* Tsunamis are giant waves that form when large sections of seafloor undergo abrupt and violent vertical movement due to fault rupture, landslides, or volcanic activity. Their formation, propagation in deep and coastal oceans, landfall, and ensuing deadly devastation are described in this presentation, paying particular attention to the Sumatra Tsunami of the Indian Ocean that occurred on December 26, 2004. Much of the discussion will be centered on observations made in Sri Lanka, where close to 27,000 people lost their lives and another 4,000 remain unaccounted. The tale of the Sumatra Tsunami in Sri Lanka typifies the mighty destructive forces of nature that control large-scale disasters, the unpredictability of natural phenomena driving such disasters, as well as the uncontrollability of their manifestation. Their destruc-

tive aftermath, although, could have been mitigated through better alertness and preparedness, education, preservation and reinforcement of natural defenses, sound design of coastal infrastructure, coordinated relief efforts, unselfish corporation across ethnic, social and political fabrics, and scientifically based reconstruction policies. Inadequate scientific knowledge has been a major hindrance in responding to tsunami disasters, and this paper highlights some of the key issues at hand where future research ought to be focused.

**Biography:** Harindra Joseph Fernando is a professor of Mechanical and Aerospace Engineering and director of the Environmental Fluid Dynamics program at Arizona State University. A native of Sri Lanka, Dr. Fernando has an undergraduate degree from the University of Sri Lanka and graduate degrees from Johns Hopkins University. His research involves both theoretical and applied aspects of fluid dynamics in both air and water and involves close interactions between computer models, physical models, and field studies. Most recently he has been involved in forensic analysis of the Indian Ocean tsunami devastation and in design of mitigation efforts to reduce future tsunami impacts.

## ASLO AWARD RECIPIENT TALKS

ASLO Award recipient talks will be introduced by Sybil Seitzinger, ASLO President, Rutgers University. The ASLO Award recipient lectures will be on Wednesday morning from 8:30 to 9:45 am and after lunch from 1:30 to 2:45 pm.

- Recipient of the Distinguished Service Award  
**C. Susan Weiler, Whitman College, Walla Walla, WA**
- Recipient of the John H. Martin Award for a High-Impact Paper in the Aquatic Sciences  
**R. L. Vannote, G.W. Minshall, K.W. Cummins, J. R. Sedell, and C. E. Cushing** for Vannote, R. L., Minshall, G.W., Cummins, K.W., Sedell, J. R., and Cushing, C. E. 1980. The river continuum concept. Can. J. Fish. Aquat. Sci. 37: 130-137.
- Recipient of the Alfred C. Redfield Lifetime Achievement Award  
**Jorg Imberger, University of Western Australia, Crawley, WA, Australia**
- Recipient of the Raymond Lindeman Award for the Outstanding Paper in Aquatic Science by a Young Scientist  
**Kelly M. Dorgan, Darling Marine Center, Walpole, ME** for "Biomechanics of Burrowing in Muddy Sediments By Crack Propagation"

**Presentation Abstract:** Marine muds are elastic solids through which animals move by propagating a crack-shaped burrow. Dilations previously considered anchors serve to exert radial compressive stress that, through elastic behavior of the medium, focuses axial tensile stresses strongly at the tip of the burrow. This focused stress breaks adhesive bonds, propagating a crack for the animal to follow. The force required to propagate a crack has been measured in gelatin, an analogue of muddy sediment, using photoelastic stress analysis. This mechanism of burrowing by fracture is consistent with descriptions of burrowing across phyla and helps explain long-puzzling anatomies and behaviors of burrowing animals. Understanding of this mechanism raises questions

about the reputed high energetic cost of burrowing, feeding guild classifications—specifically surface deposit feeders—and identifies some potential artifacts in benthic studies of chemistry and bioturbation. The response of sediments to forces exerted by burrowers depends on the mechanical properties (stiffness and fracture toughness), and understanding of that relationship will lead to advances in automaton modeling of bioturbation. Any serious mechanical analysis of swimming involves relevant physical properties of the medium. Going forward, the same will now be true of burrowing.

- Recipient of the Ruth Patrick Award for Environmental Problem Solving  
**George W. Kling, University of Michigan, Ann Arbor, MI**
- Recipient of the G. Evelyn Hutchinson Award  
**John P. Smol, Queen's University, Kingston, ON, Canada**

## ABOUT SANTA FE

ASLO will be returning to Santa Fe after many requests to do so. Santa Fe is the capital of New Mexico and the oldest capital city in America. It has preserved much of its past, while remaining a vibrant city that is recognized as a center for art and culture. Art and culture are the very heart of Santa Fe, and it is the home to many wonderful museums and galleries. Santa Fe is also the home of creative chefs, innovative cuisine, and wonderful restaurants.

Located 7,000 feet above sea level, nearby mountain peaks are above 12,000 feet, and as such, is a city with many recreational opportunities including skiing just 30 minutes from downtown.

The weather in Santa Fe averages 300 days of sunshine but winters can be cool with snow possible. Average temperature in February ranges from 48/24 F or 8/-4 C.

Santa Fe Municipal Airport has commercial flights from Denver on Great Lakes Aviation. Otherwise, Albuquerque International Sunport is just one hour away and is served by American, America West, Continental, Delta, Frontier, Northwest, Southwest, United, Great Plains, Mesa, and Skywest Airlines. All major rental car agencies have offices at the Sunport. Shuttle service is also available.

## ABOUT THE CONFERENCE MEETING SITE

Previously ASLO met in part, in the Sweeney Convention Center. Right now it is in full excavation. Archaeologists discovered a Native American village under this facility. The village dates back to the early 1200s.

Careful planning has been done to allow the most exciting program with a minimal disruption in attending sessions. Sessions and activities will take place in the beautiful Lensic Theater, as well as the Eldorado, Hilton, and La Fonda Hotels.

A wide range of housing arrangements has been made to assist you with your needs. Room rates range from \$99.00 to \$159.00. Hotel reservation information is included in this Call for Papers along with reservation instructions for these hotels. All are within walking distance of the meeting events and city activities.

## ORGANIZING COMMITTEE

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**Susana Feng**, Managing Editor

*L&O: Methods*

**Adrienne Sponberg**, Director of Public Policy

**Helen Schneider Lemay**, Business Manager

sg Meeting & Marketing Services

## MARK YOUR CALENDAR

### **30<sup>th</sup> Congress of the International Association of Theoretical and Applied Limnology (SIL)**

Co-sponsored by ASLO

August 12-18, 2007, Montreal, Quebec, Canada

### **ASLO-AGU-TOS Ocean Sciences Meeting**

March 2-7, 2008, Orlando, Florida

### **ASLO 2008 Summer Meeting**

June 8-13, 2008. St. Johns, Newfoundland, Canada

### **ASLO 2009 Aquatic Sciences Meeting**

January 25-30, 2009, Nice, France

### **Hydrobios**

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### **Walz-USA**

Dan Harkins

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Phone: 978-433-2757, Fax: 978-433-2757

Email: mail@walz-usa.com

### **World Precision Instruments**

Emmanuel Ghansah

175 Sarasota Center Boulevard

Sarasota, FL 34240

Phone: 941-371-1003, Fax: 941-377-5428

Email: mani@wpiinc.com

## COMMERCIAL AND NONPROFIT EXHIBITORS

### **Academia Books**

Bruce Davis

3512 Willow Green Court

Oaktown, VA 22124

Phone: 703-716-5537, Fax: 703-620-3676

Email: acadbkexbs@aol.com

### **Blackwell Publishing**

Taryn Goggin

350 Main Street

Malden, MA 02148

Phone: 781-388-8361, Fax: 781-388-8361

Email: tgoggin@bos.blackwell.com

### **Estuarine Research Federation**

Joy A. Bartholomew

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Port Republic, MD 20676

Phone: 410-326-7468, Fax: 410-326-7466

Email: jbarth@erf.org

### **Fluid Imaging Technologies, Inc.**

Anne Palmer

258 Cross Point Road

Edgecomb, ME 04556

Phone: 207-882-1100, Fax: 207-882-4800

Email: anne@fluidimaging.com

## GENERAL MEETING SCHEDULE

### SUNDAY

9:00am-5:00pm	Digital Photography for Aquatic Scientists Workshop
3:00-9:00pm	Registration Opens
6:30-9:00pm	Welcome Mixer/Reception

### MONDAY

8:30-9:30am	Opening and Plenary Address
9:30-9:45am	Break
9:45-10:45am	Oral Sessions
10:45-11:00am	Break
11:00am-12:00pm	Oral Sessions
12:00-1:30pm	Lunch
12:00-1:30pm	ASLO Student Meeting
12:00-5:00pm	Exhibitor Set-up
1:30-2:45pm	Oral Sessions
2:45-3:00pm	Break
3:00-4:15pm	Oral Sessions
4:00-6:00pm	Poster Set-up
4:15-4:30pm	Break
4:30-6:00pm	Oral Sessions
6:00-7:00pm	ASLO Business Meeting
8:30-10:30pm	Kegs and a Band

### TUESDAY

8:30-9:30am	Oral Sessions
9:30-6:00am	Exhibits Open
9:30-9:45am	Break
9:30am-7:30pm	Plankton in Art Exhibition
9:45-10:45am	Oral Sessions
10:45-11:00am	Break
11:00am-12:00pm	Oral Sessions
12:00-1:30pm	Lunch
12:00-1:30pm	Student Forums
1:30-2:45pm	Oral Sessions
2:45-3:00pm	Break
3:00-4:15pm	Oral Sessions
4:15-4:30pm	Break
4:30-6:00pm	Oral Sessions
7:30-8:30pm	Plenary Address

### WEDNESDAY

8:30-9:45am	Opening and Awards Talks (3)
10:00-11:00am	GEOTRACES Town Hall Meeting
10:00am-1:00pm	Poster Sessions

10:00am-6:00pm	Plankton in Art Exhibition
10:00am-6:00pm	Exhibits Open
11:00am-12:00pm	NSF BOP Town Hall Meeting
12:00-1:30pm	Lunch
12:25-1:15pm	From Ship to Shore to the Newspaper: Workshop on Science Journalism
1:30-2:45pm	Awards Talks (3)
3:00-6:00pm	Poster Sessions
3:00-5:00pm	ASLO Town Hall Meeting: Ocean Carbon and Biogeochemistry (OCB)
3:00-6:00pm	Advancements in Flux Measurement Techniques Workshop
6:00-8:00pm	Student Mixer
8:00-9:00pm	Proteus Film Showing
8:30-10:30pm	Kegs and a Band

### THURSDAY

8:30-9:30am	Opening and Plenary Address
8:30-6:00am	Exhibits Open
9:30am-7:30pm	Plankton in Art Exhibition
9:30-9:45am	Break
9:45-10:45am	Oral Sessions
10:45-11:00am	Break
11:00am-12:00pm	Oral Sessions
12:00-1:30pm	Lunch
12:00-1:30pm	ASLO Student Career Development Workshop
1:30-2:45pm	Oral Sessions
2:45-3:00pm	Break
3:00-4:15pm	Oral Sessions
4:15-4:30pm	Break
4:30-6:00pm	Oral Sessions
6:00-8:00pm	Exhibitor/Poster Tear-down
7:00-9:00pm	ASLO Goes Bowling!
8:00-9:00pm	Proteus Film Showing

### FRIDAY

8:30-9:30am	Opening and Plenary Address
9:30-9:45am	Break
9:45-10:45am	Oral Sessions
10:45-11:00am	Break
11:00am-12:00pm	Oral Sessions
12:00-1:30pm	Lunch
1:30-2:45pm	Oral Sessions
2:45-3:00pm	Break
3:00-4:15pm	Oral Sessions
4:15-4:30pm	Break
4:30-6:00pm	Oral Sessions – Last Talk Lottery!

## MYSTERY SESSION SPEAKERS

Do something a little different and attend a mystery session! There will be one short mystery session each day, and we guarantee that each one will be an hour filled with dynamic, integrative, and innovative talks on a wide range of topics. Remember, you won't know "who" you will see or "what" you might learn until you get there.

Come and enjoy a sequence of talks that might be outside of your usual box!

Monday .....	1:30-2:45pm
Tuesday .....	8:30-9:30am
Thursday.....	4:30-6:00pm
Friday .....	4:30-6:00pm

## MYSTERY SESSION SPEAKERS

- Aubrey A. Cano, University of California Santa Barbara
- Bill Cooper, Florida State University
- Warren J. Currie, Ohio University
- Paul A. del Giorgio, Université du Québec à Montréal
- Christelle Desnues, San Diego State University
- John A. Downing, EEOB, Iowa State University
- James J. Elser, Arizona State University
- Charles H. Greene, Cornell University
- Robert O. Hall, University of Wyoming
- Peter J. Hernes, University of California
- Gordon W. Holtgrieve, University of Washington
- George A. Jackson, Texas A&M University
- Michael R. Landry, Scripps Institution of Oceanography
- Nadine S. Lysiak, Boston University Marine Program & Woods Hole Oceanographic Institution
- Patrick J. Mulholland, Oak Ridge National Lab
- Stephen P. Opsahl, J. W. Jones Ecological Research Center
- John C. Priscu, Montana State University
- Jonathan H. Sharp, University of Delaware, College of Marine and Earth Studies
- Ryan A. Sponseller, Arizona State University,
- Gesa A. Weyhenmeyer, Swedish University of Agricultural Sciences (SLU)
- Peter J. Williams, University of Wales, Bangor

## SPECIAL OPPORTUNITIES AND INFORMATION FOR STUDENTS

We encourage students to attend the social events throughout the week. See below for details! For up-to-date information on all planned student events, housing recommendations, room sharing opportunities, and the Career Link Program, please check the ASLO conference website at <http://www.aslo.org> and click on Student Information.

## OUTSTANDING STUDENT POSTER AWARDS

ASLO will present several awards for the most outstanding posters presented by student members. Posters in all areas of aquatic science are appropriate, including theory, modeling, and laboratory or field experimentation. To be eligible, the student must be an ASLO member and first author on research that has not been presented previously at ASLO or other scientific meetings. Presentations will be judged on the basis of innovation/scientific insight, quality of experimental design/methods, and clarity/effectiveness of presentation. All posters submitted by ASLO students will be considered for the student poster awards. There is no need to apply.

## ASLO MULTICULTURAL PROGRAM

ASLO will hold its 18th annual program devoted to increasing the diversity of the pool of students choosing careers in the aquatic sciences. Some 560 underrepresented minority students have participated since the program began in 1990. Many of these students have gone on to earn advance degrees and are now professionals in the field. The 2007 program will include an opening dinner and keynote address by Dr. Miguel Sastre on Saturday, a field trip and special workshops on Sunday, and a student symposium on Monday (Hilton Mesa B). The Student Symposium is open to all ASLO participants, and we encourage your attendance. The program is supported by a grant from NSF. Anyone interested in volunteering to serve as a meeting-mentor, please contact: Dr. Ben Cuker ([Benjamin.cuker@hamptonu.edu](mailto:Benjamin.cuker@hamptonu.edu)), 757-727-5884, Department of Marine Science, Hampton University, Hampton, VA 23668. The URL for the program website is <http://www.hamptonu.edu/science/ASLO.htm>.

## CAREER BULLETIN BOARD

Prospective employers and supervisors are invited to post job announcements free of charge at the conference. Likewise, students are invited to post one-page resumes for viewing.

## STUDENT MEETING

The Student Meeting this year will take place during the lunch break on Monday at La Fonda. This meeting is open to all students, and we encourage you to attend. A light lunch will be served, and you will have the opportunity to meet other students involved in ASLO. The format of this meeting will be an informal two-way discussion moderated by the ASLO student representatives. A more detailed list of discussion topics will be given out to the students at registration. Please attend and let us know your thoughts.

## STUDENT FORUMS

Due to the success at the last meeting, ASLO Student Forums will be taking place again at the 2007 Aquatic Sciences Meeting. The discussion forums will act as an "ice-breaker" for students who may otherwise not approach more senior/established researchers during ASLO conferences. The emphasis should be on the informal nature of the Forums, and participation of all parties in the discussion is highly encouraged. The Student Forums will take place on Tuesday during the lunch break and a light lunch will be provided. More information will be given out to the students at registration.

## CAREER DEVELOPMENT WORKSHOP

Students are invited to attend the Career Development Workshop on Thursday. The focus will be on communication in science. Pre-registration will be required, so watch for announcements prior to the conference!

## ROOMMATES WANTED

Roommates Wanted is a free online service to those who are seeking roommates during ASLO meetings. To participate, visit the website at <http://www.aslo.org/meetings/roommates.html>.

## STUDENT MIXER

A graduate and undergraduate student mixer will take place at the 2007 Aquatic Sciences Meeting. This mixer will help foster discussion between both parties on various aspects of the graduate academic life. The emphasis should be on the informative nature of the discussion between graduate and undergraduate students in small groups. The Student Mixer will take place on Wednesday after the poster sessions in the Eldorado Pavilion. Snacks will be provided. More information will be provided at registration.

## CONFERENCE EVENTS

### REGISTRATION/INFORMATION

Dates: Sunday, February 4, 2007: 3:00-9:00pm  
Monday, Tuesday, & Thursday, February 5, 6, & 8, 2007:  
7:00am-5:00pm  
Wednesday, February 7, 2007: 7:00am-12:00pm  
Friday, February 9, 2007: 7:00am-4:00pm  
Location: Eldorado Pavilion

### OPENING WELCOME MIXER RECEPTION

Date: Sunday, February 4, 2007  
Time: 6:30-9:00pm  
Location: Eldorado Pavilion  
  
An opening welcome mixer reception will be held on Sunday, February 4, 2007. Conference registration will also be open at that time to allow you to pick up your conference materials.

## ASLO ANNUAL BUSINESS MEETING

Date: Monday, February 5, 2007  
Time: 6:00-7:00pm  
Location: Eldorado Anasazi South Ballroom  
  
The ASLO annual business meeting is scheduled for Monday evening. All ASLO members and meeting participants are encouraged to attend.

## BREAKS

There will be several breaks throughout the day to allow attendees to move between venues. Complimentary coffee will be served at each of the locations of the oral sessions at the 9:30 am and 2:45 pm breaks, as well as soft drinks at the 4:15 pm breaks on Monday, Tuesday, Thursday, and Friday. Coffee and light refreshments will be served throughout the poster sessions on Wednesday.

## PLENARY & AWARD RECIPIENT PRESENTATIONS

There will be plenary talks on Monday, Thursday, and Friday mornings and Tuesday evening. The ASLO Award recipient lectures will be on Wednesday morning and afternoon.

## PRESENTATIONS

Oral talks, poster sessions, and receptions will take place throughout the week at the Eldorado Hotel & Spa, Hilton Santa Fe Historic Plaza, and La Fonda on the Plaza - Santa Fe.

## WORKSHOPS AND TOWN HALL MEETINGS

### DIGITAL PHOTOGRAPHY FOR AQUATIC SCIENTISTS WORKSHOP

Date: Sunday, February 4, 2007  
Time: 9:00am-5:00pm  
Location: Hilton Hotel, Mesa A  
Contact: Jeremy Monroe, [info@freshwatersillustrated.org](mailto:info@freshwatersillustrated.org)  
Cost: \$75/person

Become a more effective educator, scientist, and visual communicator through photography! Beginning and intermediate photographers are invited to a one-day workshop that will include both classroom and field sessions designed to cover:

- The importance of effective photography in aquatic education and outreach
- Digital equipment, techniques, and workflow
- Underwater and natural history techniques
- Photographic sampling and documentation in science

Participants will meet for a morning classroom session at 9:00 am, eat lunch on their own, and reconvene for an afternoon field/classroom session, which will end at 5:00 pm. Attendees will be notified with workshop details via email.

Presented by *Freshwaters Illustrated*. Register at <http://www.freshwatersillustrated.org/training.html>.

## **GEOTRACES TOWN HALL MEETING**

Date: Wednesday, February 7, 2007

Time: 10:00-11:00am

Location: Hilton Hotel, Mesa A

GEOTRACES is an international study of the global marine biogeochemical cycles of trace elements and their isotopes. It is sponsored by the Scientific Committee on Oceanic Research (SCOR). Members of the GEOTRACES planning committee will hold an open session to describe the status of the program. This will include a brief presentation of the rationale for, and objectives of, GEOTRACES, followed by an open discussion of ongoing planning and implementation activities (e.g., Intercalibration Program), as well as future opportunities for those who may be interested in participating.

## **NSF BOP TOWN HALL MEETING**

Date: Wednesday, February 7, 2007

Time: 11:00am-12:00pm

Location: Hilton Hotel, Mesa B

This presentation will be set up to give an overview of the Biological Oceanography Program, its practices, purview, staff, program stats, recent activities, areas of development, and advice about both the program and related programs at the NSF. It will also be intended to specifically elicit questions from the community about the program, operations, opportunities, planning, etc. This presentation/discussion is intended for scientists wishing to learn more basic information about this particular NSF program.

## **FROM SHIP TO SHORE TO THE NEWSPAPER: WORKSHOP ON SCIENCE JOURNALISM**

Date: Wednesday, February 7, 2007

Time: 12:15-1:15pm

Location: Hilton Hotel, Mesa B

Gulf of Mexico Double-Whammy. Methane-Devourer Discovered in Arctic Seas. Antique Whale Oil and the Origin of Industrial Chemicals. These headlines introduced recent marine science news stories. Did these articles attract readers? If so, what's the secret to their success?

Participants in this workshop will learn how to present science in an interesting way while retaining factual accuracy--the key to good science communication and science journalism. Science journalism aims to transmute scientific concepts and results from jargon-based language often understandable only by scientists, to news relevant to the lives of the general reader, listener or viewer.

This workshop will explore science writing for a non-scientific audience. Participants will review examples of good science writing from newspapers, like the *New York Times* and *Washington Post*, and news magazines, like *Science News* and *New Scientist*, "dissect" the structure of science news and feature articles, discuss how popular coverage of science has changed in recent years, and learn the basics of science journalism.

Participants will have the opportunity to write a general audience science article about research presented at the conference, and individual critiques will be offered to those interested.

The workshop is free, but pre-registration is appreciated.

Please contact: Cheryl Lyn Dybas, National Science Foundation, cdybas@nsf.gov, 703-292-7734.

## **OCEAN CARBON AND BIOGEOCHEMISTRY (OCB) TOWN HALL MEETING A NEW MULTI-DISCIPLINARY OCEANOGRAPHIC PROGRAM**

Date: Wednesday, February 7, 2007

Time: 3:00-5:00pm

Location: Hilton Hotel, Mesa B

The newly formed Ocean Carbon and Biogeochemistry program (<http://ocb.whoi.edu>) will focus on the ocean's role as a component of the global Earth system, bringing together research in ecology, geochemistry, and ocean physics that inform on and advance our understanding of ocean biogeochemistry. The overall program goals are to promote, plan, and coordinate collaborative, multidisciplinary research opportunities within the U.S. research community and with international partners. Important OCB-related activities currently include: the Ocean Carbon and Climate Change (OCCC) and the North American Carbon Program (NACP), U.S. contributions to IMBER, SOLAS, CARBOOCEAN, and numerous U.S. single-investigator and medium-size research projects funded by NASA, NOAA, and NSF. A presentation of current and proposed OCB activities will be made at a Town Hall meeting during the ASLO meeting, after which there will be an open community discussion on the program scope, priorities, and processes.

## **ADVANCEMENTS IN FLUX MEASUREMENT TECHNIQUES WORKSHOP**

Date: Wednesday, February 7, 2007

Time: 3:00-6:00pm

Location: Hilton Hotel, Mesa C

Accurate in-situ measurements of property fluxes are a prerequisite for understanding and modeling lake, estuarine, and coastal ocean ecosystems. This workshop is focused on new technologies recently introduced, developed, and refined to measure both vertical and horizontal property fluxes. Such properties of interest may include fresh water, dissolved oxygen, or nutrient concentrations. Precise, long-term in-situ flux measurements of these properties through the sediment-water interface and the river-estuary-ocean interfaces are necessary for accurate biogeochemical models that help determine ecosystem parameters and influence management decisions.

A number of invited speakers will give presentations on recent work in this field. We will conclude the workshop with a round table discussion of what could be done to further advance this important research topic.

### *Presentations:*

- Nutrient fluxes in the Elkhorn Slough NERR. Ken Johnson, MBARI.
- New sensors for extended deployment biogeochemical monitoring. Andrew Barnard, WET Labs.
- The Land/Ocean Biogeochemical Observatory (LOBO)
  - Monitoring solutions for estuaries. Scott McLean, Satlantic.

- Eddy Correlation – An effective technique for measuring fluxes between the seafloor and the water column. Peter Berg, University of Virginia.
- Using acoustic Doppler velocimeters for in-situ measurements of vertical fluxes. Eric Siegel, NortekUSA.

Please contact the workshop organizers (Eric Siegel, NortekUSA, eric@nortekusa.com; Scott McLean, Satlantic, scott@satlantic.com) if you wish to present applicable research in this workshop.

## **BERING ECOSYSTEM STUDY (BEST) RESEARCH AND FUNDING PLANS TOWN HALL MEETING**

Date: Wednesday February 7th, 2007,

Time: 10:00 am - 12:00 pm

Location: Hilton Hotel, Mesa Ballroom C

This Town Hall meeting will provide the community with information on a new National Science Foundation-sponsored program, the Bering Ecosystem Study (BEST). Five proposals were funded in response to the first AO, and a second AO has been published with a closing date of March 15, 2007 ([http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf07533](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07533)). The Town Hall meeting will provide those interested in this program a chance to learn about what has been funded and additional funding opportunities through the second AO. We plan brief introductory presentations on recent changes in the Bering Sea and on the scope of the funded proposals, to be followed by an open question / answer session. A representative of the Arctic Section of the Office of Polar Programs has been invited to attend and provide background on their expectations for responses to the BEST AO. For more information on the BEST program, please visit <http://www.fish.washington.edu/best> or contact David Hyrenbach via email at khyrenba@u.washington.edu.

## **OUTSIDE THE BOX ACTIVITIES!**

New activities are being organized by conference committee members. See details below and make plans to join in!

## **THE INFLUENCE OF PLANKTONIC FORM IN ART AND DESIGN**

The 19th century German scientist Ernst Haeckel's (1834-1919) illustrations of plankton have inspired artists, architects and designers. His book *Kunst Formen der Natur (Art Forms in Nature)* is found in the library of many schools of art, less frequently in science libraries. There is, it would seem, something of a resurgence of interest in Haeckel and his work, along with a realization of the importance of plankton in our environment. It seemed opportune to take the occasion of a meeting in Santa Fe - a city renown for its art - as an opportunity to explore the impact of plankton shape and form in art and design.

The aim is to illustrate the scope of the influence of plankton form in art and design, to bring to the attention of marine and freshwater planktonologists the potential for collaboration with artists, and to use art, based on plankton, to attract the attention and curiosity of the non-specialist to this ecologically important, but not widely known, group of organisms.

We plan four events at the conference:

- 1) **A Plenary Lecture by David Thomas** (Professor of Biogeochemistry, University of Wales, Bangor, UK) on "Plankton as an Inspiration in Art". The lecture will take Poincaré's postulate that there is beauty in nature because of the harmony in its component parts. It will illustrate this with Ernst Haeckel's work and its influence in architecture and design, leading onto the recent work by the biologist Christian Hamm on the structural properties microscopic algae and the architecture of Frei Otto, famous for his organic structures. The talk will then consider the ways these organisms have excited the creativity in arts and crafts. It will conclude by highlighting how scientists and artists need the same skills to appreciate the complexity of the subjects they are trying to interpret.

The lecture will be held at the Lensic Center for Performing Arts on Tuesday, February 6th, starting at 7:30 pm, and will run for an hour. Seats are limited, and, as it is open to the public, you are advised to pick up tickets at the Lensic Box Office beforehand.

- 2) **An Exhibition**, which will explore artistic inspiration derived from plankton under a set of themes: i) Ernst Haeckel and his Influence, ii) Medusae as an Artistic Inspiration, iii) Art Scientists Saw in their Subject, iv) Plankton and the Decorative Arts and Crafts, v) Bioluminescence - Inspired by Fire, and vi) Plankton in Fiber.

The first theme will look at art, contemporary to Haeckel, which derived from the drawings in *Kunst Formen der Natur*. The Art Nouveau movement was at its peak during Haeckel's lifetime and the Art Nouveau artists, architects, and designers drew inspiration from Haeckel's drawings.

Medusae are featured in a second exhibit, which will compare the stunning glassware of the glass artist Dale Chihuly and the equally beautiful photographs by the Italian photographer Guido Mocafico – both are feasts for the eyes.

Many biologists, as Haeckel, were talented artists and took inspiration from their subject and the exhibition will show the work of two watercolor artists (Alister Hardy and G.E. "Tony" Fogg) and a photographer (Hilda Cantor Lund), who used planktonic organisms as their subjects.

The Arts and Crafts movement has taken inspiration from planktonic forms. On show, as images and originals, will be jewelry from Australia (Karin Beaumont), England (Sarah Parker-Eaton), Germany (Robert Kraus), and stunning "objets d'art" from the Welsh woodcarver Louise Hibbert.

Plankton, as we are all too well aware, being for the most part microscopic are easily passed off as just "brown/green gunk". One aspect of their behavior that is evident of the human scale and never fails to produce wonderment is bioluminescence. On display will be reproductions of paintings by two major American artists – Jackson Pollock (Phosphorescence) and Andrew Wyeth (Night Hauling), both of whom took inspiration from this phenomenon.

Fabric is a seemingly unlikely medium for expression of the art from plankton, but on display will be two examples – a quilt based on a radiolarian designed and made by the Canadian quilter Barbara West and an embroidery by the leading British fashion embroiderer Karen Nicol, commissioned for our exhibition by Shell (UK).

We plan to show drawings by Holly Sumner of radiolarians and a beautiful video of the swimming of minute planktonic animals by the young Japanese scientist Ai Nihongi – accompanied by the coolest of jazz from her countryman Akira Sakata's album "Silent Plankton."

The exhibition will be held from Tuesday, February 6th to Thursday, the 8th (9:30 am to 7:30 pm) in the Santa Fe Room in the La Fonda Hotel. On Tuesday and Thursday, the exhibition will be open to the public. Wednesday will be reserved for Conference participants and their guests.

### 3) A Screening of the Remarkable Documentary Film

"**Proteus**," an animated documentary directed and produced by David Lebrun of Night Fire Films, which deals with the life of Ernst Haeckel. It was made over a 10-year period, some of it in Eastern Germany before the Berlin Wall was torn down.

Proteus uses the undersea world to meditate on the troubled intersection of scientific and artistic vision. Ernst Haeckel found himself torn between seeming irreconcilables: science and art, materialism and religion, rationality and passion. The film weaves a tapestry of poetry and myth, biology and oceanography, scientific history, and spiritual biography. Goethe's *Faust* and the alchemical journey of Coleridge's *Ancient Mariner* are part of the story, together with the laying of the transatlantic telegraphic cable and the epic voyage of HMS Challenger. The film is a parable of both the difficulty and the possibility of unitary vision.

The film will be shown evenings at the Lensic Theater on Wednesday, February 7th and Thursday, February 8th, starting at 8:00 pm. The film runs for 60 minutes. As both performances are open to the public, it is probably wise to pick up tickets beforehand at the box office.

### 4) As Part of the Poster Sessions on Wednesday, we shall exhibit artwork by plankton scientists in a special session Plankton as an Artistic Inspiration. On show will be:

- Anita Alexander - Photography
- Elizabeth Francis - Multimedia
- Sheean Haley and Sonya Dyhrman - Multimedia
- Fabrice Lizon - Painting
- Kathy Mitchell - Ceramics
- Lindsay Moore - Words/images collage
- Dawn Moran - Multimedia
- Jessica Muhlin and Julie Santos Poitras - Poetry
- Valérie Pisani, Muriel Gout and Jacqueline Goy - Photography
- Stephanie Wilson - Multimedia
- Nivi Alroy, Itzik Rennert and Assaf Vardi - Visual art
- David Thomas - Pen and ink drawings

Along with the poster session will be a "happening" - Plankton B(a)looms – inspired by Andy Warhol's Silver Clouds installation at The Andy Warhol Museum, in Pittsburgh. This event is organized for us by Lori Adornato, Heidi Souder, and Eric Kaltenbacher from the College of Marine Science at the University of Southern Florida. Come along, have fun, and if you have your kids with you bring them along too—they'll love it. Details of time and location will be announced at the meeting.

### Acknowledgements

Funding for the exhibition has been provided by the International Census of Marine Microbes and Agouron Foundation.

## ASLO GOES BOWLING!

The meeting is winding down and you've got data overload big time! What better way to reset the brain for all the great Friday talks than to round up some friends and go bowling! Even if you aren't a bowler come, have a beer, and watch the big Limnology vs. Oceanography bowl-off! ASLO's going bowling Thursday night, starting at 7:00 pm at Silva Lanes Bowling Center, 1352 Rufina Circle in Santa Fe, 505-471-2110. You'll need to provide your transportation to the alley, a bowling shirt, if you want, and you pay as you bowl. Two and four person teams can sign up at the ASLO registration booth until Monday evening at 5:00 pm. The bowl-off will start at 8:00 pm with the winning team and individual scores announced Friday morning! We may even round up some prizes!

## MYSTERY SESSION PRESENTATIONS

Do something a little different and attend a mystery session! There will be one short mystery session each day, and we guarantee that each one will be an hour filled with dynamic, integrative, and innovative talks on a wide range of topics. Remember, you won't know "who" you will see or "what" you might learn until you get there.

Come enjoy a sequence of talks that might be outside of your usual box!

Monday .....	1:30-2:45pm
Tuesday .....	8:30-9:30am
Thursday.....	4:30-6:00pm
Friday .....	4:30-6:00pm

### Mystery Session Presentation Titles

- Biocomplexity and DOC Production and Consumption
- Molecular Characterization of Terrestrial DOM in Surface and Pore Waters by Ultra-high Resolution Mass Spectrometry
- A Discourse on Variability: A Comparison of Lentic and Lotic Environments
- A Large-scale Comparative Study of Direct Measurements of Bacterial Growth Efficiency Across Freshwater, Estuarine, and Marine Ecosystems
- Viruses in Stromatolites: What Metagenomics Have Revealed About Diversity, Adaptation, and Evolution
- The Economic Value of Water Quality: Do Limnologists Think Like Humans?
- Tumor Limnology: A Test of the Growth Rate Hypothesis Using Paired Biopsy Samples of Human Tumors

- Climate-driven Changes in Arctic Ocean Outflow Force Ecosystem Regime Shift in NW Atlantic
- Open-channel Estimates of Primary Production in the Colorado River, Grand Canyon
- Molecular Trickery -- Is Riverine Dissolved Organic Matter Really That Degraded?
- Marine-derived Nutrients and Ecosystem Metabolism: Reconsidering the Role of Salmon in Streams
- Particle Distribution: Predictions from Coagulation Theory
- Closures and Constraints on Trophic Fluxes in the Arabian Sea: Does It All Add Up?
- Tracking the Migration Patterns and Habitat Use of North Atlantic Right Whales With Stable Isotopes
- Nitrate Uptake and Denitrification Rates in Streams Determined in a Large Intersite 15n Addition Study (Linx)
- Denizens of the Deep Right Under Our Feet...But What Do They Eat?
- What Antarctic Lakes and Rivers Tell Us About the Astrobiological Potential of Other Icy Worlds
- DOC Cycling in Transit from Terrestrial and Anthropogenic Sources through the Estuarine and Coastal Environments
- Ecosystem Succession and Trophic Dynamics in a Sonoran Desert Stream
- Duration of Ice-free Days as an Important Driver for Concentrations of Dissolved Organic Carbon in Lakes
- A Framework and Strategy for the Measurement of Planktonic Organic Flux

## **KEGS AND A BAND**

Receptions featuring two bands will be held Monday and Wednesday evenings from 8:30-10:30 pm. Join us to enjoy Café Moca on Monday and Wagogo on Wednesday.

## **ORDER YOUR ASLO WATER ROCKS! T-SHIRT**

Every big rock event has a t-shirt. So, we bring you the Water Rocks! t-shirt! The shirt is based on the Water Rocks! poster design. Get one for everyone in your lab, and support ASLO while doing it—ASLO will receive 17% commission on every sale and proceeds will go to Student Travel Awards. To order your shirt, visit zazzle.com and search for "ASLO Santa Fe" (no quote marks) using the Find feature. Zazzle.com is an on-line custom t-shirt site where you can order your shirt in whatever color or style you wish.

## **OTHER ORGANIZED ACTIVITIES**

Santa Fe's unique combination of history and culture fill the city with a warm, inviting atmosphere that serves as a perfect backdrop for all. Colorful, Southwestern artwork, distinctive adobe architecture, and stunning mountain views blend to create a memorable environment where one can relax and rejuvenate. Santa Fe offers the visitor a menu brimming with historic and cultural sites to create an experience like no other.

Below is a small sampling of the half-day trips available. For more information and maps of Santa Fe, please contact the Convention & Visitor Bureau (800-777-2489) or visit <http://www.santafe.org>.

## **WALKING TOUR OF DOWNTOWN AND CANYON ROAD**

Interesting and historical buildings abound in downtown Santa Fe. Start at the Plaza and be sure to see St. Francis Cathedral, the Palace of the Governors, Museum of Fine Art, the Loretto Chapel (with the "miraculous staircase"), and San Miguel Mission, the nation's oldest church. There are also historic hotels, as well as shopping areas, that once were fine homes surrounding beautiful garden courtyards. Then, stroll over to our "artists' road" - Canyon Road, about three blocks away - and peruse its many art galleries, shops and restaurants.

## **MUSEUM HILL**

Spend the afternoon brushing up on your art history and cultural appreciation with a visit to Museum Hill. The hill is where a variety of local museums are located, including The Museum of Spanish Colonial Art, Museum of Indian Arts and Culture, the Wheelwright Museum of the American Indian, and the Museum of International Folk Art. Visit the Georgia O'Keeffe Museum is (downtown, Johnson Street) to experience a vast collection of her original works of art.

## **LOS ALAMOS AND BANDELIER NATIONAL MONUMENT**

Once known as the "secret city," Los Alamos formed in 1943 when a small group of scientists gathered to design and build the world's first nuclear weapon. Today, Los Alamos National Laboratory is known worldwide for its expertise in areas from arms control and treaty verification to energy research and development. Don't miss the "hands-on" experiences at the Bradbury Science Museum!

Just ten miles from Los Alamos is Bandelier National Monument, operated by the National Park Service, with more than 32,000 acres of scenic wilderness and prehistoric Indian ruins and cliff dwellings. Ranger talks, guided walks, and demonstrations are available.

## **HIGH ROAD TO TAOS**

The High Road to Taos is a favorite drive with many scenic overlooks through the mountains, foothills, and the towns of Chimayo, Truchas, and Las Trampas. Chimayo especially draws visitors and locals alike to explore the weaving galleries, workshops or other artisans, and to visit the Santuario de Chimayo, said to contain healing powers in its soil.

## **TURQUOISE TRAIL**

Another scenic trip is along the Turquoise Trail south of Santa Fe towards Albuquerque. The road winds through old mining towns and past the hills where turquoise was taken for ancient Indian jewelry. East of Santa Fe is the historic town of Las Vegas, New Mexico. Today the town has over 900 buildings on the National Historic Register and is a treasure trove of Victorian and Queen Anne homes.

## **SKI SANTA FE**

Ski Santa Fe is one of New Mexico's most popular recreation areas. Their new Millennium Triple Chairlift will take snow sport enthusiasts to a new height of 12,075 feet and some of the southwest's finest skiing. The area is conveniently located just sixteen miles from downtown. For more information, please visit <http://www.skisantafe.com>.

## **INSTRUCTIONS FOR PRESENTERS AND SESSION CHAIRS**

### **ABSTRACTS**

Abstracts for this meeting will be posted and archived on the ASLO web site (<http://www.aslo.org>), and a complete book of abstracts will be distributed to registered attendees at the meeting.

### **ORAL PRESENTATIONS**

Talks are scheduled in 15-minute time slots. We strongly encourage a presentation of no more than 12 minutes to allow three minutes for discussion and to entertain questions from those in the audience. Tutorial presentations have been scheduled for 30-minute time slots in some special sessions. The time limit will be strictly enforced to facilitate movement between sessions.

A PowerPoint projector, computer, and a screen will be set up in each room. To minimize any compatibility problems, please assure that your presentation design does not exceed XGA (1024 x 768).

All files that are used in the PowerPoint presentation (pictures, video clips, audio clips) should be saved in a folder, along with the PowerPoint presentation itself. If you plan to do a PowerPoint presentation, it is highly recommended that you have a backup of your presentation on overhead transparencies.

### **ADDITIONAL EQUIPMENT NEEDS**

Rental of a VCR, monitor, slide projector, audio systems, provision of extra power outlets, extra tables, stands, etc. can be handled for an additional cost. Please contact the audio-visual company directly if you plan to use additional equipment so that appropriate arrangements can be made. Costs for additional equipment will be billed to the abstract's presenting author.

### **GUIDELINES FOR COMPUTER-GENERATED PRESENTATIONS**

Each speaker can either submit their presentation via the AVHQ speaker services web site, <http://www.avhqspeakerservices.com/srr> before the meeting or bring their presentation to the Presentation Room on CD-ROM, floppy disk, Zip disk, Compact flash card, Memory Stick, Multi-media card, SD Card, or a laptop 24 hours prior to the scheduled time of their presentation.

Checking in at the Presentation Room, Hilton Hotel, Ortiz, is the single most important action you will take to ensure your presentation is a success. All speakers are required to check into the Presentation Room at least 24 hours before their presentation.

Hours are:

Sunday .....	1:00-9:00pm
Monday, Tuesday, and Thursday .....	7:00am-7:00pm
Wednesday.....	7:00am-5:00pm
Friday .....	7:00am-4:00pm

When reviewing your presentation, you should make sure all fonts appear as expected and all sound/video clips are working properly.

You will be able to edit your presentation at this time. Once you are through reviewing your presentation and verify it is ready, AVHQ personnel will queue your presentation.

The file will then be transferred to the computer network at the meeting. When the presentation is to be given, the file will be loaded on the computer in the meeting room. Each room will be staffed with an audiovisual person, who will assist in starting each presentation. Once the presentation is launched, you (the speaker) will control the program from the podium using a mouse. At the end of the meeting, all files will be destroyed, and the computer hard drives will be reformatted.

We recommend PowerPoint for all users. Web browsers with typical plug-ins will also be available, including Internet Explorer and Netscape Navigator. Presentations created using Adobe Acrobat are acceptable, as well. If you plan to use something besides Real Networks Real Player, Flash, Shockwave, or Windows Media Player, please check with our audiovisual contact Lara Gough at [lgough@avhq.com](mailto:lgough@avhq.com) to be sure your presentation will work properly.

The computers in the presentation rooms will be Windows-based PCs with Microsoft PowerPoint (Office 2003 version) installed. All videos should be an .avi or .mpg (not .mov) format so they will run properly on the computers provided. Presentations should be reviewed to be certain the fonts are displayed correctly. PowerPoint presentations that are created on Macintosh systems must be able to run on a Windows-based system as well. This will ensure proper transition of fonts and animations.

For additional information on creating PowerPoint presentations, please see the PowerPoint Tips & Style Guide at <http://www.avhqspeakerservices.com>.

### **LAPTOP SUPPORT**

In order to support presenters who want to review and modify their presentations while traveling to the meeting, there will be support for transferring files from a laptop. If you plan to do this, we recommend you bring a back up of the presentation on some other media, including CD-ROM or Zip drive in case there is a problem transferring the file from the laptop. The AV support personnel will attempt to transfer the file from a laptop to the network. This may include installing a Zip drive or CD writer to the laptop, or configuring a network card. If you have a network card, bring it along. Please make sure you have all power, video and networking adapters.

### **MEDIA SUPPORTED**

We recommend you bring at least 2 copies of your presentation to the meeting in case there is a problem with one of them. CD-R and CD-RW, Compact flash card, Memory Stick, Multi-media card or SD Card, and USB drives will be supported.

### **EDITING POWERPOINT FILES IN THE PRESENTATION ROOM**

All PowerPoint presentations can be reviewed and edited in the Presentation Room. It is recommended that all presentations be reviewed and edited for final version no less than two hours prior to the beginning of the session in which you are presenting.

## SECURITY

- You will need to provide identification in order to submit your presentation and also to access it.
- Zip disks and CDs are returned to the speaker.
- Floppy drives on the computers are disabled so no presentations can be copied.
- Cameras and video equipment are not permitted in the Speaker Ready Room.
- All files on the computers are deleted at the end of each day.
- All computers are deleted of all files and software at the end of the meeting.

## PRE-CONFERENCE FILE UPLOAD

A dedicated space is assigned to ASLO and correspondence with speakers detailing guidelines and the submission process also will be sent to presenters. Here are the steps:

1. Go to <http://www.avhqspeakerservices.com/srr>
2. Select "Submit Your Presentation"
3. Select "Your Meeting" from the dropdown list of Available Conference/Shows
4. Select "Presenter Login"
5. First time users should select "Activate Profile".  
Search for your profile by either your email address or first and last name.  
(You will be emailed a confirmation of your User ID and password to save for future reference)
6. If second visit, then login with user name and password that was emailed to you.  
There is no need to click "Activate Profile" on returning visits to the website.
7. Select your session to upload your files, click "Continue" then browse for the file(s) on your computer and click the "Upload File" button.
8. Receive confirmation of submitted presentation.

Once uploaded, an AVHQ computer tech will open the presentation file to make sure everything will open and execute correctly. If our staff makes changes, they will notify the presenter via email or phone and advise them accordingly.

## POSTER PRESENTATIONS

Posters will be setup on Monday from 4:00 - 6:00 pm and available for viewing Tuesday-Thursday in the La Fonda Ballroom. Wednesday will be dedicated to award recipient talks and poster sessions, with posters available throughout the day. Poster tear-down will be Thursday from 6:00 - 8:00 pm.

Poster space will be 48 inches by 48 inches (122cm x 122cm) in size. Size requirements must be strictly adhered to so they fit within the space assigned to them. If your poster exceeds these specifications, it may be subject to removal by the organizing committee. Pushpins will be provided to place your poster on the poster boards.

Posters will be presented depending upon the poster session to which you are assigned. You will be expected to be available to present your poster during your designated poster session. Poster presenters are asked to adhere to designated set-up and tear-down instructions and times.

Important note regarding poster presentations: The convention decorator may discard posters if the presenting author does not dismantle them according to tear-down instructions and times.

## SPEAKER READY ROOM

The Speaker Ready Room will be available for you to preview or practice your presentation. It will be open Sunday, February 4, from 1:00-9:00 pm, Monday, Tuesday and Thursday from 7:00 am-7:00 pm, Wednesday from 7:00 am-5:00 pm and Friday from 7:00 am-5:00 pm in the Aspen Room at the Hilton.

## EMAIL ROOM

A limited number of email terminals will be available at the meeting. There is no charge for the use of the email room but we ask that you limit your time to ten minutes per day. The email room is located in the Stiha Room at the La Fonda Hotel and is open Monday through Friday from 7:00 am-5:00 pm.

## WIRELESS ACCESS

Please see your hotel for information regarding wireless access options. Given we are in multiple venues, there will not be additional wireless access available.

## MESSAGE BOARD

There will be a message board located at the Eldorado Pavilion where you may post or check for messages throughout the conference.

## REGISTRATION INFORMATION

Online registration is preferred and highly recommended. You can register electronically on the conference web site (<http://www.aslo.org/santafe2007>). Electronic registrations must include complete credit card information.

Every attempt has been made to allow secure transmissions of your credit card information and transaction, but ASLO assumes no liability for your credit card information when it is released electronically. All credit card transactions will be processed through the conference web site. Transactions are protected and encrypted using a secure socket layer (SSL) certificate provided by Verisign, Inc. SSL technology is the industry-standard method for protecting web communications. The SSL security protocol provides data encryption, server authentication, message integrity, and optional client authentication for a TCP/IP (internet) connection. Credit card verification and debit services will be provided by Authorize.net, a leading provider of Internet-based transaction services with thousands of online and traditional business customers around the world.

If registration by electronic means is not possible, please complete the registration form included in this book and send to the address

listed below with payment or charge card information. Please return mailed-in registrations to:

ASLO Business Office  
5400 Bosque Boulevard, Suite 680  
Waco, Texas 76710-4446 USA

Please make checks payable to: ASLO (All payments must be in U.S. dollars drawn on a U.S. bank.)

Registrations complete with purchase order, or credit card information not accompanying an abstract submission, can be faxed to 254-776-3767.

The full registration fee includes admission to all sessions, exhibits, evening activities (unless otherwise specified), Sunday welcome reception and poster receptions, coffee breaks, book of abstracts, and the program book. Optional events such as any special organized activities are not included.

Substantial savings apply if the payment and registration form are received on or before January 4, 2007.

## SUBSTITUTIONS OR CANCELLATIONS

We understand that occasionally other responsibilities and personal obligations prevent you from attending a program for which you have registered. If you find that you will not be able to attend the ASLO meeting, we encourage you to send a substitute. Substitutions can be made at any time, even on-site at the conference.

If you find it necessary to cancel after you have already paid, we can refund your conference fee (less an \$80 USD processing fee) if we receive notice in writing on or before January 4, 2007. Due to the limited number of enrollments available, registrants who cancel on or after January 5, 2007, will be not be eligible for any part of a refund.

To provide cancellation notice and request a refund, please send a letter to: Helen Schneider Lemay, ASLO Business Office, 5400 Bosque Boulevard, Suite 680, Waco, Texas 76710-4446, fax your request to 254-776-3767, or send via email to [business@aslo.org](mailto:business@aslo.org).

## NON-REFUNDABLE FEES FOR DUPLICATE SUBMISSIONS AND ABSTRACT CHANGES

Duplicate abstract submissions and/or registrations will be charged a non-refundable processing fee of \$60 USD to cover the costs associated with processing. If submitting electronically, DO NOT submit mailed-in hard copies as well.

Also, any author who submits an abstract by mail and then resubmits the same abstract with revisions or changes or sends in a request for the appropriate changes to be made will be charged an abstract change fee of \$60 USD.

## REGISTRATION FEES\*

*\*Fees are stated in U.S. dollars and must be paid in U.S. dollars.*

- **ASLO Members:** \$350.00 USD on or before January 4, 2007 (\$430.00 USD after January 4, 2007)
- **Non-Members:** \$450.00 USD on or before January 4, 2007 (\$530.00 USD after January 4, 2007)

- **ASLO Student Members:** \$250.00 USD on or before January 4, 2007 (\$330.00 USD after January 4, 2007)
- **Non-Member Students:** \$350.00 USD on or before January 4, 2007 (\$430.00 USD after January 4, 2007)
- **One-day registrations:** \$200.00 USD on or before January 4, 2007 (\$280.00 USD after January 4, 2007)
- **Spouse/Guest:** \$100.00 USD (Guest fees cover only the conference social events such as the Sunday welcome reception, coffee services, and the poster sessions. Optional events such as special activities are not included. Spouses and guests cannot be admitted to the oral sessions without paying the appropriate full registration fee.)

A late fee of \$80 USD will be added to all registrations received after January 4, 2007.

Fees to attend the ASLO 2007 Aquatic Sciences Meeting must be paid in advance. Due to the limited numbers, registrations are not considered guaranteed until a check, money order, purchase order, or charge card information is received. All fax registrations must include complete credit card information, including number, expiration date, and card-holder name. VISA, MasterCard, and American Express are accepted. Organizations can be billed only if a purchase order accompanies the registration either by fax or by mail.

## ADDITIONAL PARTICIPANT AND ATTENDEE INFORMATION

### NON-U.S. ATTENDEES

In preparation for attendance at this meeting, you may be required to acquire a visa. Citizens of 27 countries in Europe and the Far East may visit for up to 90 days without a visa. This is only possible if the attendee has a passport with a computer-readable bar code. These countries are: Andorra, Australia, Austria, Belgium, Brunei, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Liechtenstein, Luxembourg, Monaco, the Netherlands, New Zealand, Norway, Portugal, San Marino, Singapore, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom. If you are a citizen of any of these countries, we strongly encourage you to attain an updated passport that contains the bar code in order to avoid the visa process.

An in-person interview at the American Consulate in your country, documentation, and application fee may be required to process a visa request. For security reasons, letters of invitation will only be provided for registrants who have already registered and paid the appropriate fees.

Be sure to plan well in advance and apply early if a visa will be required. For questions regarding passports, visas, or travel requirements, please refer to the U.S. Department of State visa website at [http://travel.state.gov/visa/visa\\_1750.html](http://travel.state.gov/visa/visa_1750.html) or contact your local American Consulate.

## SPECIAL NEEDS

If you have a disability or limitation that may require special consideration in order to fully participate, please contact the meeting planning organization to see how we can accommodate your needs. Call 800-929-3756 (USA, Canada & Caribbean) or 254-399-9635 (all other countries) or contact via email at [business@aslo.org](mailto:business@aslo.org).

## CHILDCARE AND FAMILY INFORMATION

A special publication, New Mexico Kids is published bimonthly and has great information on things for you and your family to do while in New Mexico and includes Santa Fe. Call them at 505-797-2708 or email [kids@newmexico-kinds.com](mailto:kids@newmexico-kinds.com).

For those requiring babysitting services, please contact Linda Iversen at Magical Happenings in Santa Fe. Magical Happenings states that they have been caring for kids of all ages for 16 years and are a fully bonded and insured company. Linda Iversen can be reached via phone at 505-982-9327 or by email at [lindadiversen@hotmail.com](mailto:lindadiversen@hotmail.com). Please refer to "ASLO" when contacting her. The cut-off date for making reservations is January 1, 2007.

## TRANSPORTATION

Santa Fe Municipal Airport has commercial flights from Denver on Great Lakes Aviation. Otherwise, Albuquerque International Sunport is just one-hour away and is served by American, America West, Continental, Delta, Frontier, Northwest, Southwest, United, Great Plains, Mesa, and Skywest Airlines. All major rental car agencies have offices at the Sunport.

Shuttle service is also available via Sandi Express, 888-775-5696, Twin Hearts, 800-654-9456, or Santa Fe Shuttle, 888-833-2300.

## SPECIAL AIRLINE RATES

American Airlines has been designated the official airline carrier for the ASLO meeting and has offered discounted airfare on some of their routes to Albuquerque, New Mexico.

For discounts, call your travel professional or tickets may be purchased by calling AA Meeting Services at 1-800-433-1790 and providing the authorization number: A7927AA. Valid travel dates are February 1 – 9, 2007.

## SPECIAL CAR RENTAL RATES

Avis has been designated the official car rental company for the ASLO Aquatic Sciences Meeting. Special meeting rates and discounts are available on a wide selection of GM and other fine cars at Santa Fe Municipal Airport or Albuquerque International Sunport.

To receive these special rates, be sure to mention your Avis Worldwide Discount (AWD) number, D130903, when you call. Call Avis directly at 1-800-331-1600 to receive the best car rental rates available. The discount will be effective January 28 – February 16, 2007.

## HOTEL AND ACCOMMODATION INFORMATION

ASLO has selected nine hotels, all within walking distance of each other and the various meeting locations, that will host the ASLO meeting delegates. Each has its own unique charm and is located close to many restaurants, shops, and local pubs. These hotels provide a range of sleeping room rates. (Refer to the map of downtown Santa Fe on page 82 for the location of these hotels.) Please make your hotel reservations by contacting the hotel directly via phone, fax or

email and specify that you are entitled to the "ASLO Room Block" rate. The cut-off date for each hotel is shown on the hotel listing. It is important that you make your reservations early since February is a busy time in Santa Fe and availability and rates will be affected after the cut-off date. We hope you will support these hotels.

### **ELDORADO HOTEL & SPA (CO-HEADQUARTER HOTEL)**

309 West San Francisco Street  
Santa Fe, NM 87504

Phone: 505-988-4455 or 800-955-4455, Fax: 505-995-4555 or Email: [rez@eldoradohotel.com](mailto:rez@eldoradohotel.com)  
Room Rate: \$149.00 (single/double)  
Reservation Cut-off Date: January 8, 2007

In Spanish, Eldorado means The Golden One. For guests, Eldorado means a memorable visit graced by the art of hospitality. Located just off the historic Plaza, this stately landmark hotel celebrating 20 years of hospitality excellence, welcomes you to Santa Fe. Our superb function rooms with Santa Fe-style décor, unique international artwork, and stunning views leave nothing to be desired. With more than 20,000 square feet of inviting and flexible spaces as your canvas, anything is possible! Guests of the Eldorado Hotel and Spa are presented with a stunning array of accommodation options to suit one's every need for privacy, comfort, and decadence. Our 219 lavish rooms are appointed with unexpected pleasures, such as private balconies and Kiva fireplaces. Guests are pampered with plush terry cloth robes, nightly turndown service, extended room service hours, and valet parking.

Parking is \$18.00 per day. High-speed Internet service and wireless are available in the guest rooms at a cost of \$9.95 per day. Dial-up is also available at the current long distance rate. For more information, please visit <http://www.eldoradohotel.com>

### **LA FONDA ON THE PLAZA - SANTA FE (CO-HEADQUARTER HOTEL)**

100 E. San Francisco Street  
Santa Fe, New Mexico 87501

Phone: 505-982-5511 or 800-523-5002, #1, Fax: 505-954-3599  
Room Rate: \$125 (single/double)  
Reservation Cut-off Date: January 15, 2007

Located at the end of the historic Santa Fe Trail, La Fonda Hotel is one of the oldest hotels in the country, built in 1922 on a site that housed visitors to the City Different as early as 1607. It is the only hotel situated on Santa Fe's downtown Plaza, and it is within walking distance of most of the city's finest shops, restaurants, art galleries, and museums.

La Fonda has retained its historic Santa Fe ambiance while acquiring all of the modern amenities. These include a spa/fitness center, heated pool, complimentary business center, and high-speed wireless access through the hotel. The rooms and suites are uniquely decorated with hand-painted furnishings and original art. All are smoke-free. La Fonda's La Plazuela restaurant, the most beautiful dining room in town, features gourmet cuisines and is a favorite of locals and visitors alike. La Fiesta Lounge, a hotspot for music lovers, offers live entertainment and dancing nightly. By day, a New Mexican buffet lunch is offered.

Convenient self-parking in the hotel's garage is \$10.00 per day. High-speed wireless internet is available in the sleeping rooms, in all the meeting space, and all public areas of the hotel at a cost of \$9.95 per day. Dial-up is also available at the current long distance rate. For more information, please visit <http://www.lafondasantafe.com>

### **HILTON SANTA FE HISTORIC PLAZA**

100 Sandoval  
Santa Fe, New Mexico 87501

Phone: 505-988-2811 or 800-336-3676, Fax: 505-986-6435  
Room Rate: \$103.00 single occupancy and \$123.00 double occupancy (current federal government rate open to all participants)  
Reservation Cut-off Date: January 15, 2007

The ancient and the modern co-exist here at the Hilton Santa Fe Historic Plaza, located just two blocks from the famous Santa Fe Plaza. This unique 157 room Hilton property features architectural elements and artifacts from the 300-year-old estate of one of Santa Fe's founding families. Exclusive casitas, spacious rooms, first class service, and award-winning cuisine accent a time-honored tradition of southwestern culture and hospitality.

All room furnishings are handcrafted by local artisans in the traditional Santa Fe style and accented by fabrics and artwork distinctive to the region. In addition, the following amenities are standard in every guest room: safe deposit boxes, remote control cable television, coffee makers with complimentary coffee and tea, hair dryers, makeup mirrors, plush robes, iron & ironing board, voice mail, and free wireless Internet access. Parking is \$15.00 per day. Their friendly staff and quality service makes Hilton Santa Fe Historic Plaza the perfect choice. For more information, please visit <http://www.santafe.hilton.com>.

### **HOTEL ST. FRANCIS**

210 Don Gaspar Avenue  
Santa Fe, New Mexico 87501

Phone: 505-983-5700 or 800-529-5700, Fax: 505-989-7690  
Room Rate: \$99.00 single occupancy and \$119.00 double occupancy  
Reservation Cut-off Date: January 15, 2007

The gracious and historic Hotel St. Francis provides an ambiance of old world charm and a tradition of hospitality and unparalleled service dating back to 1923. Located just one block southwest of Santa Fe's Plaza, the Hotel St. Francis features 82 individually appointed guest rooms, each with a refrigerator, personal safe, coffee maker, robes, iron, and ironing board. One of the most popular features of the hotel is Afternoon Tea, served daily in front of the huge fireplace. Our restaurant, Sienna, is open daily for breakfast, lunch, and dinner. The Artist's Pub features a light menu from mid-afternoon until midnight. Banquet and meeting facilities are available for groups of 10 to 60 individuals. High-speed Internet and wireless services are available in the guest rooms on a complimentary basis. Parking is \$5.00 per day. For more information, please visit <http://www.hotelstfrancis.com>.

### **INN AND SPA AT LORETO**

211 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Phone: 800-727-5531 or 505-988-5531, Fax: 505-984-7968  
Room Rate: \$103.00 single occupancy and \$123.00 double occupancy (current federal government rate open to all participants)  
Reservation Cut-off Date: January 15, 2007

At the end of the historic Santa Fe Trail amid the enchanted vistas of the Sangre de Cristo Mountains rests the Inn and Spa at Loretto infused with the art and soul of the Southwest. Located in the heart of Santa Fe, the Inn and Spa at Loretto is only a short stroll to the city's famed galleries, museums, and Canyon Road, which truly capture the spirit of the area's artistic community.

All rooms feature writing desk, CD clock radios, mini bar, full size ironing board and iron, coffee maker, pay per view movies, voice mail, complimentary high-speed wireless internet access, two telephones, plush chenille bathrobes, and hairdryers.

Baleen, recipient of the *Wine Spectator* Award of Excellence, serves ocean-inspired cuisine using local and regional flavors. SpaTerre offers an exotic selection of cross-cultural rituals for head-to-toe indulgence. The hotel also offers a year-round heated pool and private fitness center. For more information, please visit <http://www.innatloretto.com>.

### **LA POSADA DE SANTA FE RESORT & SPA**

330 E. Palace Avenue  
Santa Fe, New Mexico 87501

Phone: 505-986-0000 or 800-727-5276, Fax: 505-982-6850  
Room Rate: \$103.00 single occupancy and \$123.00 double occupancy (current federal government rate open to all participants)  
Reservation Cut-off Date: January 15, 2007

La Posada de Santa Fe is set in an environment that reflects history and tradition, characteristic of the early adobe art colony that originally occupied the site. Featured in Architectural Digest, the rooms reflect the charm of the Southwest with traditional vigas and latilla ceilings, many with Kiva fireplaces and shady patios. Complimentary wireless high-speed internet access is available in all of the guest rooms. Valet Parking is \$14.00 per day.

Renew mind, body and spirit at the Avanyu Spa. Enjoy fine dining at the AAA Four Diamond Award-winning Fuego Restaurant. Let our friendly staff pamper you as you enjoy Santa Fe's most romantic dining destination and recent winner of the 2004 *Wine Spectator* Award of Excellence. The readers of *Travel and Leisure* and *Conde Nast Traveler* have voted La Posada among their favorite hotels.

Simply put, La Posada gives you more than just a great meeting or memorable celebration, and after your event ends, the magic of Santa Fe is waiting. For more information, please visit <http://www.rockresorts.com>.

## **INN OF THE GOVERNORS**

101 West Alameda  
Santa Fe, New Mexico 87501

Phone: 505-982-4333 or 800-234-4534, Fax: 505-989-9149  
Room Rate: \$103.00 single occupancy and \$123.00 double occupancy (current federal government rate open to all participants)  
Reservation Cut-off Date: January 15, 2007

Offering the intimacy of an inn with all the services and amenities of a fine hotel, "Your Home in the Heart of Santa Fe" is ideally located on the corner of Alameda and Don Gaspar, just steps from the historic Plaza, allowing visitors to experience Santa Fe at its best. You will feel genuinely welcome by the cozy atmosphere and the attentive, caring staff.

Attention to detail is prevalent throughout and our service will exceed your expectations. Our newly refurbished Traditional Rooms are rich in color, decorated in a charming southwestern style. Each room feels comfortable and includes luxurious bedding with 350 thread count, unique touches like tin mirrors and accents, and handmade pine furnishing. All rooms offer amenities such as plush terry-cloth robes, in-room coffee makers, hair-dryer and ironing accessories, mini-refrigerators, and curved shower rods.

As our guest, you will experience the following complimentary amenities daily: a delicious full and hot breakfast buffet, afternoon tea and sherry service served from 4:00 - 5:00 pm, and complimentary parking. We look forward to hosting you! For more information, please visit <http://www.innofthegovernors.com>.

## **HOTEL SANTA FE**

1501 Paseo DePeralta  
Santa Fe, New Mexico 87501

Phone: 505-982-1200 or 800-825-9876, Fax: 505-982-7832  
Room Rate: \$99.00 single/double occupancy  
Reservation Cut-off Date: January 15, 2007

Complimentary shuttles take guests to destinations within a mile of the hotel upon request. Complimentary access is provided to a fitness center a mile away. Amaya offers seasonal patio dining, as well as candlelit dinners in an outdoor teepee (surcharge, reservations required). Complimentary high-speed wireless internet access is available in the lobby. The hotel offers complimentary area walking tours and history lectures once a week. Self parking is complimentary.

The three-story hotel has 128 guestrooms, all of which have feather pillows, custom-made duvets, and southwestern decor with natural pine furnishings. Amenities include minibars, complimentary premium channels, video games (surcharge), dial-up internet access (surcharge), and Natura toiletries. Suites also offer high-speed internet access (surcharge) and in-room safes.

## **FORT MARCY HOTEL SUITES**

320 Artist Road  
Santa Fe, New Mexico 87501

Phone: 505-988-2800, 888-600-4990 or 800-561-0898, Fax: 505-984-8682  
Room Rate: \$149.00/2-Bedroom Suite, \$159.00/2-Bedroom Townhome  
Reservation Cut-off Date: January 15, 2007

We offer nicely appointed suites, on a hill overlooking the historic Santa Fe Plaza, about five blocks away. Named for an 1846 Santa Fe U.S. Military outpost that was located close by, Fort Marcy Hotel Suites is nestled amidst nine acres of landscaping and gardens (we even have a family of deer that lives with us part of the year), and many of our suites offer spectacular views of downtown Santa Fe and the surrounding Sangre de Cristo and Jemez Mountains. We're also the closest accommodations to the Santa Fe Ski Basin, about fifteen miles away, and we offer complimentary shuttle service to downtown restaurants and other attractions in downtown Santa Fe. Our suites offer real wood-burning fireplaces, fully-equipped kitchens, comfortable living room furniture, air-conditioning, hairdryers, entertainment systems, and more than fifty television channels for your viewing pleasure. We serve a complimentary expanded continental breakfast each morning. We also have downtown Santa Fe's only indoor pool, and one of Santa Fe's largest recreational complexes is just two blocks away. The *Santa Fean* magazine chose Fort Marcy as one of the top ten hotels in Santa Fe, and our winning category was value! Stay here and feel like a local. Self-parking is complimentary. For more information, please visit <http://www.fortmarcy.com>.

## **FOR MORE INFORMATION**

For more information on the ASLO 2007 Aquatic Sciences Meeting, address all correspondence and questions regarding registration, conference logistics, and hotel accommodations to:

Helen Schneider Lemay  
ASLO Business Office  
5400 Bosque Boulevard, Suite 680  
Waco, Texas 76710-4446  
Email: [business@aslo.org](mailto:business@aslo.org)  
Web: <http://www.aslo.org/victoria2006>  
Phone: 800-929-ASLO (Within the U.S., Canada, and the Caribbean),  
254-399-9635 (All other countries)  
Fax: 254-776-3767

# MONDAY, FEBRUARY 5, 2007

## CS13: INVASIVE SPECIES

Chair(s):	Meghan E. Brown, mbrown@hws.edu
Location:	Eldorado Ana. North
9:45 am	<u>Hambright, K. D.</u> ; Easton, J.; Komescher, N. L.; Zamor, R. M.; Easton, A. C.: INVASIVE AND TOXIC: PRYMNESIUM PARVUM MOVES NORTHWARD INTO OKLAHOMAN WATERS
10:00 am	<u>De Stasio, B. T.</u> ; Schrimpf, M. B.; Beranek, A. E.; Hoyer, E. W.: INCREASED ZOOPLANKTON ABUNDANCE AND COMMUNITY GRAZING RATES IN GREEN BAY, LAKE MICHIGAN FOLLOWING INVASION BY DREISSENID MUSSELS
10:15 am	<u>Schrimpf, M. B.</u> ; De Stasio, B. T.; Reed, T.: UNUSUAL SHIFTS IN TROPHIC STRUCTURE FOLLOWING DREISSENID INVASION OF GREEN BAY, LAKE MICHIGAN
10:30 am	<u>Julius, M. L.</u> ; Kraetsch, C. J.; Nishimoto, R. T.: A PRELIMINARY INVESTIGATION OF THE DIATOM FLORA RECOVERED FROM MUGIL CEPHALUS AND VALIMUGIL ENGELI AND ITS IMPLICATION FOR COMPETITION BETWEEN THE TWO SPECIES
11:00 am	<u>Thabes, M. C.</u> ; Branstrator, D. K.: VARIATION IN MORPHOLOGY, LIFE HISTORY, AND VERTICAL MIGRATION OF BYTHOTREPES LONGIMANUS IN LAKES OF VARYING TROPHIC STATE AND COLOR
11:15 am	<u>Strecker, A. L.</u> ; Arnott, S. E.: DISPERSAL MEDIATES THE EFFECTS OF AN INVASIVE PREDATOR, BYTHOTREPES, ON A ZOOPLANKTON COMMUNITY
11:30 am	<u>Manca/Marina, M. M.</u> ; Portogallo/Magda, M.; Brown/Meghan, M. E.: CHANGES IN PHENOLOGY OF THE SPINY WATER FLEA, BYTHOTREPES LONGIMANUS AND ITS SUCCESS IN LAKE MAGGIORE, ITALY AS A RESULT OF CHANGES IN CLIMATE AND TROPHY

## CS17: MOLECULAR TECHNIQUES AND PERSPECTIVES

Chair(s):	Rebecca J. Gast, rgast@whoi.edu
Location:	Eldorado Zia
9:45 am	<u>Gast, R. J.</u> ; Moran, D. M.; Uhlinger, K. R.; Leavitt, D. R.; Smolowitz, R.: ENVIRONMENTAL DISTRIBUTION OF QUAHOG PARASITE UNKNOWN IN THE COASTAL MARINE ENVIRONMENT
10:00 am	<u>Petrik, K. L.</u> ; Haywood, A. J.; Scholin, C.; Marin, R.: MOLECULAR DETECTION OF KARENIA BREVIS AND RELATED SPECIES USING SANDWICH HYBRIDIZATION AND FLUORESCENT IN SITU HYBRIDIZATION ASSAYS.
10:15 am	<u>Erdner, D. L.</u> ; McCauley, L. A.; Libera, K.; Anderson, D. M.: A REAL-TIME PCR ASSAY FOR ENUMERATING THE TOXIC DINOFLAGELLATE ALEXANDRIUM FUNDYENSE: LABORATORY STUDIES AND FIELD VALIDATION

10:30 am	<u>Hynes, A. M.</u> ; Waterbury, J. B.; Webb, E. A.; Doney, S. C.: DIVERSITY OF TRICHODESMIUM: CHARACTERIZATION OF THE WOODS HOLE CULTURE COLLECTION
11:00 am	<u>Fortenberry, G.</u> ; Commey, S. A.: MICROBIAL DIVERSITY ASSOCIATED WITH MICROCIONA PORIFERA SPONGE USING MOLECULAR TECHNIQUES
11:15 am	<u>Rocha, A. M.</u> ; Cutter, M. R.; DuPont, S. J.; Stroot, P. G.: APPLICATION OF FISH AND RT-RIBOSYN TO CHARACTERIZE DISTINCT MICROBIAL POPULATIONS IN SUBSURFACE CONTAMINATED SEDIMENTS
11:30 am	<u>Penton, C. R.</u> ; Devol, A. H.; Engstrom, P.; Tiedje, J. M.: QUANTITATIVE PCR FOR THE DETECTION AND ENUMERATION OF ANAMMOX BACTERIA IN MARINE AND FRESHWATER SEDIMENTS
11:45 am	<u>Comte, J.</u> ; Fauteux, L.; del Giorgio, P. A.: LINKING THE FUNCTIONAL AND COMPOSITIONAL BACTERIOPLANKTON SUCCESSIONS ALONG THE WATER FLOW PATH IN A NORTHERN WATERSHED

## CS21: PHYSICAL-BIOLOGICAL INTERACTIONS

Chair(s):	Clarissa Anderson, c_anders@lifesci.ucsb.edu Søren L. Nielsen, nielsen@ruc.dk
Location:	Hilton Mesa C
9:45 am	<u>Nielsen, S. L.</u> ; Banta, G. T.; Risgaard-Petersen, N.: NITROGEN TURNOVER IN COASTAL SEDIMENTS – PHYSICAL VERSUS BIOLOGICAL PROCESSES
10:00 am	<u>Skinner, A. C.</u> ; Quigg, A. S.: BELLY-UP IN THE BAYOU, WHO'S THE CULPRIT? PHYSICAL, CHEMICAL AND BIOLOGICAL PARAMETERS OF OFFATTS BAYOU, GALVESTON, TX
10:15 am	<u>Lawson, R. L.</u> ; Anderson, M. A.: DENSITY DRIVEN CURRENTS IN A SHALLOW EMBAYMENT IN LAKE ELSINORE RESULTING FROM DIFFERENTIAL HEATING AND COOLING
10:30 am	<u>Capello, H. E.</u> ; Ochs, C. A.; Zimba, P. V.: PHYTOPLANKTON PIGMENT DEGRADATION PATTERNS IN THE OXIC AND HYPOXIC REGIONS OF A LAKE WATER-COLUMN
11:00 am	<u>Brzezinski, M. A.</u> ; Washburn, L.; Siegel, D. A.: PHYSICAL DRIVERS OF SPATIAL PATTERNS IN PHYTOPLANKTON PRIMARY PRODUCTIVITY IN THE SANTA BARBARA CHANNEL, CA, USA
11:15 am	<u>Anderson, C. R.</u> ; Siegel, D. A.; Brzezinski, M. A.; Guillocheau, N.: SOURCES OF VARIABILITY IN THE PHYTOPLANKTON COMMUNITY STRUCTURE OF THE SANTA BARBARA CHANNEL, CALIFORNIA
11:30 am	<u>Rines, J.</u> ; McFarland, M.; Donaghay, P.; Sullivan, J.; Graff, J.: IMPORTANCE OF SPECIES-SPECIFIC CHARACTERISTICS OF THE PHYTOPLANKTON TO THE DYNAMICS AND PROPERTIES OF THIN LAYERS DURING THE MONTEREY BAY LOCO EXPERIMENT, 2006

(\*) represents Invited presentations

MONDAY

11:45 am	<u>Donaghay, P. L.</u> ; Rines, J.; Sullivan, J. M.; Hanson, A. K.: ALTERNATE PATTERNS OF THIN LAYER FORMATION BY TWO DINOFLAGELLATES
1:30 pm	<u>Berx, B.</u> ; Simpson, J. H.; Gascoigne, J.; Saurel, C.: BIO-PHYSICAL INTERACTIONS OVER CULTIVATED MUSSEL BEDS IN THE MENAI STRAIT (UK)
1:45 pm	<u>Ohman, M. D.</u> ; Davis, R. E.; Sherman, J. T.; Maurer, B.: MESOSCALE BIOPHYSICAL FRONTS IN THE CALIFORNIA CURRENT SYSTEM RESOLVED WITH OCEAN GLIDERS
2:00 pm	<u>Adornato, L. R.</u> ; Villareal, T. A.; Kaltenbacher, E. A.; Schoenbaechler, C. A.; Byrne, R. H.: PHYSICAL AND BIOLOGICAL FEATURES OF THE NORTH PACIFIC SUBTROPICAL FRONT IN SUMMER
2:15 pm	<u>Zeeman, S. I.</u> : PRIMARY PRODUCTION AS INFLUENCED BY PHYSICAL MECHANISMS NEAR THE Pribilof ISLANDS, ALASKA.

## CS23: REMOTE SENSING AND EMERGING TECHNOLOGIES

Chair(s):	Jim Hendee, <a href="mailto:jim.hendee@noaa.gov">jim.hendee@noaa.gov</a>
Location:	Hilton Mesa C
3:00 pm	<u>Hendee, J. C.</u> ; Jankulak, M.; Gramer, L. J.; Manzello, D.: INTEGRATING NEAR REAL-TIME DATA FOR CORAL REEF ECOLOGICAL FORECASTING
3:15 pm	<u>Armstrong, R. A.</u> ; Guild, L.: HYPERSPECTRAL REMOTE SENSING OF INSULAR SHELF REEFS IN SOUTHWESTERN PUERTO RICO AFTER THE 2005 BLEACHING EVENT
3:30 pm	<u>Morrison, J. R.</u> : RETRIEVING THE QUANTUM YIELD OF CHLOROPHYLL FLUORESCENCE FROM HYPERSPECTRAL REMOTE SENSING REFLECTANCE MEASUREMENTS
3:45 pm	<u>Volkmer, M. M.</u> ; Schalles, J. F.; Hladik, C. M.; Pennings, S. C.: COASTAL WETLAND AND SURFACE WATER CLASSIFICATIONS USING HYPERSPECTRAL AERIAL IMAGERY
4:00 pm	<u>Drzewianowski, A. F.</u> ; Kallin, E. B.; Perry, M. J.: DIURNAL CHANGES IN VARIABLE FLUORESCENCE MEASURED WITH FIRE (FLUORESCENCE INDUCTION, RELAXATION FLUOROMETER)
4:30 pm	<u>Greenfield, D. I.</u> ; Scholin, C. A.; Jensen, S.; Marin, R.; Roman, B.; Preston, C.; Jones, W.; Doucette, G. J.; Mikulski, C. M.: FIELD APPLICATIONS OF THE ENVIRONMENTAL SAMPLE PROCESSOR FOR IDENTIFYING HARMFUL MARINE PHYTOPLANKTON: 2006-2007
4:45 pm	<u>Spear, A. H.</u> ; Daly, K. L.; Huffman, D. E.; Garcia-Rubio, L.: A NEW MULTIWAVELENGTH SPECTROSCOPY DETECTION METHOD FOR THE HARMFUL ALGAL BLOOM SPECIES, KARENIA BREVIS
5:00 pm	<u>Becker, R. H.</u> ; Sultan, M. I.; Boyer, G. L.; Twiss, M. R.; Konopko, E.: MAPPING CYANOBACTERIAL BLOOMS IN THE LOWER GREAT LAKES FROM MODIS AND SEAWIFS DATA

5:15 pm	<u>Nelson, J. R.</u> ; Savidge, D. K.; Tzeng, M.; Robertson, C. Y.; Blanton, J. O.: SEASONALLY RECURRING FEATURES IN OCEAN COLOR AND SST SATELLITE IMAGERY: POSSIBLE PATHWAYS FOR CROSS-SHELF TRANSPORT ON THE SE US CONTINENTAL SHELF
5:30 pm	<u>Kostadinov, T. S.</u> ; Siegel, D. A.; Maritorena, S.; Guillocheau, N.; Brzezinski, M.: NEXT-GENERATION SEMI-ANALYTICAL BIO-OPTICAL MODELING FOR OPTICALLY COMPLEX SITES. CASE STUDY IN THE SANTA BARBARA CHANNEL, CALIFORNIA.
5:45 pm	<u>Sieracki, M. E.</u> ; Balch, W. M.; Benfield, M. C.; Hanson, A. R.; Mattar, M. A.; Murtagh, S. J.; Pilskaln, C. H.; Riseman, E. M.; Schultz, H.; Tupper, B.; Utgoff, P. E.: TOOLS FOR AUTOMATED RECOGNITION OF PLANKTON IMAGES

## SS04: DISSOLVED ORGANIC MATTER QUALITY: LINKING ENVIRONMENTAL DYNAMICS TO MOLECULAR STRUCTURE

Chair(s):	William J. Cooper Rudolf Jaffe, <a href="mailto:jaffer@fiu.edu">jaffer@fiu.edu</a> Thursten Dittmar, <a href="mailto:dittmart@ocean.fsu.edu">dittmart@ocean.fsu.edu</a> Leigh McCallister, <a href="mailto:leigh@vims.edu">leigh@vims.edu</a>
Location:	Eldorado Ana. South
9:45 am	<u>Koch, B. P.</u> ; Ludwichowksi, K. U.; Shaojun, L.; Dittmar, T.; Kattner, G.: ADVANCED ANALYTICAL APPROACHES FOR THE MOLECULAR CHARACTERIZATION OF DISSOLVED ORGANIC MATTER
10:00 am	<u>Bialk, H. M.</u> ; Sleighter, R. L.; Hatcher, S. A.; Hatcher, P. G.; Dias, R. F.; Abdulla, H.: MOLECULAR CHARACTERIZATION OF DOM TRANSFORMATION ALONG A TRANSECT OF THE LOWER CHESAPEAKE BAY REGION USING ADVANCED SPECTROSCOPIC TECHNIQUES
10:15 am	<u>Gonsior, M.</u> ; Peake, B. M.; Cooper, W. J.; Cooper, W. T.: CHARACTERIZATION OF DISSOLVED ORGANIC MATTER ALONG A MIXING GRADIENT USING ELECTROSpray IONIZATION FOURIER TRANSFORM ION CYCLOTRON RESONANCE MASS SPECTROMETRY
10:30 am	<u>Hartnett, H. E.</u> ; Brown, B. A.: TRANSFORMATIONS OF RIVERINE DISSOLVED ORGANIC CARBON: EXPLORING BIOGEOCHEMICAL PROCESSES USING ELECTROSPray-IONIZATION MASS SPECTROMETRY
11:00 am	Cressman, K.; Milbrandt, E. C.; Siwicke, J.; Bortone, S.; Alberte, R. S.: CHEMICAL FINGERPRINTING OF COASTAL WATER MASSES AND WATERSHED SOURCES IN THE CALOOSAHATCHEE RIVER/ESTUARY SYSTEM
11:15 am	<u>Ingall, E. D.</u> ; Sannigrahi, P.; Koprivnjak, J. F.; Vetter, T.; Perdue, E. M.; Pfomm, P.: NEW INSIGHTS INTO THE COMPOSITION OF MARINE DISSOLVED ORGANIC MATTER FROM SAMPLES RECOVERED USING COMBINED ELECTRODIALYSIS AND REVERSE OSMOSIS

(\*) represents Tutorial presentations

11:30 am	<u>Orellana, M. V.</u> ; Klimek, J.; Desaki, A. L.; Ranish, J.; Repeta, D. J.; Hansell, D. A.; Engh, G. V.: PROTEINS IN THE ATLANTIC OCEAN: COUPLING DOC SHOTGUN PROTEOMIC ANALYSIS AND ELISA ASSAYS
11:45 am	<u>Maie, N.</u> ; Pisani, O.; Calvo, M.; <u>Jaffé, R.</u> : ASSESSING SEASONAL AND SPATIAL VARIABILITY IN CDOM QUALITY IN FLORIDA BAY USING EXCITATION EMISSION MATRICES AND PARALLEL FACTOR ANALYSIS (EEM-PARAFAC).
	<b>SS07: CARBON CYCLING AT THE LAND-OCEAN INTERFACE</b>
Chair(s):	Antonio Mannino, antonio.mannino@nasa.gov Marjorie Friedrichs, marjy@ccpo.odu.edu Dale Haidvogel, dale@imcs.rutgers.edu
Location:	Eldorado Sunset
9:45 am	<u>Jahnke, R. A.</u> : CLASSIFICATION OF AND PRIMARY CARBON FLUXES AT GLOBAL CONTINENTAL MARGINS: A FRAMEWORK FOR INTEGRATION~
10:15 am	<u>Nagai, T.</u> ; Gruber, N.; Frenzel, H.; McWilliams, J. C.; Plattner, G. K.: DOMINANT ROLE OF EDDIES IN OFFSHORE CARBON TRANSPORT IN THE CALIFORNIA CURRENT SYSTEM
10:30 am	<u>Lucas, A. J.</u> ; Dupont, C. L.; Tai, V.; Pompa, J.; Franks, P. J.; Palenik, B.: THE GREEN RIBBON: ENHANCED PRIMARY PRODUCTIVITY OVER THE SOUTHERN CALIFORNIA BIGHT INNER SHELF.
11:00 am	<u>Salisbury, J.</u> ; Vandemark, D.; Mahadevan, A.; Jonsson, B.; McGillis, W.; Hunt, C.; Campbell, J.: SEASONAL EVOLUTION OF DISSOLVED INORGANIC CARBON ALONG A CROSS-SHELF TRANSECT IN THE GULF OF MAINE: THE INFLUENCE OF RIVERINE DISCHARGE.
11:15 am	<u>Sauer, M. J.</u> ; Roesler, C. S.: SPATIAL AND SEASONAL VARIABILITY OF PHYTOPLANKTON AND CDOM IN THE GULF OF MAINE
11:30 am	<u>Lohrenz, S. E.</u> ; Cai, W. J.; Chen, F. Z.; Chen, X.; Tuel, M.: SEASONAL DYNAMICS IN SATELLITE-DERIVED AIR-SEA FLUXES OF CO <sub>2</sub> IN A RIVER-INFLUENCED COASTAL MARGIN
11:45 am	<u>Miller, W. D.</u> ; Harding, L. W.: CLIMATE FORCING OF THE SPRING BLOOM IN CHESAPEAKE BAY
1:30 pm	<u>Friedrichs, M.</u> ; Hofmann, E. E.; McClain, C. R.; Haidvogel, D.; Wilkin, J.; Lee, C.; Mannino, A.; Najjar, R.; O'Reilly, J.; Fennel, K.; Druon, J.; Seitzinger, S.; Signorini, S.; Pollard, D.: EASTERN U.S. CONTINENTAL SHELF CARBON BUDGET: MODELING, DATA ASSIMILATION, AND ANALYSIS
1:45 pm	<u>Druon, J. N.</u> ; Mannino, A.; Friedrichs, M.; McClain, C. R.: MODELING THE ROLE OF THE SEMI-LABILE DOC IN THE EXPORT OF CARBON FROM THE EASTERN U.S. CONTINENTAL SHELF TO THE OPEN OCEAN
2:00 pm	<u>Mannino, A.</u> ; Russ, M. E.; Hooker, S. B.: SATELLITE-DERIVED DISTRIBUTIONS OF DOC AND CDOM IN THE U.S. MIDDLE ATLANTIC BIGHT

2:15 pm	<u>DeAlteris, J. A.</u> ; Bauer, J. E.; Perkey, D. W.; Keesee, E. E.; Cai, W. J.: 14C AND 13C ISOTOPIC CHARACTERIZATION OF ORGANIC CARBON IN SURFACE WATERS OF THE SOUTH ATLANTIC BIGHT
2:30 pm	<u>Bauer, J. E.</u> ; Raymond, P. A.; Cole, J. J.; Petsch, S. T.; Longworth, B. E.; Caraco, N. F.; Keesee, E. J.: REGIONAL VARIABILITY IN THE AGES AND REACTIVITIES OF RIVERINE DISSOLVED AND PARTICULATE ORGANIC MATTER EXPORTED TO A TEMPERATE OCEAN MARGIN
3:00 pm	<u>Louchouarn, P.</u> ; Brandenberger, J. M.; Crecelius, E.: HISTORICAL RECONSTRUCTION OF REDUCED OXYGEN LEVELS IN DEEP WATERS OF PUGET SOUND: BIOGEOCHEMICAL AND PHYSICAL CONSTRAINTS ON HYPOXIA CONDITIONS
3:15 pm	<u>Hunt, C. W.</u> ; Salisbury, J. E.; Vandemark, D.; Campbell, J. W.; McGillis, W. R.: SPATIAL AND TEMPORAL VARIABILITY OF PCO <sub>2</sub> IN THE GREAT BAY ESTUARY SYSTEM
3:30 pm	Cossarini, G.; Libralato, S.; Melaku Canu, D.; Salon, S.; Solidoro, C.: EFFECTS OF CHANGES IN PRECIPITATION PATTERN ON COASTAL WETLAND ECOSYSTEMS. DOWNSCALING GLOBAL CHANGE PREDICTIONS TO THE LAGOON OF VENICE
3:45 pm	<u>Huang, W.</u> ; Chen, R. F.; Bandla, V.; Tian, Y.: USING GEOGRAPHICAL INFORMATION SYSTEMS FOR MODELLING SOURCES OF ESTUARINE DISSOLVED ORGANIC CARBON
4:00 pm	<u>Gardner, G. B.</u> ; Chen, R. F.; Blumberg, A. F.; Georgas, N.; Huang, W.; Peri, F.: MEASUREMENT AND MODELING OF CHROMOPHORIC DISSOLVED ORGANIC MATTER IN AN URBAN ESTUARY
4:30 pm	<u>Perkey, D. W.</u> ; Bauer, J. E.; Keesee, E. E.: VARIABILITY OF MAJOR CARBON POOLS IN THE MISSISSIPPI RIVER: IMPORTANCE OF TRIBUTARY INPUTS AND REGIONAL LAND USE ON CARBON AND ORGANIC MATTER BIOGEOCHEMISTRY
4:45 pm	<u>Raymond, P. A.</u> ; Oh, N. H.; Turner, R. E.; Broussard, W.: A LARGE SCALE SHIFT IN DISSOLVED INORGANIC CARBON CONCENTRATION AND EXPORT FROM THE MISSISSIPPI RIVER: RESULTS FROM A HIGH RESOLUTION 100 YEAR DATA SET
5:00 pm	<u>Moyer, R. P.</u> ; Grottoli, A. G.: STABLE- AND RADIOCARBON ISOTOPES IN CORALS AND ADJACENT NATURAL WATERS: RECONSTRUCTING LAND-USE CHANGE AND THE LAND-OCEAN CARBON CYCLE.
5:15 pm	<u>Lansard, B. .</u> ; Rabouille, R. .; Grenz, C. .; Denis, L. .: ORGANIC CARBON MINERALIZATION IN CONTINENTAL SHELF SEDIMENTS UNDER THE INFLUENCE OF THE RHONE RIVER INPUTS (NW MEDITERRANEAN)
5:30 pm	<u>Weston, N. B.</u> ; Vile, M. A.; Velinsky, D. J.; Joye, S. B.; Neubauer, S. C.: RISING SEA LEVELS AND SALINITY INTRUSION INTO TIDAL FRESHWATER MARSHES: SHIFTING MICROBIAL COMMUNITIES AND PATHWAYS OF ORGANIC MATTER MINERALIZATION

MONDAY

(\*) represents Invited presentations

5:45 pm	<u>Edmonds, J. W.</u> ; Weston, N. B.; Mou, X.; Joye, S. B.; Moran, M. A.: LINKING THE RESPONSE OF THE MICROBIAL COMMUNITY STRUCTURE TO CARBON MINERALIZATION RATES DURING SEAWATER INTRUSION INTO FRESHWATER ESTUARINE SEDIMENTS	3:00 pm	<u>Campbell-Malone, R.</u> ; Baldwin, K. C.; DeCew, J. C.; Muller, J. A.; Raymond, J. J.; Tsukrov, I.; Moore, M. J.: FROM FLOATING TARGET TO FRACTURE TRAUMA: THE MAKINGS OF A VESSEL-WHALE COLLISION MODEL
3:15 pm	<u>Brito, M.</u> : EFFECTS OF FOOD AVAILABILITY ON GROWTH AND DEVELOPMENT OF LYTECHINUS PICTUS, THE WHITE URCHIN	3:15 pm	<u>Brito, M.</u> : EFFECTS OF FOOD AVAILABILITY ON GROWTH AND DEVELOPMENT OF LYTECHINUS PICTUS, THE WHITE URCHIN
3:30 pm	<u>Singleton, M. C.</u> ; Danforth, J. M.; Pulster, E. L.; Smith, J. S.; Maruya, K. A.; Frischer, M. E.: GEORGIA OYSTER WATCH (GEOW) - CAN OYSTERS BE UTILIZED AS INTEGRATIVE MONITORS OF BOTH BACTERIOLOGICAL AND CHEMICAL WATER QUALITY?	3:30 pm	<u>Singleton, M. C.</u> ; Danforth, J. M.; Pulster, E. L.; Smith, J. S.; Maruya, K. A.; Frischer, M. E.: GEORGIA OYSTER WATCH (GEOW) - CAN OYSTERS BE UTILIZED AS INTEGRATIVE MONITORS OF BOTH BACTERIOLOGICAL AND CHEMICAL WATER QUALITY?
3:45 pm	<u>Thompson, W. E.</u> : SETTLEMENT PATTERNS OF FISH ON MESOAMERICAN REEFS	3:45 pm	<u>Thompson, W. E.</u> : SETTLEMENT PATTERNS OF FISH ON MESOAMERICAN REEFS
4:00 pm	<u>Williams, B. D.</u> ; Love, J. W.: INGRESSION AND MIGRATION RATES OF THE GLASS EEL STAGE OF AMERICAN EEL ( <i>ANGUILLA ROSTRATA</i> ) IN COASTAL ESTUARIES OF MARYLAND	4:00 pm	<u>Williams, B. D.</u> ; Love, J. W.: INGRESSION AND MIGRATION RATES OF THE GLASS EEL STAGE OF AMERICAN EEL ( <i>ANGUILLA ROSTRATA</i> ) IN COASTAL ESTUARIES OF MARYLAND
4:30 pm	<u>Sturdavant, S. K.</u> ; McFall, G.: ASSESSING THE UTILIZATION OF REEF LEDGES BY LOGGERHEAD SEA TURTLES IN AND AROUND GRAY'S REEF NATIONAL MARINE SANCTUARY, GEORGIA, USA TO REMOVE EPIBIONTS	4:30 pm	<u>Sturdavant, S. K.</u> ; McFall, G.: ASSESSING THE UTILIZATION OF REEF LEDGES BY LOGGERHEAD SEA TURTLES IN AND AROUND GRAY'S REEF NATIONAL MARINE SANCTUARY, GEORGIA, USA TO REMOVE EPIBIONTS
4:45 pm	<u>Nance, A. N.</u> ; Holloman, E.; Newman, M.: MERCURY EXPOSURE THROUGH SEAFOOD CONSUMPTION: A PROBABILISTIC RISK ASSESSMENT	4:45 pm	<u>Nance, A. N.</u> ; Holloman, E.; Newman, M.: MERCURY EXPOSURE THROUGH SEAFOOD CONSUMPTION: A PROBABILISTIC RISK ASSESSMENT
5:00 pm	<u>Cowart, D. A.</u> ; Ulrich, P. N.; Marsh, A. G.: SALINITY SENSITIVITY OF DEVELOPMENT IN ANTARCTIC SEA URCHIN EMBRYOS	5:00 pm	<u>Cowart, D. A.</u> ; Ulrich, P. N.; Marsh, A. G.: SALINITY SENSITIVITY OF DEVELOPMENT IN ANTARCTIC SEA URCHIN EMBRYOS
			<b>SS19: SUPPLY-SIDE ECOLOGY: WHAT HAVE WE LEARNED SINCE (LEWIN) 1986?</b>
Chair(s):	Gil Rilov, rilovg@science.oregonstate.edu Sarah Dudas, Sarah.Dudas@science.oregonstate.edu		
Location:	Hilton Mesa A		
3:00 pm	<u>Menge, B. A.</u> : ECOLOGICAL SUBSIDIES IN COASTAL BENTHIC ECOSYSTEMS: RESPONSE OF RECRUITMENT AND PHYTOPLANKTON TO CLIMATIC FLUCTUATIONS <sup>~</sup>	3:00 pm	<u>Menge, B. A.</u> : ECOLOGICAL SUBSIDIES IN COASTAL BENTHIC ECOSYSTEMS: RESPONSE OF RECRUITMENT AND PHYTOPLANKTON TO CLIMATIC FLUCTUATIONS <sup>~</sup>
3:30 pm	<u>Pineda, J.</u> ; Scotti, A.; Gallager, S.: PLANKTON TRANSPORT BY SHALLOW AND DEEP INTERNAL MOTIONS: THE EVIDENCE, AND ILLUSTRATION OF THE PROCESSES FROM A FIELD STUDY	3:30 pm	<u>Pineda, J.</u> ; Scotti, A.; Gallager, S.: PLANKTON TRANSPORT BY SHALLOW AND DEEP INTERNAL MOTIONS: THE EVIDENCE, AND ILLUSTRATION OF THE PROCESSES FROM A FIELD STUDY
3:45 pm	<u>Rilov, G.</u> ; Dudas, S.; Menge, B. A.; Grantham, B.; Lubchenco, J.; Schiel, D. R.: THE SURF ZONE: A SEMI-PERMEABLE BARRIER TO ONSHORE RECRUITMENT OF INVERTEBRATE LARVAE?	3:45 pm	<u>Rilov, G.</u> ; Dudas, S.; Menge, B. A.; Grantham, B.; Lubchenco, J.; Schiel, D. R.: THE SURF ZONE: A SEMI-PERMEABLE BARRIER TO ONSHORE RECRUITMENT OF INVERTEBRATE LARVAE?
4:00 pm	<u>Dudas, S. E.</u> ; Grantham, B. A.; Kirincich, A. K.; Menge, B. A.; Lubchenco, J.; Barth, J. A.: CURRENT REVERSALS AS DETERMINANTS OF INTERTIDAL RECRUITMENT ON THE CENTRAL OREGON COAST: DIFFERENTIAL EFFECTS ON BARNACLES AND MUSSELS	4:00 pm	<u>Dudas, S. E.</u> ; Grantham, B. A.; Kirincich, A. K.; Menge, B. A.; Lubchenco, J.; Barth, J. A.: CURRENT REVERSALS AS DETERMINANTS OF INTERTIDAL RECRUITMENT ON THE CENTRAL OREGON COAST: DIFFERENTIAL EFFECTS ON BARNACLES AND MUSSELS

<sup>(~)</sup> represents Tutorial presentations

4:15 pm	<u>DiBacco, C.</u> ; Pineda, J.; Fuchs, H.; Helfrich, K.: DEVELOPMENT AND APPLICATION OF A DOWNWELLING FLUME TO ASSESS VERTICAL SWIMMING VELOCITIES AND BEHAVIORS OF MEROPLANKTON
4:30 pm	<u>Woodson, C. B.</u> ; McManus, M. A.: BEHAVIOR AND DISPERSAL IN THE COASTAL OCEAN: CAN ZOOPLANKTOS REMAIN NEAR HIGH RESOURCE PATCHES?
4:45 pm	<u>Fuchs, H. L.</u> ; Neubert, M. G.; Mullineaux, L. S.: EFFECTS OF TURBULENCE-MEDIATED LARVAL BEHAVIOR ON LARVAL SUPPLY AND SETTLEMENT IN TIDAL CURRENTS
5:00 pm	<u>Shima, J. S.</u> ; Swearer, S. E.: MAELSTROM IN THE MATRIX: EXTREME ENVIRONMENTAL HETEROGENEITY IN NEARSHORE OCEAN SYSTEMS NECESSITATES A NOVEL CONCEPTUAL FRAMEWORK FOR MARINE METAPOPULATIONS
5:15 pm	<u>Zacherl, D. C.</u> : DESTINATION UNKNOWN? WHAT CALCIFIED STRUCTURES CAN TELL US ABOUT WHERE LARVAE GO
5:30 pm	<u>Paris, C. B.</u> ; Cowen, R. K.; Llopiz, J. K.; Cherubin, L. M.: INFLUENCE OF INDIVIDUAL TROPHIC INTERACTIONS OF LARVAL FISHES ON POPULATION NETWORKS
5:45 pm	<u>Abelson, A.</u> ; Zibdeh, M.; Ben-Tzvi, O.; Zvuloni, A.; Kiflawi, M.; Mokady, O.; Gaines, S.: INDIRECT EVIDENCE FOR EXTERNAL SOURCES OF FISH AND CORAL RECRUITS IN THE NORTHERN GULF OF AQABA, RED SEA

## SS21: PRODUCTION AND CYCLING OF DISSOLVED ORGANIC MATTER IN AQUATIC SYSTEMS STUDIED THROUGH EXPERIMENTAL, FIELD, AND MODELING APPROACHES

Chair(s):	Daniel Repeta, drepeta@whoi.edu Craig Carlson, carlson@lifesci.ucsb.edu Raleigh R. Hood, rhood@hpl.umces.edu
Location:	Eldorado Ana. South
1:30 pm	<u>Aluwihare, L. I.</u> ; DeJesus, R. P.; Hansman , R. L.; Druffel, E. R.: RADIOCARBON BASED BIOGEOCHEMICAL STUDIES OF DISSOLVED ORGANIC CARBON (DOC) CYCLING~
2:00 pm	<u>Keller, D. P.</u> ; Hood, R. R.: MODELING DISSOLVED ORGANIC CARBON AND NITROGEN CYCLING IN OCEANIC, COASTAL, AND ESTUARINE SURFACE WATERS
2:15 pm	<u>Goldberg, S. J.</u> ; Carlson, C. A.; Hansell, D. A.; Bock, B.: STOCKS, DYNAMICS, AND REACTIVITY OF DOM IN THE UPPER 250 M AT THE BERMUDA ATLANTIC TIME-SERIES (BATS) SITE
2:30 pm	<u>Ogawa, H.</u> ; Fukuda, H.; Koike, I.: DISTRIBUTIONS OF BULK QUANTITY AND QUALITY OF DISSOLVED ORGANIC MATTER IN SURFACE WATERS ALONG 160W TRANSECT ACROSS THE CENTRAL PACIFIC

3:00 pm	Carlson, C. A.; Hansell, D. A.; Meyers, M. K.; Nelson, N. B.; Siegel, D.; Smethie, D.: DISTRIBUTION AND DECAY OF DOC IN THE INTERIOR OF THE NORTH ATLANTIC BASIN
3:15 pm	<u>Hansell, D. A.</u> ; Carlson, C. A.: HIGH SPATIAL RESOLUTION MERIDIONAL SECTIONS OF DISSOLVED ORGANIC CARBON IN THE ATLANTIC AND PACIFIC OCEANS
3:30 pm	<u>Knapp, A. N.</u> ; Sigman, D. M.; Kustka, A.; Lipschultz, F.; Capone, D. G.; Gunderson, T.: OLIGOTROPHIC BULK SURFACE OCEAN DISSOLVED ORGANIC NITROGEN DOES NOT RESPOND TO CHANGES IN N2 FIXATION RATES
3:45 pm	<u>Meador, T. B.</u> ; Aluwihare, L. I.: A COMBINED ISOTOPIC AND CHEMICAL CHARACTERIZATION APPROACH TO STUDYING ORGANIC NITROGEN DYNAMICS IN THE OCEAN
4:00 pm	<u>Hara, Seiko, S.</u> ; Koike, Isao, I.: EPIFLUORESCENT-MICROSCOPIC DIRECT OBSERVATION OF COLLOIDAL ORGANIC AGGREGATES IN THE OCEAN
4:30 pm	<u>Dittmar, T.</u> ; Koch, B. P.; D'Andrilli, J.; Kattner, G.; William, T.: THE DYNAMIC AND MOLECULAR STRUCTURE OF DISSOLVED ORGANIC MATTER IN ICE-COVERED OCEANS
4:45 pm	<u>Michel, C.</u> ; Riedel, A.; Gosselin, M.; LeBlanc, B.: WINTER-SPRING DYNAMICS OF DISSOLVED ORGANIC MATTER IN FIRST-YEAR SEA ICE AND SURFACE WATERS ON AN ARCTIC CONTINENTAL SHELF, WESTERN CANADA
5:00 pm	<u>McCarthy, M. D.</u> ; Beaupre, S. R.; Druffel, E.; Walker, B. D.; Guilderson, T.: DOC FROM OFF-AXIS HYDROTHERMAL CIRCULATION: A SOURCE OF "PRE-AGED" AUTOCHTHONOUS DOC TO THE DEEP OCEAN
5:15 pm	<u>Maie, N.</u> ; Miyoshi, T.; Jaffé, R.: SPATIAL AND TEMPORAL VARIABILITY IN THE CHEMICAL CHARACTERISTICS OF UDOM IN THE FLORIDA COASTAL EVERGLADES
5:30 pm	<u>Floge, S. A.</u> ; Wells, M. L.; Boehme, J.: SEASONAL CHANGES IN COLLOIDAL CHROMOPHORIC ORGANIC MATTER IN THE DAMARISCOTTA RIVER ESTUARY, MAINE
5:45 pm	<u>Duan, S.</u> ; Bianchi, T.: TEMPORAL VARIABILITY IN THE COMPOSITION AND ABUNDANCE OF DISSOLVED ORGANIC MATTER IN THE LOWER MISSISSIPPI AND PEARL RIVERS (USA)

## SS24: THE AQUATIC GEL PHASE, ITS ROLE IN BIOGEOCHEMICAL CYCLES

Chair(s):	Pedro Verdugo, verdugo@u.washington.edu Peter H. Santschi, Santschi@tamug.edu
Location:	Eldorado Ana. North
1:30 pm	<u>Verdugo, P.</u> : MARINE POLYMER NETWORKS: AN INTRIGUING CHALLENGE FOR BIOLOGISTS, GEOCHEMIST AND POLYMER PHYSICISTS~
2:00 pm	Harris, J.; Chin, W.; Quesada, I.; Verdugo, P.: PURINERGIC STIMULATION OF SECRETION IN PHAEOCYSTIS

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2:15 pm	Liu, Z.; Lee, C.; Zhu, Q.; Aller, R. C.; Batista, F.: USE OF A FLUORESCENT PROBE TO INVESTIGATE THE THREE-DIMENSIONAL STRUCTURE OF SEDIMENTARY ORGANIC MATTER
2:30 pm	Schwehr, K. A.; Truxal, L.; Hung, C. C.; Xu, C.; Santschi, P. H.: IMPORTANCE OF RELATIVE HYDROPHOBICITY AND MOLECULAR WEIGHT DISTRIBUTIONS OF SELECTED EXOPOLYMERIC SUBSTANCES FOR THEIR PHYSICO-CHEMICAL PROPERTIES
3:00 pm	Ploug, H.; Passow, U.: APPARENT DIFFUSIVITY IN DIATOM AGGREGATES CONTAINING TRANSPARENT EXOPOLYMER PARTICLES (TEP): IMPLICATIONS FOR SUBSTRATE TURNOVER BY ATTACHED BACTERIA
3:15 pm	Slezak, D.; Kiene, R. P.; Kieber, D. J.; Matrai, P. A.; Relinger, A.: EVIDENCE FOR MUCOUS TRAPPING OF GASEOUS DIMETHYLSULFIDE DURING BLOOMS OF COLONIAL PHAEOCYSTIS ANTARCTICA IN THE ROSS SEA
3:30 pm	Hung, C. C.; Schwehr, K. A.; Xu, C.; Zhang, S.; Roberts, K. A.; Santschi, P. H.: ENIGMA OF ASSESSING LOSSES FROM FILTRATION OF POC AND ASSOCIATED SPECIES SUCH AS TH-234 IN THE OCEAN
3:45 pm	Riedel, A.; Michel, C.; Gosselin, M.; LeBlanc, B.: EXOPOLYMERIC SUBSTANCES IN ARCTIC SEA ICE: IMPLICATIONS FOR CARBON CYCLING AND MICROBIAL INTERACTIONS
4:00 pm	Ortega-Retuerta, E.; Reche, I.; Duarte, C. M.: TRANSPARENT EXOPOLYMER PARTICLES AND THEIR DISSOLVED PRECURSORS IN THE SOUTHERN OCEAN: DISTRIBUTION AND REGULATION FACTORS
4:30 pm	Szlosek, J. E.; Engel, A.; Lee, C.; Armstrong, R. A.: COAGULATION EFFICIENCY OF PHYTOPLANKTON CELLS DURING DIFFERENT GROWTH STAGES AND ITS RELATIONSHIP TO EXOPOLYMER PARTICLE PROPERTIES
4:45 pm	Mohar, B.; Kofol, R.; Kovac, N.; Faganeli, J.: ENZYMATIC HYDROLYSIS OF THE NORTHERN ADRIATIC MUCOUS MACROAGGREGATES
5:00 pm	Boehme, J. R.; Wells, M. L.: EFFECTS OF PHOTOBLEACHING ON THE COLLOIDAL FRACTION OF MARINE CHROMOPHORIC DISSOLVED ORGANIC MATTER

## SS26: UNDERSTANDING AND MODELING AQUATIC ECOSYSTEMS USING FUNDAMENTAL LAWS

Chair(s):	Joe Vallino, jvallino@mbl.edu Lora Harris, lharris@mbl.edu
Location:	Hilton Mesa A
1:30 pm	Vallino, J. J.: CAN THE COORDINATION AND EXPRESSION OF DISTRIBUTED MICROBIAL METABOLIC NETWORKS BE EXPLAINED BY THE THEORY OF MAXIMUM ENTROPY PRODUCTION?
1:45 pm	Harris, L. A.; Brush, M. J.; Vallino, J. J.; Nixon, S. W.: A UNIVERSAL APPROACH TO MODELING PHYTOPLANKTON PRODUCTION

2:00 pm	Irwin, A. J.; Finkel, Z. V.: SCALING-UP FROM SIZE-DEPENDENT PHYSIOLOGY TO THE SIZE STRUCTURE OF PHYTOPLANKTON COMMUNITIES
2:15 pm	Finkel, Z. V.: MACROEVOLUTIONARY TRAJECTORIES IN THE SIZE OF MARINE PHYTOPLANKTON
2:30 pm	Meysman, F.; Bruers, S.; Middelburg, J. J.: HOW WELL DOES NON-EQUILIBRIUM THERMODYNAMICS EXPLAIN THE METABOLISM OF MARINE SEDIMENT FOOD WEBS?

## SS37: THE INFLUENCE OF GLOBAL CLIMATE CHANGE ON BIOLOGICAL PROCESSES IN SURFACE WATERS

Chair(s):	Steven W. Wilhelm, wilhelm@utk.edu David A. Hutchins, dahutch@udel.edu Giacomo R. DiTullio, ditullio@cofc.edu
Location:	La Fonda La Terraza
9:45 am	Tortell, P. D.; Raven, J. A.: MEASURING, UNDERSTANDING, AND PREDICTING MARINE PLANKTONIC RESPONSES TO GLOBAL CHANGE~
10:15 am	Sedwick, P. N.; Sholkovitz, E. R.; Church, T. M.: EVIDENCE FOR THE IMPACT OF FOSSIL-FUEL BURNING ON THE ATMOSPHERIC INPUT OF SOLUBLE IRON TO THE SURFACE OCEAN
10:30 am	Behrenfeld, M. J.; O'Malley, R. T.: CLIMATE-DRIVEN TRENDS IN CONTEMPORARY OCEAN PRODUCTIVITY
11:00 am	Hutchins, D. A.; Fu, F. X.; Zhang, Y.; Warner, M. E.; Feng, Y.; Portune, K.; Bernhardt, P. W.; Mulholland, M. R.: CO <sub>2</sub> CONCENTRATION CONTROLS TRICHODESMIUM NITROGEN AND CARBON FIXATION RATES, GROWTH RATES AND ELEMENTAL RATIOS
11:15 am	Feng, Y.; Hutchins, D. A.; Hare, C. E.; Leblanc, K.; DiTullio, G. R.; Wilhelm, S. W.; Sun, J.; Rose, J. M.; Passow, U.; Nemcek, N.; Zhang, Y.; Gueguen, C.; Benner, R.: THE INTERACTIVE EFFECTS OF INCREASED TEMPERATURE AND PCO <sub>2</sub> ON THE NORTH ATLANTIC SPRING BLOOM PHYTOPLANKTON COMMUNITY
11:30 am	Fu, F.; Garcia, N.; Zhang, Y.; Feng, Y.; Warner, M.; Hutchins, D. A.: RISING CO <sub>2</sub> AND TEMPERATURE EFFECTS ON COMMUNITY DYNAMICS OF HARMFUL AND HARMLESS ESTUARINE ALGAL GROUPS
11:45 am	Michelou, V. K.; Cottrell, M. T.; Kirchman, D. L.: LIGHT EFFECTS ON ORGANIC MATTER UPTAKE BY BACTERIOPLANKTON GROUPS IN THE NORTHEAST ATLANTIC OCEAN
1:30 pm	Rose, J. M.; Hutchins, D. A.; Dunbar, R. B.; Feng, Y.; Handy, S. M.; Hare, C. E.; Long, M. C.; Zhang, Y.: INTERACTIVE EFFECTS OF IRON AND TEMPERATURE ON MICROBIAL ASSEMBLAGES WITHIN THE ROSS SEA, ANTARCTICA
1:45 pm	Gessner, M. O.; Daigo, M. J.; Kamara, S.; Steiner, D.; Filippini, M.: EFFECTS OF EXPERIMENTAL WARMING ON LITTER DECOMPOSITION AND MICROBIAL RESPIRATION IN A FRESHWATER LITTORAL MARSH

(~) represents Tutorial presentations

2:00 pm	Kumagai, M.; Hatano, M.; Sakai, Y.; Ishikawa, K.: IMPACTS OF CLIMATE CHANGE ON THE LAKE BIWA ECOSYSTEM
2:15 pm	<u>Gooseff, M. N.</u> ; Bowden, W. B.; Balser, A.; Green, A.; Peterson, B.; Bradford, J.: STREAM ECOSYSTEM IMPACTS FROM INCREASED THERMOKARST ACTIVITY IN THE ALASKAN ARCTIC – RESPONSE TO A CHANGING CLIMATE
2:30 pm	<u>Rose, K. C.</u> ; Williamson, C. E.; Tucker, A. J.; Oris, J. T.; Winder, M.: SEASONAL AND SPATIAL VARIATION IN ULTRAVIOLET RADIATION TRANSPARENCY OF LAKE TAHOE, USA
3:00 pm	<u>Sobrino, C.</u> ; Ward, M. L.; Phillips-Kress, J. D.; Neale, P. J.: INCREASED CO <sub>2</sub> AFFECTS PHYTOPLANKTON GROWTH, CELL PERMEABILITY AND SPECTRAL SENSITIVITY TO UVR EXPOSURE
3:15 pm	<u>Eakin, C. M.</u> ; Morgan, J.; Liu, G.; Christensen, T.; Heron, S.; Skirving, W.; Strong, A. E.; Gledhill, D.: RECORD BREAKING CORAL BLEACHING IN THE CARIBBEAN: THE 2005 BLEACHING EVENT
3:30 pm	<u>Hylander, S.</u> ; Hansson, L. A.: ZOOPLANKTON COMMUNITY RESPONSE TO SIMULTANEOUS THREATS OF UV AND PREDATION
3:45 pm	Cottrell, M. T.; Michelou, V. K.; Nemcek, N.; DiTullio, G.; Kirchman, D. L.: UNCOUPLING OF HETEROTROPHIC BACTERIAL METABOLISM AND PRIMARY PRODUCTION IN THE NORTHEAST ATLANTIC OCEAN IN SUMMER 2005
4:00 pm	<u>Panzeca, C.</u> ; Leblanc, K.; Hutchins, D. A.; DiTullio , G. R.; Beck, A. J.; Taylor, G. T.; Sañudo-Wilhelmy, S. A.: THE IMPACT OF B-VITAMINS ON DMS PRODUCTION AND PHYTOPLANKTON METABOLISM IN THE NORTH ATLANTIC

**SS43: AQUATIC VIRUSES: FRIENDS OR FOES?**

Chair(s):	Mya Breitbart, mya@marine.usf.edu John Paul, jpaul@marine.usf.edu
Location:	Eldorado Zia
3:00 pm	<u>Allen, M. J.</u> ; Wilson, W. H.: MICROARRAYS AND GIANT VIRUSES
3:15 pm	<u>Vega Thurber , R. L.</u> ; Rodriguez Brito, B.; Liu, H.; Rohwer, F. L.: HERPES VIRUS OUTBREAKS IN CORALS
3:30 pm	<u>Säwström, C.</u> ; Granéli, W.; Laybourn-Parry, J.; Anesio, A. M.: HIGH VIRAL INFECTION RATES IN ANTARCTIC AND ARCTIC BACTERIOPLANKTON – AN ADAPTATION TO LIFE IN THE EXTREME?
3:45 pm	<u>Bouvier, T.</u> ; Maurice, C.: EFFECT OF BACTERIAL PHYSIOLOGIC STATE ON VIRAL DYNAMICS
4:00 pm	Ortmann, A. C.; Spuhler, J.; Fulton, J. S.; Snyder, J.; Young, M.: MEASURING THE VIRUS DIVERSITY OF HOT SPRINGS USING SEVERAL APPROACHES
4:30 pm	<u>Angly, F. E.</u> ; Felts, B.; Breitbart, M.; Salamon, P.; Edwards, R. A.; Carlson, C.; Chan, A. M.; Haynes, M.; Kelley, S.; Liu, H.: THE MARINE VIROME OF FOUR OCEANIC REGIONS
4:45 pm	McDaniel, L. D.; Paul, J. H.; Breitbart, M.: OCCURENCE OF PHAGE INTEGRASE-LIKE GENES IN TAMPA BAY
5:00 pm	<u>Paul, J. H.</u> ; Mobberly, J.; Scott, K. M.: A PROPHAGE IN THE HYDROTHERMAL VENT OBLIGATE CHEMOAUTOTROPH THIOMICROSPIRA CRUNOGENA
5:15 pm	<u>Pagano, M. B.</u> ; Escribano, D. F.; Taylor, G. T.: THE EFFECTS OF SEAWATER CONSTITUENTS ON VIRAL DECAY RATES

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# TUESDAY, FEBRUARY 6, 2007

## CS04: BENTHIC-PELAGIC INTERACTIONS

Chair(s):	Jeffrey S. Cornwell, cornwell@hpl.umces.edu
Location:	Hilton Mesa C
3:00 pm	<u>Ask, J.</u> ; Karlsson, J.; Jansson, M.: ENERGY MOBILIZATION IN UNPRODUCTIVE LAKE ECOSYSTEMS ALONG A CLIMATE GRADIENT
3:15 pm	<u>Viollier, E.</u> ; Groleau, A.; Deflandre, B.; Jezequel, D.; Sarazin, G.; Rabouille, C.: BENTHIC OXYGEN DEMAND AND HYPOLIMNION ANOXIA IN A GREAT ALPINE LAKE, BOURGET LAKE, FRANCE
3:30 pm	<u>Hannides, A. K.</u> ; Sansone, F. J.; Hebert, A. B.: PERMEABLE SEDIMENTS AS NUTRIENT REGENERATORS: THE ROLE OF PERMEABILITY IN THE REMINERALIZATION OF SUSPENDED PARTICULATE ORGANIC MATTER
3:45 pm	<u>Holyoke, R. R.</u> ; Owens, M. S.; Cornwell, J. C.: INTERACTIONS OF BENTHIC MICROALGAE AND ORGANIC DEPOSITION ON NUTRIENT EXCHANGE AT THE SEDIMENT-WATER INTERFACE
4:00 pm	<u>Huzarska, K.</u> : EPS IMPORTANCE FOR SANDY SEDIMENT MOBILITY - CASE STUDIES FROM THE SOUTH BALTIC (POLAND)
4:15 pm	<u>Dartnell, P.</u> ; Collier, R.; Buktenica, M.; Jessup, S.; Chezar, H.; Girdner, S.: MULTIBEAM SONAR MAPPING AND MODELING OF A SUBMERGED BRYOPHYTE MAT, CRATER LAKE, OREGON
4:30 pm	Buktenica, M.; <u>Jessup, S. L.</u> ; Collier, R. W.; Girdner, S.; Dartnell, P.: BENTHIC CRYPTOGAM MAT COMMUNITIES IN CRATER LAKE: IMPLICATIONS OF BIOMASS ACCUMULATION FOR PELAGIC ECOSYSTEM PROCESSES
4:45 pm	<u>Luecke, C.</u> ; Whalen, S.; Fortino, K.: ASSESSING BENTHIC PRIMARY PRODUCTIVITY USING PULSE-MODULATED FLUOROMETRY
5:00 pm	<u>Johnson, C. R.</u> ; Luecke, C.; Whalen, S. C.: FISH MEDIATED MOVEMENT OF NITROGEN BETWEEN BENTHIC AND PELAGIC HABITATS IN ARCTIC LAKES
5:15 pm	<u>Cornwell, J. C.</u> ; Owens, M. S.; Kana, T. M.: APPLICATION OF THE N2:AR TECHNIQUE TO THE MEASUREMENT OF DENITRIFICATION IN ESTUARY, RESERVOIR AND STREAM SEDIMENTS: METHODOLOGICAL CONSIDERATIONS
5:30 pm	<u>Milbrandt, E. C.</u> ; Cressman, K.; Siwicke, J.; Bortone, S. A.; Alberte, R. S.: SEAGRASS STRESS RESPONSES RESULTING FROM LAKE OKEECHOBEE WATER RELEASES AND WATERSHED INPUTS IN THE CALOOSAHATCHEE RIVER-ESTUARY SYSTEM
5:45 pm	<u>Smith, K. A.</u> ; Caffrey, J. M.: THE EFFECTS OF HUMAN AND CLIMATIC IMPACTS ON SEDIMENT NITROGEN DYNAMICS IN ESCAMBIA BAY, FLORIDA

## CS10: EUTROPHICATION AND NUTRIENT CYCLING

Chair(s):	Jane M. Caffrey, jcaffrey@uwf.edu Amy M. Marcarelli, marcamy@isu.edu Autumn J. Oczkowski, ajo@gso.uri.edu
Location:	Eldorado Sunset
8:30 am	<u>Barnes, R. T.</u> ; Raymond, P. A.: THE DUAL ISOTOPIC COMPOSITION OF NITRATE EXPORTED FROM SMALL TEMPERATE WATERSHEDS OF DIFFERENT LAND USES
8:45 am	<u>Altabet, M. A.</u> ; Varekamp, J. C.: THE NITROGEN ISOTOPE BIOGEOCHEMISTRY OF LONG ISLAND SOUND: INSIGHTS INTO MECHANISM(S) OF 15N ENRICHMENT IN EUTROPHICATION-IMPACTED ESTUARIES
9:00 am	<u>Oczkowski, A. J.</u> ; Nixon, S. W.; DiMilla, P. A.; McKinney, R. A.; Henry, K. M.: CONTRIBUTIONS OF ANTHROPOGENIC NITROGEN TO SECONDARY PRODUCTION IN NARRAGANSETT BAY, RHODE ISLAND (USA): A STABLE ISOTOPE APPROACH
9:15 am	<u>Crusius, J.</u> ; Giblin, A.; Koopmans, D. J.; Erban, L.; Bratton, J. F.; Foreman, K.: NUTRIENT DISCHARGE FROM FRESH AND SALINE GROUNDWATER TO WEST FALMOUTH HARBOR (MA) INFERRRED FROM RADIUM ISOTOPES AND RADON
9:45 am	<u>Nydick, K. R.</u> ; Anderson, C.: NUTRIENTS AND EUTROPHICATION IN THE LOWER ANIMAS RIVER, COLORADO-NEW MEXICO: IDENTIFYING NUTRIENT SOURCES WITH GEOGRAPHIC LOADING ANALYSIS AND N15 ISOTOPES
10:00 am	<u>Smith, S. M.</u> ; Lee, K. D.: RESPONSES OF PERIPHYTON TO ARTIFICIAL NUTRIENT ENRICHMENT IN FRESHWATER KETTLE PONDS OF CAPE COD NATIONAL SEASHORE
10:15 am	<u>Marcarelli, A. M.</u> ; Rugenski, A. T.; Bechtold, H. A.; Inouye, R. S.; Baxter, C. V.: NUTRIENTS DIFFERENTIALLY AFFECT BIOMASS ACCRUAL, PRODUCTION, AND ACTIVITY OF BIOFILM COMMUNITIES IN A EUTROPHIC SOUTHEAST IDAHO RIVER
10:30 am	<u>Hill, B. H.</u> ; McCormick, F. H.; Harvey, B. C.; Johnson, S. L.; Warren, M. L.: METABOLISM, NUTRIENT UPTAKE AND MICROBIAL ENZYMES IN FORESTED STREAMS: THE ROLE OF MANAGEMENT HISTORY, STREAM HABITAT AND TRANSIENT STORAGE
11:00 am	<u>Koop-Jakobsen, K.</u> ; Giblin, A.: NITROGEN RETENTION IN SALT MARSH SEDIMENT
11:15 am	<u>Fairchild, G. W.</u> ; Velinsky, D. J.: CHEMICAL MODIFICATION OF SMALL STREAMS BY CONSTRUCTED PONDS.
11:30 am	<u>Conde-Costas, C.</u> : NITROGEN DYNAMICS IN A TROPICAL CAVE STREAM, PR
11:45 am	<u>Hamilton, S. K.</u> ; Bruesewitz, D. A.; Horst, G.; Sarnelle, O.: CALCIUM CARBONATE PRECIPITATION AND PHOSPHORUS STRIPPING INDUCED BY NUTRIENT ADDITIONS IN A LAKE MESOCOSM EXPERIMENT

(\*) represents Tutorial presentations

1:30 pm	Fox, L. R.; Valiela, I.: LONG-TERM CHANGES IN SALT MARSH VEGETATION: EFFECTS OF CHRONIC NUTRIENT ENRICHMENT AND SEA-LEVEL RISE.
1:45 pm	<u>Kinney, E. L.</u> ; Valiela, I.: A SENSITIVE AND WIDESPREAD INDICATOR OF ESTUARINE NITROGEN LOADS: STABLE ISOTOPIC SIGNATURES IN SALT MARSH CORDGRASS IN CAPE COD ESTUARIES
2:00 pm	Olsen, Y. S.; Hofmann, L. C.; Fox, S.; Valiela, I.: HOW DOES SEAGRASS SHOOT DENSITY AND NITROGEN LOAD AFFECT FAUNAL COMPOSITION IN WAQUOIT BAY, MA?
2:15 pm	Teichberg, M.; Aguila, C.; Fox, S.; Olsen, Y.; Valiela, I.: RESPONSE OF ULVA LACTUCA AND GRACILARIA TIKVAHIAE TO NITRATE AND AMMONIUM ENRICHMENT IN WAQUOIT BAY, MASSACHUSETTS
2:30 pm	<u>Caffrey, J. M.</u> ; Bano, N.; Smith, K.; Hollibaugh, J. T.: NITRIFICATION RESPONSE TO HYPOXIA IN THREE SOUTHEASTERN ESTUARIES
3:00 pm	<u>McCarthy, M. J.</u> ; Carini, S.; Gardner, W. S.: EFFECTS OF SALINITY MANIPULATIONS AND ORGANIC MATTER ADDITIONS ON DENITRIFICATION RATES IN SOUTH TEXAS COASTAL SYSTEMS
3:15 pm	Atilla, N.; Rabalais, N. N.; Morrison, W.; Mendenhall, W.; Normandeau, C.; Dortch, Q.; Turner, R. E.: PHYTOPLANKTON COMMUNITY COMPOSITION IN LAKE PONTCHARTRAIN
3:30 pm	<u>Nowlin, W. H.</u> ; Gaulke, A.; Vanni, M. J.: THE RELATIVE IMPORTANCE OF BACTERIA AND ALGAE IN PELAGIC NUTRIENT CYCLING OF RESERVOIR ECOSYSTEMS
3:45 pm	<u>Graneli, W.</u> ; Graneli, E.: A NEVER-ENDING LIMITING NUTRIENT CONTROVERSY - THE BALTIC SEA

## CS24: SPECIES INTERACTIONS: COMPETITION, DISEASE, MUTUALISM

Chair(s):	TBD
Location:	Hilton Mesa B
1:30 pm	Dinsdale, E. A.; Pantos, O.; Smriga, S.; Edwards, R. A.; Angly, F.; Hayes, M.; Azam, F.; Krause, L.; Vega Thurber, R.; Rohwer, F.: HUMAN ACTIVITIES DRIVE A TRANSITION FROM AUTOTROPHY TO HETEROTROPY IN CORAL REEF MICROBIAL COMMUNITIES
2:00 pm	<u>Prince, E. K.</u> ; Myers, T. L.; Naar, J.; Kubanek, J.: COMPETING PHYTOPLANKTON UNDERMINE ALLELOPATHY OF KARENIA BREVIS, THE RED TIDE DINOFLAGELLATE
2:15 pm	Mayali, X.; Franks, P. J.; Azam, F.: TEMPORARY CYST FORMATION BY A DINOFLAGELLATE REMOVES BACTERIAL COLONIZATION
2:30 pm	Yanik, E. L.; <u>Smith, V. H.</u> : EFFECT OF DIET ON THE SUSCEPTIBILITY OF CULEX SP. TO BEAUVARIA BASSIANA INFECTION
3:00 pm	Vanschoenwinkel, B. J.; De Vries, C. P.; Seaman, M. T.; Brendonck, L.: LOCAL VS REGIONAL FACTORS IN A ROCK POOL METACOMMUNITY: THE ROLE OF DISPERSAL LIMITATION AND PRIORITY EFFECTS IN EXPLAINING SMALL-SCALE SPATIAL PATTERNS

3:15 pm	Arnott, S. E.; Derry, A. M.; Duke, L.; Forrest, J.; Pokorny, J.; Strecker, A. L.: THE INFLUENCE OF DISPERSAL ON COMMUNITY COMPOSITION DEPENDS ON LOCAL FACTORS
3:30 pm	<u>McShane, R. R.</u> ; Cowley, D. E.: COMPETITION BETWEEN NATIVE AND INTRODUCED FISHES MODIFIES THE TROPHIC INTERACTIONS WITHIN REFUGIA IN AN INTERMITTENT STREAM
3:45 pm	<u>Raub, S. C.</u> ; Dang, C. K.; Lucas, F. S.; Chauvet, E.; Gessner, M. O.: EFFECTS OF FUNGAL AND BACTERIAL INTERACTIONS ON LEAF DECOMPOSITION IN STREAM MICROCO_SMS

## SS04: DISSOLVED ORGANIC MATTER QUALITY: LINKING ENVIRONMENTAL DYNAMICS TO MOLECULAR STRUCTURE

Chair(s):	William J. Cooper Rudolf Jaffe, jaffer@fiu.edu Thursten Dittmar, dittmar@ocean.fsu.edu Leigh McCallister, leigh@vims.edu
Location:	Eldorado Ana. South
8:30 am	<u>Cotner, J. B.</u> ; Amado, A. M.; Cory, R. M.; Edlund, B.; McNeill, K.: SUPERIOR TALES: THE EFFECTS OF MICROBES AND PHOTOCHEMICAL PROCESSES ON DOM IN THE EARTH'S LARGEST LAKE
8:45 am	<u>Tzortziou, M.</u> ; Neale, P. J.; Osburn, C. L.: PHOTOCHEMICAL DEGRADATION OF DISSOLVED ORGANIC MATERIAL FROM A TIDAL MARSH-ESTUARINE SYSTEM. MEASUREMENTS AND SPECTRAL PHOTOBLEACHING MODELING.
9:00 am	<u>Neale, P. J.</u> ; Tzortziou, M.; Osburn, C. L.: A SIMPLE SPECTRAL MODEL FOR SOLAR PHOTOBLEACHING OF MARSH AND ESTUARINE COLORED DISSOLVED ORGANIC MATTER (CDOM)
9:15 am	<u>Mead, R.</u> ; Smith, E.; Babila, T.; Mendoza, W.: TIDAL CYCLE VARIATIONS IN THE OPTICAL PROPERTIES OF ESTUARINE DISSOLVED ORGANIC MATTER (DOM) FROM A SOUTHEASTERN (USA) SALT MARSH
9:45 am	<u>Swan, C. M.</u> ; Nelson, N. B.; Siegel, D. A.; Carlson, C. A.: HYDROGRAPHY OF CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) IN THE PACIFIC
10:00 am	<u>Russ, M. E.</u> ; Mannino, A.: EVALUATING THE FATE OF DOC AND CDOM AT THE CHESAPEAKE BAY MOUTH TO THE COASTAL MID-ATLANTIC BIGHT THROUGH MICROBIAL DEGRADATION AND PHOTO-OXIDATION EXPERIMENTS
10:15 am	Reche, I.; Ortega-Retuerta, E.; Pulido-Villena, E.; Duarte, C. M.: DISTRIBUTION OF CHROMOPHORIC DISSOLVED ORGANIC MATTER IN THE SOUTHERN OCEAN: PHOTOCHEMICAL AND BACTERIAL TRANSFORMATIONS
10:30 am	<u>Hood, E.</u> ; Fellman, J. B.; Edwards, R. T.; D'Amore, D. V.: SPECTROSCOPIC ANALYSES OF SEASONAL CHANGES IN THE SOURCE AND CHEMICAL CHARACTER OF DISSOLVED ORGANIC MATTER IN COASTAL TEMPERATE RAINFOREST WATERSHEDS

(\*) represents Invited presentations

TUESDAY

11:00 am	McKnight, D. M.; Appel, M.; Brooks, M.; Cory, R.: PHOTOLYTIC EFFECTS ON SPECTRAL PROPERTIES AND CU-BINDING BY STREAM FULVIC ACIDS
11:15 am	Aiken, G. R.; Ryan, J. N.; Nagy, K. L.: CHALLENGES IN THE STUDY OF MERCURY-DISSOLVED ORGANIC MATTER INTERACTIONS
11:30 am	Blodau, C.; Heitmann, T.; Bauer, M.; Macalady, D.: CONTROLS ON ELECTRON TRANSFER OF DOM AND ITS POTENTIAL SIGNIFICANCE FOR HETEROTROPHIC RESPIRATION IN A NORTHERN WETLAND
11:45 am	Westerhoff, P.; Mezyk, S. P.; Cooper, W. J.; Minakata, D.: DIRECT MEASUREMENT OF HYDROXYL RADICAL RATE CONSTANTS WITH SUWANNEE RIVER FULVIC ACID AND OTHER DISSOLVED ORGANIC MATTER ISOLATES

### SS06: BIOFILMS IN AQUATIC FOOD WEBS

Chair(s):	Willem Goedkoop, willem.goedkoop@ma.slu.se Alan Decho, Awdecho@gwm.sc.edu
Location:	Hilton Mesa B
8:30 am	Battin, T. J.; Besemer, K.; Hoedl, I.; Singer, G.: STREAM BIOFILMS: MORE THAN SLIME CITIES~
9:00 am	Neu, T. R.; Lawrence, J. R.: A NOVEL APPROACH TO EXTRACELLULAR POLYMERIC SUBSTANCES (EPS) IN BIOFILM SYSTEMS
9:15 am	Lyon, D. R.; Kopecky, A. L.; Ziegler, S. E.: EFFECTS OF NUTRIENT ENRICHMENT ON AUTOTROPHIC-HETEROTROPHIC COUPLING WITHIN OZARK STREAM BIOFILMS AS REVEALED BY 13C-PLFA
9:30 am	Devlin, S. P.; Vadeboncoeur, Y.; Vander Zanden, M. J.: SPATIO-TEMPORAL VARIATION IN PERIPHYTON PRODUCTIVITY, BIOMASS, RESPIRATION AND DELTA 13C ACROSS A LAKE SIZE GRADIENT.
9:45 am	Hill, W. R.; Fanta, S. E.; Smith, T. B.; Roberts, B. J.: CARBON STABLE ISOTOPE DYNAMICS AND STOICHIOMETRY IN AUTOTROPHIC BIOFILMS
10:00 am	Bellinger, B. J.; Underwood, G. J.; Ziegler, S. E.; Gretz, M. R.: THE ROLE OF DIATOM DERIVED POLYMERS IN CARBON CYCLING WITHIN ESTUARINE BIOFILMS DETERMINED THROUGH ISOTOPIC ENRICHMENT
10:15 am	Muschiol, D.; Traunspurger, W.: MEIOFAUNA IN FLOATING CHEMOAUTOTROPHIC MICROBIAL MATS IN MOVILE CAVE, ROMANIA - TROPHIC RELATIONSHIPS, POPULATION DYNAMICS AND LIFE CYCLE STRATEGIES
10:30 am	Peters, L.; Traunspurger, W.: NEMATODES AND OTHER MEIOFAUNA IN LITTORAL BIOFILMS IN LAKES: DEVELOPMENT, DISTRIBUTION AND ECOLOGICAL INTERACTIONS
11:00 am	Admiraal, W.; Van Beusekom, S. A.; Schwartz, T.: RETENTION OF BACTERIAL CELLS AND LATEX BEADS IN NATURAL AND CULTURED PHOTOTROPHIC BIOFILMS

11:15 am	Goedkoop, W.; Spann, N.; Åkerblom, N.: THE ROLE OF HUMIC BIOFILMS FOR CONTAMINANT BIOAVAILABILITY AND SUBLETHAL EFFECTS TO THE MIDGE CHIRONOMUS RIPARIUS.
11:30 am	Waiser, M. J.; Lawrence, J.; Glozier, N.; Donald, D.; Tumber, V.; Holm, J.; Swerhone, G.; Wallace, E.: A MESOCOSM AND ROTOTORQUE REACTOR APPROACH FOR INVESTIGATING EFFECTS OF CONTAMINANTS ON BIOFILM COMMUNITIES FROM PRAIRIE AQUATIC ECOSYSTEMS.
11:45 am	Hmelo, L. R.; Van Mooy, B. A.: INVESTIGATION OF ACYLATED HOMOSERINE LACTONES IN MARINE ENVIRONMENTS USING ELECTROSPRAY-IONISATION MASS SPECTROMETRY

### SS08: RECRUITMENT OF MARINE LARVAE: EXPERIMENTAL AND MODELING STUDIES

Chair(s):	Donal T. Manahan, manahan@usc.edu Eileen Hofmann, hotmann@ccpo.odu.edu
Location:	Hilton Mesa A
8:30 am	Mullineaux, L. S.: MODELING THE BIOLOGY AND HYDRODYNAMICS OF RECRUITMENT – NEW APPROACHES AND INSIGHTS~
9:00 am	Koehl, M.; Crimaldi, J. P.; Dombroski, D. E.; Cooper, T.: EFFECTS OF COMMUNITY STRUCTURE, WATER CURRENTS AND WAVES ON LARVAL SETTLEMENT INTO BENTHIC HABITATS
9:15 am	Maldonado, E. M.; Latz, M. I.: EFFECT OF FLUID SHEAR ON GROWTH AND DEVELOPMENT OF SEA URCHIN LARVAE
9:45 am	Toonen, R. J.; Bird, C. B.; Baums, I. B.: WHERE HAVE ALL THE LARVAE GONE? GENETIC PATTERNS OF CONNECTIVITY IN THE HAWAIIAN ARCHIPELAGO
10:00 am	Hedgecock, D.: GENOMIC APPROACHES TO UNDERSTANDING VARIATION IN RECRUITMENT SUCCESS
10:15 am	Rock, J.; Young, E.; Carvalho, G.; Murphy, E.; Hutchinson, B.; North, N.; Meredith, M.; Thorpe, S.; Collins, M.; Hauser, L.; Rodhouse, P.; Everson, I.; Belchier, M.: GENE FLOW IN ANTARCTIC FISHES: THE ROLE OF OCEANOGRAPHY AND LIFE HISTORY
10:30 am	Manahan, D. T.: PHYSIOLOGICAL DETERMINANTS OF LARVAL LIFE SPAN IN THE PLANKTON
11:00 am	Powell, E. N.; Klinck, J. M.; Hedgecock, D.; Hofmann, E. E.: UNDERSTANDING CRASSOSTREA GIGAS POPULATION VARIABILITY USING A GENETICS-BASED MODEL
11:15 am	Hofmann, G. E.; Fielman, K. T.; Hammond, L.; O'Donnell, M. J.: PHYSIOLOGICAL FINGERPRINTS OF RESPONSE TO THE ENVIRONMENT: USING GENOME-ENABLED TECHNIQUES TO ASSESS THERMOTOLERANCE IN SEA URCHIN LARVAE
11:30 am	Hirst, A. G.; López-Urrutia, A.; Veit-Köhler, G.; Brey, T.: EXPLORING PATTERNS IN THE EGG DEVELOPMENT TIMES OF PLANKTON AND NEKTON

(\*) represents Tutorial presentations

11:45 am	<u>Rasmussen, L. L.</u> ; Levin, L. A.; Cornuelle, B. D.; Becker, B. J.; Largier, J. L.: SMALL SCALE LARVAL CONNECTIVITY: PATTERNS AND PROCESSES FROM ELEMENTAL FINGERPRINTING AND PHYSICAL MODELING	10:00 am	Hasemann, C.; Fiesoletti, F.; Lansard, B.; Sablotny, B.; Spagnoli, F.; Soltwedel, T.: NEW TECHNOLOGIES TO STUDY EFFECTS OF PHYSICAL DISTURBANCES AT THE SEDIMENT-WATER INTERFACE: THE DEVELOPMENT OF AN "INTEGRATED SEDIMENT DISTURBER" (ISD)
1:30 pm	<u>Jones, W. J.</u> ; Preston, C.; Greenfield, D.; Roman, B.; Jensen, S.; Massion, G.; Marin, III, R.; Scholin, C.; Vrijenhoek, R. C.: USE OF SANDWICH HYBRIDIZATION AND THE ENVIRONMENTAL SAMPLE PROCESSOR (ESP) FOR DETECTION OF MARINE LARVAE: HIGH-THROUGHPUT LAB ANALYSIS AND IN SITU DETECTION.	10:15 am	<u>Almroth, E. M.</u> ; Andersson, S.; Apler, A.; Tengberg, A.; Hall, P. O.: INFLUENCE OF NATURAL AND MANMADE SEDIMENT RESUSPENSION ON WATER QUALITY - IN SITU SIMULATION STUDIES IN A SCOTTISH LOCH
1:45 pm	<u>Biermann, J. L.</u> ; North, E. W.: BEHAVIOR AND PHYSICAL CONDITIONS INFLUENCE ON BLUE CRAB LARVAL TRANSPORT INTO CHESAPEAKE AND DELAWARE BAYS: AN INTEGRATED FIELD AND MODELING STUDY	10:30 am	<u>Marvaldi, J. H.</u> ; Legrand, J.; Masset, F. J.; Nicot, M.; Barbot, D.; Degres, Y.; Jouannic, M.; Cabioch, F.; Billand, P.: ROSE PROJECT (WRECK MONITORING ACOUSTIC NETWORK): PROTOTYPE SYSTEM DEMONSTRATION IN COASTAL WATERS (MID JUNE – EARLY SEPTEMBER 2006)
2:00 pm	<u>Fiechter, J.</u> ; Mooers, C. N.; Haus, B. K.; Johns, E.: CORAL LARVAE DISPERSION PATHWAYS IN THE UPPER FLORIDA KEYS FROM HIGH-RESOLUTION OBSERVATIONS AND SIMULATIONS	11:00 am	Crawford, M. M.; Crawford, P. J.: ENGINEERING DRIVEN PROGRAMME TO DEPLOY LANDERS AS IN SITU LABORATORIES IN 8000 MWD
2:15 pm	<u>Nadaoka, K.</u> ; Harii, S.; Suzuki, Y.; Nishimoto, T.; Tamura, H.; Miyazawa, Y.; Yasuda, N.: REEF CONNECTIVITY IN THE RYUKYU ISLANDS, JAPAN, REVEALED BY FIELD AND LABORATORY EXPERIMENTS AND NUMERICAL SIMULATIONS	11:15 am	Delauney, L.; Lepage, V.: BIOFOULING PROTECTION FOR MARINE BENTHIC OBSERVATORIES SENSORS BY LOCAL CHLORINATION
2:30 pm	<u>Fetzer, I.</u> : GO WITH THE FLOW: ADAPTATION OF LIFE CYCLES TO A BI-LAYERED FLOW REGIME OF AN ARCTIC ESTUARY SYSTEM	11:30 am	Sweetman, A. K.; Smith, K. L.; Witte, U.: THE ROLE OF DEEP-SEA METAZOAN MACROFAUNA IN BENTHIC CARBON REMINERALIZATION
		11:45 am	<u>Köster, M.</u> ; Wardenga, R.; Blume, M.: SMALL-SCALE INVESTIGATIONS OF MICROBIAL COMMUNITIES IN COASTAL SEDIMENTS OF THE SOUTHERN BALTIMORE SEA
		1:30 pm	Wenzhoefer, F.; <u>Waldmann, C.</u> ; Fischer, J.; Bergenthal, M.; Roey, H.: BENTHIC BIOGEOCHEMICAL STUDIES IN COASTAL MARINE SEDIMENTS ON DIFFERENT SPATIAL AND TEMPORAL SCALES USING THE MOBILE SENSOR PLATFORM C-MOVE
		1:45 pm	<u>Hebert, A. B.</u> ; Sansone, F. J.; Pawlak, G.: TRACER DISPERSAL IN SANDY SEDIMENT POREWATER UNDER ENHANCED PHYSICAL FORCING AT THE KILO NALU OBSERVATORY, OAHU, HAWAII
		2:00 pm	<u>Nickell, L. A.</u> ; Harvey, S. M.; Walpersdorf, E.; Burke, K.; Witte, U.; Spagnoli, F.: PARTICLE AND SOLUTE TRANSPORT IN ORGANICALLY ENRICHED SEDIMENTS FROM A SCOTTISH LOCH
		2:15 pm	<u>Rabouille, C.</u> ; LANSARD, B.; SOLTWEDEL, T.; Kershaw, P.; Damgaard, L. R.: PERTURBATION OF CARBON RECYCLING IN SEDIMENTS OF THE COASTAL OCEAN: THE NEED FOR OBSERVATION OF SPATIAL AND TEMPORAL VARIABILITY
		2:30 pm	<u>Barry, J. P.</u> ; Johnson, K. S.; Hamilton, A.; Coletti, L.; Lovera, C.: DEVELOPMENT OF EDDY CORRELATION METHODS TO ESTIMATE FLUXES OF OXYGEN AND NITRATE THROUGH CONTINENTAL SHELF SEDIMENTS IN MONTEREY BAY, CALIFORNIA
		2:45 pm	<u>Plant, J. N.</u> ; Johnson, K. S.; Coletti, L. J.; Fitzwater, S. E.: SULFIDE FLUX FROM COLD SEEPS IN MONTEREY BAY OBSERVED AT WEEKLY TO MONTHLY TIME SCALES USING AN ISUS CHEMICAL SENSOR

TUESDAY

(\*) represents Invited presentations

## SS18: PREDICTING THE EFFECT OF CHANGES IN THE TERRESTRIAL ENVIRONMENT ON AQUATIC DOC

Chair(s):	Kevin Bishop, kevin.bishop@ma.slu.se Rick Bourbonniere, Rick.Bourbon@ec.gc.ca Tom Clair, tom.clair@ec.gc.ca
Location:	Eldorado Zia
8:30 am	<u>Dillon, P. J.</u> ; Molot, L. A.; Futter, M.: DISSOLVED ORGANIC MATTER: SOURCES, SINKS, CHARACTERIZATION AND TRENDS IN ONTARIO LAKES AND STREAMS~
9:00 am	<u>Erlandsson, M.</u> ; Bishop, K.; Fölster, J.; Weyhenmeyer, G.: DRIVERS OF SYNCHRONOUS TOC TRENDS IN SWEDISH WATERCOURSES
9:15 am	<u>Clair, T. A.</u> ; Dennis, I. F.; Laudon, H.: TOTAL ORGANIC CARBON AND NITROGEN EXPORTS FROM NOVA SCOTIAN CATCHMENTS RECEIVING DECREASING SULFATE DEPOSITION
9:45 am	<u>Rosén, P.</u> ; Karlsson, J.; Vogel, H.; Förster, J.; Persson, P.: TOC IN LAKE WATER DURING THE HOLOCENE INFERRED FROM LAKE SEDIMENTS AND IR SPECTROSCOPY, EFFECTS OF CLIMATE, VEGETATION, FIRE AND PERMAFROST
10:00 am	<u>Rusak, J. A.</u> ; Hanson, P. C.; Carpenter, S. R.; Kasian, S. M.; Paterson, A. M.; Somers, K. M.: LAKE-SPECIFIC INTERACTIONS BETWEEN WATER CHEMISTRY AND DISSOLVED ORGANIC AND INORGANIC CARBON AMONG REGIONS
10:15 am	<u>Giesler, R.</u> ; Karlsson, J.; Klaminder, J.; Mört, C. M.: THE ROLE OF VEGETATION FOR DOC PRODUCTION AND EXPORT ALONG A SUB-ARCTIC CLIMATE GRADIENT
10:30 am	<u>Bergamaschi, B. A.</u> ; Sonnerup, R.; Russell, A. D.: LONG TERM TRENDS IN DISSOLVED ORGANIC CARBON COMPOSITION IN THE SACRAMENTO AND SAN JOAQUIN RIVERS
11:00 am	<u>Pellerin, B. A.</u> ; Bergamaschi, B. A.: DISSOLVED ORGANIC CARBON DYNAMICS AND REACTIVITY IN AN AGRICULTURAL WATERSHED IN CALIFORNIA
11:15 am	<u>Morris, D. P.</u> : VARIABILITY IN THE RATE OF CDOM PHOTOBLEACHING AND ITS CONTROL IN THE LEHIGH RIVER, PENNSYLVANIA, USA
11:30 am	<u>Sobczak, W. V.</u> ; Raymond, P. A.; Boose, E. R.; Singh, S.: ALLOCHTHONOUS ORGANIC MATTER EXPORT FROM A HEMLOCK DOMINATED WATERSHED THREATENED BY AN INVASIVE FOREST HERBIVORE
11:45 am	<u>Karlsson, J.</u> ; Förster, J.; Rosén, P.; Christensen, T. R.: CARBON DIOXIDE EMISSION FROM A SUBARCTIC MIRE LAKE SURROUNDED BY MELTING PERMAFROST

## SS20: ADVANCES IN BIOGEOCHEMICAL MODELING: BRIDGING PHYSICS, CHEMISTRY, AND BIOLOGY

Chair(s):	Parisa Jourabchi, parisa@geo.uu.nl Sandra Arndt, arndt@geo.uu.nl Philippe Van Cappellen, pvc@geo.uu.nl
Location:	Eldorado Ana. North
1:30 pm	<u>Hood, R. R.</u> : PELAGIC FUNCTIONAL GROUP MODELING: PROGRESS, CHALLENGES AND PROSPECTS~
2:00 pm	<u>Moore, J. K.</u> ; Braucher, L.: THE RELATIVE ROLES OF ATMOSPHERIC DUST DEPOSITION AND CONTINENTAL MARGINS AS SOURCES OF DISSOLVED IRON TO THE WORLD OCEAN
2:15 pm	<u>Stock, C. A.</u> ; Powell, T. M.; Levin, S. A.: TROPHIC CASCADES, EUTROPHICATION, AND SEASONAL CYCLES IN A SIZE-RESOLVED AQUATIC ECOSYSTEM MODEL
2:30 pm	<u>Jourabchi, P.</u> ; L'Heureux, I.; Van Cappellen, P.: STEADY STATE COMPACTION IN DEEP-SEA SEDIMENTS: CALCITE DISSOLUTION VS. COMPRESSION
3:00 pm	<u>Schmid, M.</u> ; De Batist, M.; Granin, N.; Kapitanov, V. A.; McGinnis, D. F.; Mizandrontsev, I. B.; Obzhirov, A. I.; Wüest, A.: SOURCES AND SINKS OF METHANE IN LAKE BAIKAL - A SYNTHESIS OF MEASUREMENTS AND MODELING
3:15 pm	<u>Katsev, S.</u> ; Chaillou, G.; Sundby, B.; Mucci, A.: EFFECT OF PROGRESSIVE OXYGEN DEPLETION ON SEDIMENT DIAGENESIS
3:30 pm	<u>Meile, C.</u> ; King, E.; Tuncay, K.: INVESTIGATING THE LOCAL MICROBIAL ENVIRONMENT: PORE SCALE MODELING LINKED TO GEOBACTER SULFURREDUCENS METABOLISM
3:45 pm	<u>Pallud, C.</u> ; Meile, C.; Fendorf, S.: A COMBINED EXPERIMENTAL AND MODELING APPROACH TO STUDY DIFFUSION-LIMITED BIOTRANSFORMATION OF REDOX SENSITIVE METALS
4:00 pm	<u>Arndt, S.</u> ; Vanderborgh, J. P.; Regnier, P.: SPATIO-TEMPORAL DYNAMICS OF SILICA CYCLING IN A MACROTIDAL ESTUARY: COUPLING HYDRODYNAMICS, SEDIMENT TRANSPORT AND BIOGEOCHEMISTRY
4:30 pm	<u>Thullner, M.</u> ; Regnier, P.: REACTIVE TRANSPORT MODELING OF ORGANIC CARBON DEGRADATION PATHWAYS AND REDOX FLUXES IN MARINE SEDIMENTS: A GLOBAL SCALE QUANTIFICATION
4:45 pm	<u>Tsandev, I.</u> ; Slomp, C. P.; Van Cappellen, P.: THE GLOBAL MARINE PHOSPHORUS CYCLE: SENSITIVITY TO GLACIAL-INTERGLACIAL VARIATIONS
5:00 pm	<u>Haefner, J. W.</u> ; Nydick, K. R.; Wurtsbaugh, W. A.; Baker, M. A.; Hall, R. O.: THE SIMPLEST COMPLEX MODEL OF STREAM-LAKE NUTRIENT DYNAMICS THAT DOES NOT CONTRADICT OBSERVED PATTERNS

(~) represents Tutorial presentations

## **SS21: PRODUCTION AND CYCLING OF DISSOLVED ORGANIC MATTER IN AQUATIC SYSTEMS STUDIED THROUGH EXPERIMENTAL, FIELD, AND MODELING APPROACHES**

Chair(s): Daniel Repeta, drepeta@whoi.edu  
 Craig Carlson, carlson@lifesci.ucsb.edu  
 Raleigh R. Hood, rhood@hpl.umces.edu

Location: Eldorado Ana. South

1:30 pm	<u>Anderson, T. R.</u> ; Flynn, K. J.: DOM LABILITY: A CHALLENGE FOR MODELLERS
1:45 pm	<u>Kujawinski, E. B.</u> ; Morrison, L.: THE LINK BETWEEN DOM COMPOSITION AND MICROBIAL ACTIVITY IN THREE MARINE ENVIRONMENTS
2:00 pm	<u>Longnecker, K.</u> ; Sherr, E. B.; Sherr, B. F.: LINKING THE GROWTH OF MARINE HETEROTROPHIC BACTERIOPLANKTON WITH CHANGES IN THE DOMINANT PHYTOPLANKTON COMMUNITY
2:15 pm	<u>Passow, U.</u> ; De La Rocha, C.; Arnosti, C.; Grossart, H.; Murray, A. E.; Engel, A.: OVERVIEW OF A MESOCOSM EXPERIMENT INVESTIGATING THE IMPACT OF PHYTOPLANKTON ON THE MICROBIAL LOOP
2:30 pm	<u>Grossart, H. P.</u> ; Jezbera, J.; Hornak, K.; Hutalle, K.; Simek, K.: ABUNDANCE AND IN SITU ACTIVITIES OF MAJOR BACTERIAL GROUPS IN LAKE GROSSE FUCHSKUHLE (NORTH-EASTERN GERMANY)
3:00 pm	<u>Cabaniss, S. E.</u> ; Madey, G. R.; Maurice, P. A.: AGENT-BASED BIOGEOCHEMICAL MODELING OF NATURAL ORGANIC MATTER
3:15 pm	<u>Davis, J. L.</u> ; Benner, R.: ESTIMATION OF LABILE, SEMI-LABILE AND REFRACTORY DOM BASED ON HYDROLYZABLE AMINO ACID YIELDS
3:30 pm	<u>Karl Kaiser, D.</u> ; Ronald Benner, ..: THE CHEMICAL COMPOSITION OF BIOREACTIVE ORGANIC MATTER IN THE OPEN OCEAN
3:45 pm	<u>Steen, A. D.</u> ; Hamdan, L. J.; Arnosti, C.: POWERBARS VS. CARDBOARD: SMALL STRUCTURAL DIFFERENCES DETERMINE THE FATE OF POLYSACCHARIDES IN AN ESTUARY
4:00 pm	<u>Cai, Y.</u> ; <u>Guo, L. D.</u> ; Douglas, T. A.: CARBOHYDRATE COMPOSITION OF DISSOLVED ORGANIC MATTER IN THE CHENA RIVER, ALASKA
4:30 pm	<u>Klauser, L.</u> ; Schubert, C. J.; Wehrli, B.: AMINO SUGARS IN ANOXIC SYSTEMS: A COMPARISON BETWEEN THE BLACK SEA AND LAKE LUGANO (SWITZERLAND)
4:45 pm	<u>Ziervogel, K.</u> ; Arnosti, C.: CONTRASTING EXTRACELLULAR ENZYME ACTIVITIES BETWEEN AGGREGATES AND AMBIENT SEAWATER FROM THE NORTHEASTERN GULF OF MEXICO
5:00 pm	<u>Leenheer, J. A.</u> ; Reddy, M. M.: CHARACTERIZATION OF ORGANIC MATTER INCORPORATED IN CALCIUM CARBONATE PRECIPITATED IN PYRAMID LAKE, NEVADA
5:15 pm	<u>Griffith, D. R.</u> ; Raymond, P. A.: CARBON CYCLING DYNAMICS IN A HIGHLY URBANIZED ESTUARY

5:30 pm	Johnson, L. T.; Tank, J. L.: THE EFFECT OF LAND USE ON DOC AND DON UPTAKE IN HEADWATER STREAMS IN THE KALAMAZOO RIVER BASIN, MICHIGAN.
5:45 pm	<u>Kaplan, L. A.</u> : MEASUREMENTS OF STREAM WATER DOM COMPOSITION COMBINED WITH BIOLOGICAL LABILITY PROFILING IN BIOREACTORS RANKS THE UPTAKE KINETICS OF DOM CONSTITUENTS

## **SS22: EVOLUTIONARY RESPONSES OF PLANKTON COMMUNITIES TO NATURAL AND HUMAN-INDUCED STRESS**

Chair(s): Alison Derry, derrya@biology.queensu.ca

Location: Eldorado Ana. North

8:30 am	<u>Hairston, N. G.</u> ; Ellner, S. P.; Geber, M. A.; Yoshida, T.; Fox, J. A.; Jones, L. E.: ASSESSING THE RATE OF EVOLUTION ON AN ECOLOGICAL TIME SCALE~
9:00 am	<u>Yoshida, T.</u> ; Jones, L. E.; Ellner, S. P.; Hairston Jr., N. G.: CRYPTIC POPULATION DYNAMICS: RAPID EVOLUTIONARY CHANGE MASKS TROPHIC INTERACTION
9:15 am	<u>DeMott, W. R.</u> ; McKinney, E. N.: PHYTOPLANKTON EVOLUTION IN THE LABORATORY: EVIDENCE FOR A TRADE-OFF BETWEEN MAXIMAL GROWTH RATE AND DIGESTION DEFENSES.
9:45 am	<u>Dawson, M. N.</u> : RATES AND SCALES OF EVOLUTION IN MARINE PLANKTON
10:00 am	<u>Nagai, S.</u> ; Nishitani, G.; Yamaguchi, S.; Lian, C.; Yasuda, N.; Itakura, S.: GENETIC STRUCTURE AND GENE FLOW OF POPULATIONS IN SEVERAL HARMFUL ALGAL BLOOM SPECIES IN JAPANESE COASTAL WATERS REVEALED BY MICROSATELLITES
10:15 am	<u>Pantel, J. H.</u> ; Leibold, M. A.: THE EFFECTS OF GENETIC DIVERSITY ON INVASION AND ADAPTATION IN DAPHNIA POPULATIONS
10:30 am	<u>Kerfoot, W. C.</u> ; McNaught, A. S.; Weider, L. J.: RED QUEEN HYPOTHESIS: HOW MANY PARTNERS IN THE DANCE?
11:00 am	<u>Thum, R. A.</u> : THE EFFECT OF REPRODUCTIVE ISOLATING MECHANISMS ON DIAPTOMID COPEPOD DISTRIBUTION AND CO-OCCURRENCE
11:15 am	<u>Avery, D. E.</u> ; Dam, H. G.; Irwin, K. J.: THE GENETIC NATURE OF TOXIN RESISTANCE IN ACARTIA HUDSONICA
11:30 am	<u>Fox, J. A.</u> : LIFE HISTORY AND NEUTRAL GENETIC VARIATION IN POPULATIONS OF DAPHNIA MENDOTAE OVER TIME
11:45 am	<u>Derry, A. M.</u> ; Arnott, S. E.; Boag, P. T.: CONTEMPORARY EVOLUTION OF ZOOPLANKTON FOLLOWING LAKE ACIDIFICATION AND RECOVERY

TUESDAY

(\*) represents Invited presentations

**SS25: IN SEARCH OF ALLOCHTHONY**

Chair(s):	Joel Hoffman, Hoffman.Joel@epa.gov Deborah Bronk, bronk@vims.edu
Location:	Eldorado Zia
1:30 pm	<u>Cole, J. J.</u> : TERRESTRIAL SUBSIDIES OF AQUATIC METABOLISM AND FOOD WEBS: A TUTORIAL AND REVIEW.
1:45 pm	<u>Doucett, R. R.</u> ; Marks, J. C.; Blinn, D. W.; Caron, M.; Hungate, B. A.: QUANTIFYING TERRESTRIAL SUBSIDIES TO AQUATIC FOOD WEBS USING STABLE ISOTOPES OF HYDROGEN
2:00 pm	Van den Meersche, K.; <u>Middelburg, J. J.</u> ; Soetaert, K.: CARBON SOURCES FUELING HETEROTROPHS IN A NUTRIENT-RICH, TURBID TIDAL ESTUARY
2:15 pm	<u>Bukaveckas, P. A.</u> ; Aufdenkampe, A. K.: AUTOCHTHONOUS PRODUCTION AND SESTON STOICHIOMETRY – A COMPARATIVE STUDY OF THE OHIO, UPPER MISSISSIPPI AND MISSOURI RIVERS.
2:30 pm	Hill, J. M.; McQuaid, C. D.; Kaehler, S.: TEMPORAL VARIATION IN SUSPENDED PARTICULATE MATTER, MACROALGAE AND MUSSELS SUGGESTS HEAVY DEPENDENCE OF CONSUMERS ON VERY NEARSHORE PRODUCTION.
3:00 pm	<u>Alin, S. R.</u> ; Schindler, D. E.; Ingalls, A. E.: ESTIMATING THE IMPORTANCE OF TERRESTRIAL INPUTS TO LAKE ECOSYSTEMS IN SOUTHWEST ALASKA USING THE BIT INDEX AND LIGNIN PHENOLS
3:15 pm	<u>Rosi-Marshall, E. J.</u> ; Tank, J. L.; Evans-White, M.; Royer, T. V.; Whiles, M. R.; Pokelsek, J. D.; Griffiths, N. A.; Chambers, C. P.: CROP RESIDUES AND STREAM CARBON BUDGETS: EXAMINING THE ECOLOGICAL SIGNIFICANCE OF ALLOCHTHONOUS CARBON IN MIDWESTERN AGRICULTURAL STREAMS
3:30 pm	Pace, M. L.; Carpenter, S. R.; Cole, J. J.; Coloso, J. J.; Kitchell, J. F.; Hodgson, J. R.; Middelburg, J. J.; Preston, N. D.; Solomon, C. T.; Weidel, B.: DOES TERRESTRIAL CARBON SUBSIDIZE PLANKTON IN A CLEAR-WATER LAKE?
3:45 pm	Solomon, C. T.; Carpenter, S. R.; Cole, J. J.; Pace, M. L.: RELIANCE OF BENTHIC INVERTEBRATES ON NEW PRIMARY PRODUCTION: RESULTS FROM A 13-C ADDITION TO A LARGE, CLEAR-WATER LAKE
4:00 pm	<u>Gutseit, K.</u> ; Berglund, O.; Granéli, W.: FATTY ACID QUALITY OF SESTON IN HUMIC AND CLEAR WATER LAKES
4:30 pm	Tank, J. L.; Rosi-Marshall, E. J.; Hoellein, T. J.; Entrekin, S. A.; Lamberti, G. A.: THE EXPERIMENTAL ADDITION OF LARGE WOOD INFLUENCES ECOSYSTEM FUNCTION IN THREE HEADWATER STREAMS
4:45 pm	<u>Hopkinson, C. S.</u> ; Weston, N.; Vallino, J. J.; Garritt, R. H.: ESTUARINE ECOSYSTEM METABOLISM AND THE IMPORTANCE OF ALLOCHTHONOUS SUBSIDIES
5:00 pm	Hoffman, J. C.; Bronk, D. A.: ALLOCHTHONOUS SUBSIDIES TO AN ESTUARINE FOOD WEB GOVERNED BY RIVER DISCHARGE

5:15 pm	Preston, N. D.; Carpenter, S. R.; Cole, J. J.; Pace, M. L.: DRIVING ALLOCHTHONY: THE RAIN OF CARBON AND AEOLIAN DEPOSITION ON LAKES
5:30 pm	<u>Duarte, C. M.</u> ; Dachs, J.; Barrón, C.: ALLOCHTHONOUS ORGANIC CARBON INPUTS TO THE OPEN OCEAN

**SS27: TRACE METALS, MICROBIAL PROCESSES, AND BIOGEOCHEMICAL CYCLES THROUGH SPACE AND TIME**

Chair(s):	Kathy Barbeau, kbarbeau@ucsd.edu Alison Butler, butler@chem.ucsb.edu Felisa Wolfe-Simon, fwolfe@asu.edu
Location:	La Fonda La Terraza
9:45 am	<u>Morel, F. M.</u> : BIOGEOCHEMICAL EVOLUTION, PHYTOPLANKTON STOICHIOMETRY AND THE CO-LIMITATION HYPOTHESIS~
10:15 am	<u>Woo, E. S.</u> ; Price, N. M.: COPPING OUT ON IRON: CHARACTERIZATION OF A PLASTOCYANIN GENE IN AN OCEANIC DIATOM
10:30 am	Xu, Y.; McGinn, P.; Feng, L.; Morel, F. M.: CD SUBSTITUTION IN THE CARBONIC ANHYDRASE OF MARINE DIATOMS
11:00 am	<u>Park, H.</u> ; Song, B.; Morel, F. M.: EXPRESSION OF CADMIUM CARBONIC ANHYDRASE (CDCA) IN TWO THALASSIOSIRA SP. T. WEISSFLOGII AND T. OCEANICA
11:15 am	<u>Dupont, C. L.</u> ; Brahamsha, B.; Paulson, I.; Barbeau, K.; Palenik, B.: UPTAKE AND UTILIZATION OF NICKEL BY MARINE SYNECHOCOCCUS
11:30 am	<u>Mann, E. L.</u> ; Riedel, G. F.; Sanders, J. G.: ARSENIC TOXICITY AND PHYTOPLANKTON DYNAMICS IN THE SARGASSO SEA
11:45 am	Kim, H. S.; Walsh, M. J.; <u>Ahner, B. A.</u> : NUTRIENT STATUS INFLUENCE OVER CU LIGAND COMPOSITION IN EMILIANIA HUXLEYI CULTURES
1:30 pm	<u>Anbar, A. D.</u> : POTENTIAL INSIGHTS INTO THE EVOLUTION OF THE METALLOME FROM METAL STABLE ISOTOPES
1:45 pm	Wolfe-Simon, F.; Diamond, A.; Morgan, J.; Elser, J. J.; Anbar, A. D.: EVOLUTIONARILY SIGNIFICANT DIFFERENCES BETWEEN PROKARYOTIC AND EUKARYOTIC RESPONSES TO FE STRESS
2:00 pm	<u>Aguilar-Islas, A. M.</u> ; Hurst, M. P.; Buck, K. N.; Bruland, K. W.: DISSOLVED IRON AND NITRATE IN THE SOUTHEASTERN BERING SEA: ADDRESSING THE 'RON CURTAIN' HYPOTHESIS
2:15 pm	Wisniewski, R. J.; Moffett, J. W.: THE DISTRIBUTION AND SPECIATION OF ZINC IN THE SUBARCTIC NORTH PACIFIC AND BERING SEA
2:30 pm	Ussher, S. J.; Achterberg, E. P.; Worsfold, P. J.: SEASONAL IRON DISTRIBUTIONS AND SPECIATION IN THE ATLANTIC OCEAN
3:00 pm	Lomas, M. W.; Sedwick, P. N.; Casey, J. R.: DOES IRON AVAILABILITY CONTROL NEW PRODUCTION BY PROCHLOROCOCCUS IN SUBSURFACE WATERS OF THE SARGASSO SEA?

(~) represents Tutorial presentations

3:15 pm	<u>Butler, A.</u> ; Homann, V.; Iinishi, A.; Owen, T.: MARINE MICROBIAL SIDEROPHORES
3:30 pm	<u>Hopkinson, B. M.</u> ; Roe, K. L.; Barbeau, K. A.: GENOMIC AND EXPERIMENTAL EVIDENCE FOR HEME UPTAKE BY MARINE BACTERIA
3:45 pm	<u>Saito, M. A.</u> ; Noble, A. E.; Bertrand, E. M.: POLAR OPPOSITES: A COMPARISON OF COBALT AND B12 BIOGEOCHEMISTRY BETWEEN THE ROSS SEA AND THE COSTA RICA DOME
4:00 pm	<u>Taylor, G. T.</u> ; Sullivan, C. W.: COBALT AND VITAMIN B12 CYCLING AMONG DIATOMS AND PROKARYOTES IN ANTARCTIC SEA ICE
4:30 pm	<u>Amin, S. A.</u> ; Kuepper, F. C.; Green, D.; Carrano, C. J.: THE ROLE OF SYMBIOTIC BACTERIAL SIDEROPHORES IN THE DEVELOPMENT OF TOXIC PHYTOPLANKTON BLOOMS
4:45 pm	<u>Steigenberger, S. J.</u> ; Croat, P. L.; Passow, U.; Statham, P. J.: EFFECT OF ALGAL POLYSACCHARIDES AND UVA+B RADIATION ON IRON SPECIATION IN SEAWATER
5:00 pm	<u>Roy, E. G.</u> ; Wells, M. L.; Cochlan, W. P.; Trick, C. G.: EVIDENCE FOR BIOLOGICAL CONTROL OF Fe(II) OXIDATION RATES IN SURFACE WATERS OF THE EASTERN AND WESTERN SUBARCTIC PACIFIC
5:15 pm	<u>Cutter, G. A.</u> ; Cutter, L. S.; Bernhardt, P. W.; Mulholland, M. R.: HYDROGEN SULFIDE PRODUCTION BY TRICHODESMIUM AND SPECULATIONS ON ITS RELATIONSHIP TO IRON CYCLING
5:30 pm	<u>Castruita, M.</u> ; Shaked, Y.; Stiefel, E.; Morel, F. M.: AVAILABILITY OF IRON FROM THE IRON STORAGE PROTEINS FERRITIN AND DPS TO MARINE PHYTOPLANKTON
5:45 pm	<u>Repeta, D. J.</u> ; Moffett, J. W.: CHEMICAL CHARACTERIZATION OF IRON BINDING ORGANIC LIGANDS IN SEAWATER

### SS31: MORTALITY AMONG MICROBES

Chair(s):	Janice Lawrence, jlawrenc@unb.ca Kay Bidle, bidle@marine.rutgers.edu
Location:	Hilton Mesa A
3:00 pm	<u>Lawrence, J. E.</u> : MORTALITY AMONG MICROBES~
3:30 pm	Rosenberg, G.; Bidle, K.; Berman-Frank, I. R.: GENES REGULATING PROGRAMMED CELL DEATH IN THE MARINE CYANOBACTERIUM TRICHODESMIUM
3:45 pm	<u>Vardi, A.</u> ; Bidle, K. D.; Falkowski, P. G.; Bowler, C. P.: THE ROLE OF NITRIC OXIDE IN STRESS SURVEILLANCE AND ITS INTERPLAY WITH THE CELL DEATH MACHINERY IN MARINE DIATOMS
4:00 pm	Bidle, K. D.; Haramaty, L.; Barcelos e Ramos, J.; Falkowski, P. G.: ACTIVATION AND RECRUITMENT OF THE CASPASE CELL DEATH MACHINERY DURING LYtic VIRAL INFECTION OF THE UNICELLULAR COCCOLITHOPHORID, EMILIANIA HUXLEYI.

4:15 pm	Evans, C.; Wilson, W. H.; Darroch, L.; Kadner, S.; Liss, P. S.; Malin, G.: PRODUCTION AND POTENTIAL ROLE OF DMS AND RELATED COMPOUNDS DURING THE VIRAL INFECTION OF ALGAE
4:30 pm	<u>Paesani, V. I.</u> ; Lawrence, J. E.: COSTLY COLLISIONS: THE BIOCHEMICAL NATURE OF RECEPTORS DIFFERS BETWEEN TWO VIRUSES INFECTING HETEROSIGMA AKASHIWO
4:45 pm	<u>Berman, T.</u> ; Wynne, D.: ALGAL LYSIS IN EXPONENTIALLY GROWING CULTURES
5:00 pm	<u>Brown, C. M.</u> ; Campbell, D. A.; Lawrence, J. E.: PROPAGATION OF VIRUS MPV-SP1 IN THE PRASINOPHYTE MICROMONAS PUSILLA REQUIRES HOST PHOTOSYNTHESIS
5:15 pm	<u>Zepp, R. G.</u> ; Jones, R.: FACTORS INFLUENCING LIGHT-INDUCED MORTALITY OF ENTEROCOCCI IN SEDIMENT SUSPENSIONS
5:30 pm	Kimmance, S. A.; Wilson, W. H.; Archer, S. D.: USE OF THE MODIFIED DILUTION TECHNIQUE TO ESTIMATE VIRAL VERSUS GRAZING MORTALITY OF PHYTOPLANKTON
5:45 pm	<u>Dickerson, T. L.</u> ; Berhane, T. K.; Fortenberry, G.; Williams, H. N.: THE PREDATION PATTERN OF BALOs ON VIBRIO PARAHAEMOLYTICUS IN A CHESAPEAKE BAY MESOCOSM

### SS36: DYNAMICS OF TRACE METAL STOICHIOMETRY IN PLANKTON: CAUSES, EFFECTS, AND IMPLICATIONS

Chair(s):	Stephen B. Baines, sbaines@ms.cc.sunysb.edu Benjamin S. Twining, twining@mail.chem.sc.edu
Location:	Eldorado Sunset
4:15 pm	<u>Hutchins, D. A.</u> : TAKING IRON STOICHIOMETRY FROM THE LABORATORY TO THE OCEAN: PROGRESS AND PITFALLS~
4:45 pm	<u>Quigg, A. S.</u> : ECOLOGICAL STOICHIOMETRY: DEFINING THE MOVEMENT OF TRACE ELEMENTS ACROSS TROPHIC LEVELS
5:00 pm	<u>Twining, B. S.</u> ; Baines, S. B.; Vogel, C. A.: PHYTOPLANKTON TRACE METAL QUOTAS ACROSS NUTRIENT GRADIENTS IN THE EQUATORIAL PACIFIC OCEAN
5:15 pm	<u>Beck, A. J.</u> ; Panzeca, C.; Hutchins, D. A.; Sañudo-Wilhelmy, S. A.: TRENDS IN DISSOLVED AND INTRACELLULAR TRACE METALS IN THE NORTH ATLANTIC OCEAN
5:30 pm	Baines, S. B.; Twining, B. S.; Vogel, C.; Chen, X.; Fisher, N. S.: DO PHYSIOLOGICAL CASCADES AFFECT THE RESPONSE OF PHYTOPLANKTON TRACE ELEMENT STOICHIOMETRIES TO NUTRIENT LIMITATION
5:45 pm	Karimi, R.; Chen, C. Y.; Pickhardt, P. C.; Fisher, N. S.; Folt, C. L.: RAPID GROWTH FROM HIGH NUTRIENT QUALITY PHYTOPLANKTON REDUCES MERCURY ACCUMULATION IN DAPHNIA

TUESDAY

(\*) represents Invited presentations

## SS45: THE PARADOX OF DIDYMOSENIA GEMINATA

Chair(s):	Craig Cary, caryc@waikoto.ac.nz Max Bothwell, bothwellm@pac.dfo-mpo.gc.ca Sarah Spaulding, spaulding.sarah@epa.gov
Location:	Hilton Mesa B
4:30 pm	<u>Kilroy, C.</u> ; Biggs, B. J.; Vieglais, C. C.: DIDYMOSENIA GEMINATA IN NEW ZEALAND: A SCIENCE RESPONSE TO HELP MANAGE AN UNWANTED, INVASIVE FRESHWATER DIATOM ~
5:00 pm	Bothwell, M. L.; Pellett, K.; Wright, H.; Lynch, D. R.: HAVE BLOOMS OF DIDYMOSENIA GEMINATA IMPACTED THE ESCAPEMENT OF ADULT STEELHEAD TROUT ( <i>ONCORHYNCHUS MYKISS</i> ) IN RIVERS ON VANCOUVER ISLAND?

5:15 pm	<u>Cary, S. C.</u> ; Hicks, B. J.; Crawford, N. J.; Rueckert, A.; Coyne, K. J.: LOW-LEVEL DETECTION AND ENUMERATION OF DIDYMOSENIA GEMINATA USING DNA PROBES
5:30 pm	<u>Lindstrøm, E. A.</u> ; Skulberg, O. M.: DIDYMOSENIA GEMINATA (LYNGBYE) M. SCHMIDT, AN INDIGENOUS CONSTITUENT OF THE ALGAL FLORA IN NORWEGIAN WATERCOURSES
5:45 pm	<u>Rost, A. L.</u> ; Fritsen, C. H.; Memmott, J.; Davis, C.: A PAIRED STREAM REACH COMPARISON TO GAIN INSIGHT INTO FACTORS CONTRIBUTING TO THE PROLIFERATION OF DIDYMOSENIA GEMINATA

(~) represents Tutorial presentations

## WEDNESDAY, FEBRUARY 7, 2007

Posters are grouped by topic. The poster number indicates the topic where the posters for a session will be located. The Ecosystem Change topic posters will be presented in the La Fonda, New Mexico Room. All other topics will be presented in the La Fonda Ballroom.

Biogeochemical Cycles – BGC

Ecosystem Change – CHG

Dissolved Organic Matter – DOM

Ecology – ECOL

Education – EDUC

Lower Food Web – LOWER

Metal and Chemistry – METAL

Physical – PHYS

## CS03: BEHAVIORAL AND PHYSIOLOGICAL ECOLOGY

Chair(s): Don K. Button, dkbutton@ims.uaf.edu

- ECOL-01 Ocasio Torres, M. E.; LaPlante, L. H.; Penney, B. K.: LEARNING BEHAVIOR OF TAUTOGOLABRUS ADSPERSUS IN RESPONSE TO THE DEFENSE MECHANISMS OF FLABELLINA VERRUCOSA
- ECOL-02 Sierra, R.; Burke, R.: DIETARY HABITS OF DIAMONDBACK TERRAPINS OF JAMAICA BAY, NEW YORK
- ECOL-03 Carrion, C. N.; Robles, C.: ALLOMETRY OF PISASTER OCHRACEUS POPULATIONS IN BAMFIELD, BRITISH COLUMBIA
- ECOL-04 Ortega, L. A.; Heupel, M. R.; Motta, P. J.: MOVEMENT PATTERNS AND DEPTH PREFERENCES OF YOUNG BULL SHARKS (*CARCHARHINUS LEUCAS*) IN THE CALOOSAHATCHEE ESTUARY, FLORIDA
- ECOL-05 Hassett, R. P.: CHOLESTEROL SUPPLEMENTATION ENHANCES THE NUTRITIONAL VALUE OF CYANOBACTERIA FOR THE COPEPOD EURYTEMORA HERDMANI
- ECOL-06 Shimizu, Y.; Urabe, J.: CHANGES IN P CONTENT OF DAPHNIA: MECHANISMS AND IMPLICATIONS

## CS04: BENTHIC-PELAGIC INTERACTIONS

Chair(s): Jeffrey S. Cornwell, cornwell@hpl.umces.edu

- LOWER-01 Lockwood, R. S.; Wurtsbaugh, W. A.: NITROGEN CYCLING IN THE LITTORAL ZONE OF A SUBALPINE OLIGOTROPHIC LAKE – NUTRIENT PROCESSING AND FLUXES QUANTIFIED USING A MESOCOSM  $^{15}\text{N}$ -NITRATE ADDITION
- LOWER-02 Nascimento, F. J.; Karlson, A.; Elmgren, R.: UPTAKE OF RADIO-LABELLED CYANOBACTERIA BY A NATURAL BENTHIC MEIOFAUNAL COMMUNITY FROM THE BALTIC SEA
- LOWER-03 Karlson, A. M.; Nascimento, F. J.; Elmgren, R.: DIFFERENTIAL UPTAKE OF CARBON FROM TWO BALTIC CYANOBACTERIA BY A DEPOSIT-FEEDING AMPHIPOD

## CS06: BIOGEOCHEMISTRY

Chair(s): Matthew A. Charette, mcharette@whoi.edu  
Pia Engstrom, piae@u.washington.edu

- BGC-01 Alexander, K. B.; McKnight, D.; Miller, M. P.: LAKE PROCESSING OF CARBON IN AN ALPINE/SUBALPINE ECOTONE DURING PEAK FLOW CONDITIONS IN THE GREEN LAKE VALLEY, COLORADO FRONT RANGE
- BGC-02 Lenes, J. M.; Darrow, B. A.; Walsh, J. J.; Prospero, J. M.; He, R.; Weisberg, R. H.; Vargo, G. A.; Heil, C. A.: SAHARAN DUST AND PHOSPHATIC FIDELITY: A THREE DIMENSIONAL BIOGEOCHEMICAL MODEL OF TRICHOODESMIUM ON THE WEST FLORIDA SHELF
- BGC-03 Jiang, L. Q.; Cai, W. J.; Wang, y.; Wanninkhof, R.; Lueger, H.: AIR-SEA CO<sub>2</sub> FLUXES ON THE SOUTH ATLANTIC BIGHT: IS THE SAB A SOURCE OF CO<sub>2</sub> TO THE ATMOSPHERE?
- BGC-04 Gregory, T. K.; Morrison, J. R.: INVESTIGATING HIGH-FREQUENCY NUTRIENT DYNAMICS IN AN ESTUARY USING AN AUTONOMOUS SAMPLING PLATFORM
- BGC-05 Williams, S. Y.; MCGOVERN, T.: EFFECTS OF NUTRIENTS INPUTS FROM MOBILE BAY ON RUPPIA MARITIMA IN COASTAL ALABAMA
- BGC-06 Rich, J. J.; Ward, B. B.: ANAMMOX ACTIVITY IN THE OXYGEN MINIMUM ZONE OF THE PERUVIAN UPWELLING SYSTEM
- BGC-07 Royer, T. V.; Rubin, M.; Leff, L. G.: MICROBIAL COMMUNITY STRUCTURE IN HEADWATER STREAMS AND ITS INFLUENCE ON DENITRIFICATION
- BGC-08 Panetta, R. J.; Gelinas, Y.: POTENTIAL OF ALKYLBORONATE RESINS FOR THE ISOLATION OF DISSOLVED SUGARS INCLUDING THE LOW MOLECULAR WEIGHT FRACTION
- BGC-09 Henderson, N. D.; Cox, L.; Hannigan, R.: DISTINGUISHING BETWEEN ANTHROPOGENIC AND BIOGENIC ORGANICS IN BLACK SHALE DRAINING STREAMS
- BGC-10 Podlaska, A.; Xu, Y.; Li, X.; Suarez, P.; Scranton, M. I.; Taylor, G. T.: IN PURSUIT OF THE DOMINANT CHEMOAUTOTROPHS IN THE ANOXIC CARIACO BASIN
- BGC-11 Kyle, M.; Elser, J.: MICROBIAL NUTRIENT LIMITATION IN COLORADO ALPINE LAKES ACROSS A GRADIENT OF ATMOSPHERIC NITROGEN DEPOSITION
- BGC-12 Figueroa-Nieves, D.; Ortiz-Zayas, J. R.; McDowell, W. H.: CONTRIBUTION FROM WASTE WATER TREATMENT PLANTS TO NUTRIENTS, DISCHARGE, AND DOC IN STREAMS IN THE NORTHEAST REGION OF PUERTO RICO
- BGC-13 Venn, C.; Sherry, J. M.; Halchak, J.: IRON-PRECIPITATING MICROBES AT AN ANTHRACITE MINE DISCHARGE SITE AND A NATURAL MINERAL SPRING IN PENNSYLVANIA: A COMPARATIVE SCANNING ELECTRON MICROSCOPE STUDY

WEDNESDAY

- BGC-14 Steger, L. D.; Kyle, M.; Watts, J.; Elser, J. J.: PHYTOPLANKTON NUTRIENT LIMITATION IN COLORADO ALPINE LAKES ACROSS A GRADIENT OF ATMOSPHERIC NITROGEN DEPOSITION
- BGC-15 Paez, C. I.; Anderson, M. A.: PHOSPHORUS RETENTION CAPACITY OF SEDIMENTS AFTER ALUM APPLICATION TO BIG BEAR LAKE
- BGC-16 Cable, P. H.; McKee, B. A.: SOLUTE EXCHANGE, WEATHERING AND CHEMISTRY OF AN ANTARCTIC STREAM
- BGC-17 Koszelnik, P.; Tomaszek, J. A.; Gruca-Rokosz, R.: SIGNIFICANCE OF DENITRIFICATION IN RELATION TO EXTERNAL LOADING AND NITROGEN RETENTION IN MOUNTAIN RESERVOIR

## CS08: ECOSYSTEM MANAGEMENT, RESTORATION, AND SCIENCE POLICY

- Chair(s): Randall E. Hicks, rhicks@d.umn.edu  
Tobias Vrede, tobias.vrede@emg.umu.se
- EDUC-01 Williams, N. B.; Pyrtle, A. J.; Dixon, B.; Hernandez-Cruz, L. R.; Ithier-Guzman, W.; Mayo, M.: ASSESSING IMPACTS OF LAND USE CHANGES ON ESTUARIES IN THE ISLAND OF PUERTO RICO: AN INTEGRATIVE APPROACH
- EDUC-02 Frankic, A.; Cataldo, A. L.: COASTAL ECOSYSTEM MANAGEMENT IN WELLFLEET HARBOR, MA: ADDRESSING SUSTAINABLE SHELLFISHING AND AQUACULTURE
- EDUC-03 Ruperto, J. M.; Rosario, J.; Acosta, J.: IDENTIFICATION OF MACROINVERTEBRATES AND CHARACTERIZATION OF THE DOMINANT SUBSTRATE AT YAGUEZ RIVER
- EDUC-04 Mayo, M.; Pyrtle, A. J.: RADIOGEOCHEMISTRY AS A TOOL FOR THE DEVELOPMENT OF MANAGEMENT STRATEGIES FOR MANGROVES IN THE VIEQUES NATIONAL WILDLIFE REFUGE
- EDUC-05 Griffith, J. F.; Schiff, K. D.; Lyon, G.: DISCHARGES OF FECAL BACTERIA FROM NON-ANTHROPOGENIC SOURCES INTO MARINE RECEIVING WATERS DURING WET WEATHER

## CS09: EDUCATION AND OUTREACH (NATIONAL AND INTERNATIONAL)

- Chair(s): Paula Keener-Chavis, paula.keener-chavis@noaa.gov
- EDUC-06 Cline, A. H.; Morrison, J. R.; Chick, P. C.; Kent, T.: SEASONS IN THE SEA: AN OCEAN OBSERVING INFORMAL EDUCATION EXHIBIT AT THE SEACOAST SCIENCE CENTER IN RYE, NH.
- EDUC-07 White, A. E.; Hynes, A. M.; Shi, Y.; Al-Rshaidat, M. M.; De la Iglesia, R. A.; Harrison, E.; Jones, R.; Keats, K.; Morton, P.; Myers, K.; Santibanez-Bustos, J. F.; Wilson, S.: THE EFFECTS OF MESOSCALE EDDIES ON MICROBIAL COMMUNITIES IN THE NORTH PACIFIC: RESULTS FROM THE FIRST AGOURON COURSE IN MICROBIAL OCEANOGRAPHY

- EDUC-08 Doyle, R. D.; Mullins, M.; Scgell, N.: MARSH MADNESS: A SCIENCE EDUCATION ADVENTURE FOCUSED ON WETLAND ENVIRONMENTS

## CS10: EUTROPHICATION AND NUTRIENT CYCLING

- Chair(s): Jane M. Caffrey, jcaffrey@uwf.edu  
Amy M. Marcarelli, marcamy@isu.edu  
Autumn J. Oczkowski, ajo@gso.uri.edu
- BGC-18 Roberts, Q. N.; Bronk, D. A.; Filippino, K. C.; Carlson, C. A.: MEASUREMENT OF DON CONCENTRATIONS AFTER INORGANIC NITROGEN REMOVAL
- BGC-19 Whritenour, C. A.; Schulz, K.: ECOLOGICAL STOICHIOMETRY OF THE SALT MARSH: Si:N RATIOS AND EFFECTS ON ALGAL COMMUNITY COMPOSITION AND THE LOWER FOOD WEB
- BGC-20 Porubsky, W. P.; Meile, C.; Joye, S. B.: VARIATIONS IN GROUNDWATER BIOGEOCHEMISTRY AND FLOW ON MOSES HAMMOCK (SAPELO ISLAND, GA): FIELD MEASUREMENTS, LABORATORY ASSAYS AND MODELING
- BGC-21 Canion, A. K.; MacIntyre, H. L.: HOURLY-TO-MONTHLY VARIABILITY IN ENVIRONMENTAL FORCING FACTORS AND THE RESPONSE OF PHYTOPLANKTON IN WEEKS BAY, USA
- BGC-22 Sims, S. E.; Opsahl, S. P.: LONG-TERM TRENDS IN NITRATE CONTAMINATION IN URBAN AND RURAL SPRINGSHEDS
- BGC-23 Yarbro, L. A.; Carlson, P. R.; Arnold, H.; Mattson, R. A.; Mantini, L.: SEAGRASS AND MACROALGAL ABUNDANCE REFLECTS CHANGING OPTICAL WATER QUALITY IN THE BIG BEND REGION OF THE EASTERN GULF OF MEXICO
- BGC-24 Jung, S.; Jansen, S.; Polerecky, L.; Lee, J.; Holtappels, M.; Lavik, G.; Kuypers, M. M.; De Beer, D.; Kang, H.: HIGH RATES OF GASEOUS N PRODUCTION IN INTERTIDAL SANDY SEDIMENT, WADDEN SEA, GERMANY
- BGC-25 Zaneveld, J. R.; Levin, M.; Koegler, J.; Walsh, I.; Hanson, A.; Egli, P.; Gregory, T. K.; Morrison, J. R.: AN UNDERWATER REAGENT BASED PHOSPHATE SENSOR FOR LONG-TERM DEPLOYMENTS
- BGC-26 Procise, L. A.; Mulholland, M. R.: ISOTOPIC PARTICLE COMPOSITION, BIOLOGICAL AND PHYSICAL PROPERTIES ALONG THE MAINSTEM OF THE CHESAPEAKE BAY
- BGC-27 Toetz, D. W.: NITRATE IN GROUND AND SURFACE WATERS IN THE VICINITY OF A CONCRETEATED ANIMAL FEEDING OPERATION IN WESTERN OKLAHOMA.
- BGC-28 Hayes, K. C.; Wilde, S. B.: TOP-DOWN AND BOTTOM-UP CONTROL OF A BLOOM OF PROROCENTRUM MINIMUM

## CS11: EVOLUTION AND POPULATION BIOLOGY

- Chair(s): Paola G. Batta Lona, paola.batta\_lona@uconn.edu
- ECOL-07 Batta Lona, P. G.; Bucklin, A.; Copley, N. J.; Wiebe, P. H.; Patarnello, T.: POPULATION GENETIC VARIATION OF THE SOUTHERN OCEAN KRILL, *EUPHAUSIA SUPERBA*, IN THE WESTERN ANTARCTIC PENINSULA REGION: SINGLE NUCLEOTIDE POLYMORPHISMS (SNP)
- ECOL-08 Yasuda, N.; Nagai, S.; Hamaguchi, M.; Okaji, K.; Nadaoka, K.: POPULATION GENETIC STRUCTURE OF THE CROWN-OF-THORNS STARFISH *ACANTHASTER PLACI* IN JAPAN AND PACIFIC ISLANDS REVEALED BY MICROSATELLITES.

## CS12: EXTREME ENVIRONMENTS

- CHG-01 Li, X.; Percy, D. F.; Astor, Y.; Lorenzoni, L.; Taylor, G. T.; Scranton, M. I.: SULFUR SPECIATION AND METAL CYCLING IN THE CARIACO BASIN
- CHG-02 Colón-Ortiz, L.; Santos-Flores, C. J.: CYANOBACTERIA AND DIATOMS IN THE MICROBIAL MATS OF THE CABO ROJO SALTERNS: CHANGES INDUCED BY DECREASED SALINITY
- CHG-03 Kalanetra, K. M.; Hollibaugh, J. T.: DISTRIBUTION, ABUNDANCE, AND DIVERSITY OF AMMONIA OXIDIZING ARCHAEOA AND BACTERIA IN THE SOUTHERN AND ARCTIC OCEANS
- CHG-04 Swan, B. K.; Ehrhardt, C. J.; Valentine, D. L.: MICROBIAL COMMUNITY STRUCTURE WITHIN THE ANOXIC SEDIMENTS OF A HYPERHALINE LAKE, THE SALTON SEA, CA
- CHG-05 Hall, J. R.; Jackson-Weaver, O.; Dahm, C. N.; Crossey, L. J.; Karlstrom, K. E.; Fischer, T.; Takacs-Vesbach, C.: CO<sub>2</sub>-RICH SPRINGS AND TRAVERTINES OF THE WESTERN U.S.: GEOMICROBIOLOGY OF "CONTINENTAL SMOKERS"
- CHG-06 Ryan, G. T.; Priscu, J. C.; Takacs-Vesbach, C.: EXTREMOPHILIC BACTERIA FROM ANTARCTIC LAKE FRYXELL- EVIDENCE FOR PHENOTYPIC CONVERGENCE
- CHG-07 Zeglin, L. H.; Takacs-Vesbach, C. D.; Dahm, C. N.; Barrett, J. E.; Gooseff, M. N.: BIOLOGICAL, PHYSICAL AND NUTRIENT GRADIENTS IN NEAR-STREAM HYDROLOGIC MARGINS OF HOT AND COLD DESERTS

## CS13: INVASIVE SPECIES

- Chair(s): Meghan E. Brown, mbrown@hws.edu
- CHG-08 Hembre, L. K.; Cooner, J.: PHYLOGEOGRAPHIC ANALYSIS OF BYTHOTREPES INVASIONS IN MINNESOTA LAKES
- CHG-09 Rivera, A.; Yau, A.; Lenihan, H.: EFFECTS OF THE ALGA *TURBINARIA ORNATA* ON GROWTH OF THE JUVENILE CORAL *POCILLOPOORA VERRUCOSA*

- CHG-10 García-Vázquez, S.; Alston, D. E.; Lilyestrom, C.: DISTRIBUTION OF EXOTIC AUSTRALIAN CRAYFISH, *CERAX QUADRATICARINATUS* IN PUERTO RICO
- CHG-11 Thomson, F. K.; Heinemann, S. A.; Hynes, W.; Dobbs, F. C.: CHARACTERIZATION OF ANTIBIOTIC RESISTANCE GENES IN *VIBRIO CHOLERAE* ISOLATED FROM SHIPS' BALLAST TANKS
- CHG-12 Weisz, E. J.; Yan, N. D.: GEOGRAPHIC PREDICTORS OF INVASION SUCCESS IN A NON-INDIGENOUS ZOOPLANKTIVORE, *BYTHOTREPES LONGIMANUS*
- CHG-13 Brown, M. E.: NATURE AND NURTURE DURING DORMANCY: THE ROLE OF DISSOLVED OXYGEN, PH AND MATERNAL INVESTMENT IN DIAPAUSING EGG VIABILITY AND NEONATE FITNESS OF BYTHOTREPES

## CS15: METALS AND ISOTOPES

- METAL-01 Wiegand, M. D.; Johnston, T. A.; Kollar, S.; Leggett, W. C.; Casselman, J. M.; Pyle, G. G.: MATERNAL INFLUENCES ON MINERAL COMPOSITION OF WALLEYE (*SANDER VITREUS*) AND WHITEFISH (*COREGONUS CLUPEAFORMIS*) EGGS
- METAL-02 Ithier-Guzman, W.; Pyrtle, A. J.: RADIOGEOCHEMISTRY OF SOIL AND MARINE SEDIMENTS IN THE ISLAND OF PUERTO RICO
- METAL-03 Walsh, E. J.; Schroeder, T.; De La Cerda, F.; Ramirez, C. M.: LIFE HISTORY RESPONSES TO ARSENIC IN CLONES OF THE ROTIFER *EUCHLANIS DILATATA* FROM THE RIO GRANDE
- METAL-04 Li, L.; Pala, F.; Jiang, M.; Wallace, G. T.: MODELING PB DISTRIBUTION IN BOSTON HARBOR, MASSACHUSETTS BAY AND CAPE COD BAY

## CS17: MOLECULAR TECHNIQUES AND PERSPECTIVES

- Chair(s): Rebecca J. Gast, rgast@whoi.edu
- LOWER-04 Frazier, L.; Broftt, J.; Baylor, V.; Frischer, M.: COMPARITIVE ANALYSIS OF THE ASSIMILATORY NITRATE REDUCTASE GENE IN RESPONSE TO A SIMULATED UPWELLING IN A NORWEGIAN FJORD
- LOWER-05 LaGier, M. J.; Farmer, A.; Goodwin, K. D.: DEVELOPMENT OF ELECTROCHEMICAL BIOSENSORS FOR DETECTION OF MICROBIAL CONTAMINANTS IN COASTAL WATERS
- LOWER-06 Durbin, E. G.; Casas, M. C.: A NOVEL METHOD FOR MEASURING IN SITU RATES OF PREDATION ON DIFFERENT SPECIES OF COPEPOD NAUPLII USING QPCR
- LOWER-07 Liu, Y.; Kemp, P. F.; Aller, J. Y.; Radway, J.; Dhadwal, H.: AN EVANESCENT WAVE BASED OPTIC BIOSENSOR FOR MARINE MICROBIAL ECOLOGY STUDY
- LOWER-08 Seda Miró, J. M.; Govind, N. S.; Arroyo, N.: HEAVY METAL RESISTANCE AND RIBOFLAVIN PRODUCTION IN THE MARINE YEAST *DEBARYOMYCES HANSENII*

WEDNESDAY

- LOWER-09 Orcutt, K. M.; Gundersen, K.; Wells, M. L.; Sieracki, M. E.; Smith, J. G.: LIGHTING UP CELL PROTEINS WITH QUANTUM DOTS
- LOWER-10 Ishikawa, K.; Hosoi-Tanabe, S.; Ban, S.: APPLICATION OF REAL-TIME PCR FOR MONITORING A FRESHWATER RED-TIDE AGENT UROGLENA AMERICANA (CHRYOSOPHYCEAE)
- LOWER-11 Stepanauskas, R.; Sieracki, M. E.: SINGLE-CELL GENOMICS OF MARINE BACTERIOPLANKTON
- LOWER-12 Steele, J. A.; Countway, P. D.; Schwalbach, M. S.; Rose, J. M.; Vigil, P. D.; O'Brien, S. G.; Hewson, I.; Brown, M. V.; Jones, A. C.; Patel, A.; Ruan, Q.; Huang, J.; Sun, F.; Caron, D. A.; Fuhrman, J. A.: BACTERIAL AND PROTISTAN COOCURRENCE AND INTERACTIONS AT THE SAN PEDRO OCEAN TIME SERIES IN THE SAN PEDRO CHANNEL, CALIFORNIA

## CS18/14: OCEANS, LAKES, AND STREAMS IN A CHANGING ENVIRONMENT

- CHG-14 Onodera, J.; Takahashi, K.; Yanada, M.; Yoshida, T.: DIATOM FLORAL FLUXES AND THE OCEANOGRAPHIC CHANGES AT STATION AB IN THE BERING SEA AND STATION SA IN THE SUBARCTIC PACIFIC DURING 1990-1998
- CHG-15 Jessup, S. L.; Morrison, D.; Buktenica, M.; Girdner, S.; Collier, R. W.; Dartnell, P.: ANCIENT BENTHIC BRYOPHYTE COMMUNITIES IN CRATER LAKE: STRUCTURE, COMPOSITION AND DISTRIBUTION OF SEDIMENT-IMPACTED LEPTODICTYON MATS
- CHG-16 Erickson, J. M.; Saros, J. E.: DIATOM-BASED RECONSTRUCTIONS OF LAKE WATER CHEMISTRY TO TEST THE LANDSCAPE POSITION CONCEPT OVER LONGER TIME SCALES IN LAKES OF NORTHEASTERN WISCONSIN
- CHG-17 Neubauer, S. C.: A SEVENTEEN-YEAR RECORD OF INORGANIC CARBON IN THE SUSQUEHANNA AND POTOMAC RIVERS, THE LARGEST TRIBUTARIES OF CHESAPEAKE BAY
- CHG-18 Moore, E. K.; Connely, W.; Kerin, E.; Woodland, R.: THE PROJECTED EFFECTS OF CLIMATE CHANGE ON CHESAPEAKE BAY

## CS21: PHYSICAL-BIOLOGICAL INTERACTIONS

- Chair(s): Clarissa Anderson, c\_anders@lifesci.ucsb.edu  
Søren L. Nielsen, nielsen@ruc.dk
- PHYS-01 Hylton, T. R.; Neely, B.; Moeller, P.: PURIFICATION AND IDENTIFICATION OF A BACTERIAL SIDEROPHORE
- PHYS-02 Lasternas, S.; Tunin-Ley, A.; Ibanez, F.; Andersen, V.; Pizay, M. D.; Lemée, R.: DIEL VERTICAL ABUNDANCE AND DIVERSITY OF MICROPHYTOPLANKTON IN NW MEDITERRANEAN SEA (DYNAPROC II CRUISE; SEP-OCT 2004)
- PHYS-03 Moellendorf, S. M.; Crisman, T. L.: ECOHYDROLOGY OF TROPICAL DRY FOREST STREAMS IN COSTA RICA: IMPACT OF ALTERED HYDROLOGY ON STREAM BIOTA IN THE DRY-WET SEASON TRANSITION

- PHYS-04 Incze, L. S.; Wolff, N.; Rosen, S.; Baukus, A.; Stevick, P.; Kraus, S.; Fields, D.: ADVECTION, INTERNAL WAVES AND TROPHIC FUNNELING ON A SMALL OFFSHORE BANK
- PHYS-05 Gardner, W. S.; McCarthy, , M. J.: CATION EXCHANGE EFFECTS ON ESTIMATING POTENTIAL DISSIMILATORY NITRATE REDUCTION TO AMMONIUM (DNRA) IN COASTAL SEDIMENTS
- PHYS-06 Tandon, A.; Nagai, T.; Gruber, N.; McWilliams, J. C.: BIOLOGICAL AND PHYSICAL IMPACTS OF AGEOSTROPHIC FRONTAL CIRCULATIONS DRIVEN BY CONFLUENT FLOW AND VERTICAL MIXING

## CS22: PRIMARY PRODUCTION AND DECOMPOSITION

- LOWER-13 Acuña, V.; Dahm, C. N.; Tockner, K.; Uehlinger, U.: EFFECTS OF PULSE EVENTS AT DIFFERENT SPATIAL SCALES ON ARID LAND AND ALPINE STREAM AND RIVER ECOSYSTEMS
- LOWER-14 Gallegos, C. L.; Kenworthy, W. J.; Biber, P. D.; Wolfe, B. S.: UNDERWATER SPECTRAL ENERGY DISTRIBUTION AND SEAGRASS DEPTH LIMITS ALONG AN OPTICAL WATER QUALITY GRADIENT
- LOWER-15 Sanchez, B. I.; Santos, C. J.: AQUATIC AND AERO-AQUATIC HYPHOMYCETES ASSOCIATED TO SUBMERGED BAMBOO LEAVES IN A SMALL STREAM OF PUERTO RICO
- LOWER-16 Coloso, J. J.; Cole, J. J.; Pace, M. L.: DEPTH-INTEGRATED ESTIMATES OF METABOLISM IN A CLEAR-WATER LAKE
- LOWER-17 Doyle, R. D.; Huang, H.; Scott, J. T.: SPATIAL AND TEMPORAL PATTERNS OF PLANKTONIC AND COMMUNITY METABOLISM IN TEXAS RESERVOIRS: A TEST OF THE RESERVOIR ZONATION MODEL

## CS23: REMOTE SENSING AND EMERGING TECHNOLOGIES

- Chair(s): Jim Hendee, jim.hendee@noaa.gov
- PHYS-07 Hernández-Cruz, L. R.; Pyrtle, A.; Dixon, B.: REMOTE SENSING APPLICATIONS FOR SOIL & SEDIMENTATION STUDIES
- PHYS-08 Vega-Rodriguez, M.; Armstrong, R.; Detres, Y.: OCEANOGRAPHIC AND METEOROLOGICAL REAL-TIME MEASUREMENTS AT THE PUERTO RICO ICON/CREWS STATION
- PHYS-09 Moore, C.; Barnard, A.; Derr, A.; Orrico, C.; Romanko, D.; Larson, N.; Murphy, D.; Janzen, C.: AN INTEGRATED SENSOR PACKAGE FOR LONG-TERM IN-SITU MARINE MONITORING OF PHYSICAL AND BIOGEOCHEMICAL PARAMETERS
- PHYS-10 Cavanaugh, K. C.; Siegel, D. A.; Reed, D. C.; Kinlan, B. P.: REMOTE SENSING OF GIANT KELP IN THE SANTA BARBARA CHANNEL USING SPOT IMAGERY

- PHYS-11 Jannasch, H. W.; Coletti, L. J.; Johnson, K. S.; Fitzwater, S. E.; Needoba, J. A.; Plant, J. N.: A NEW ROBUST MOORING SYSTEM FOR CONTINUOUS MONITORING OF ESTUARIES AND PROTECTED COASTAL WATERS
- PHYS-12 Poulton, N. J.; Ellis, S.; Nelson, H.: USING AN IMAGING-IN-FLOW PARTICLE ANALYZER (FLOWCAM®) FOR PHYTOPLANKTON ANALYSIS AND CLASSIFICATION

## CS24: SPECIES INTERACTIONS: COMPETITION, DISEASE, MUTUALISM

- ECOL-09 Gast, R. J.; Moran, D. M.; Dennett, M. R.; Rocca, J.; Amaral-Zettler, L.: LEGIONELLA SPECIES, INCLUDING THE HUMAN PATHOGEN LEGIONELLA PNEUMOPHILA, IN MOUNT HOPE BAY
- ECOL-10 Caceres, C. E.; Hall, S. R.; Smyth, R.; Duffy, M. A.; MacIntyre, S.; Tessier, A. J.: REGIONAL AND LOCAL DETERMINANTS OF FUNGAL PARASITE DYNAMICS IN SEVEN POPULATIONS OF DAPHNIA
- ECOL-11 Myers, T. L.; Prince, E. K.; Kubanek, J.: GULF OF MEXICO PHYTOPLANKTON INHIBIT BREVETOXINS PRODUCED BY THE RED TIDE DINOFLAGELLATE KARENIA BREVIS
- ECOL-12 Falls, J. A.; Lipcius, R. N.: EFFECTS OF BENTHIC MACRO-ALGAE ON PREDATION OF JUVENILE BLUE CRABS (CALLINECTES SAPIDUS) IN CHESAPEAKE BAY
- ECOL-13 Zavala Lopez, A.; Losekoot, M.: LEACH'S STORM-PETREL DOES NOT REQUIRE VOCALIZATIONS FOR NEST RELOCATION
- ECOL-14 Haggbloom, M. M.; Kerkhof, L. J.; Ahn, Y. B.; Fraser, C.; Gray, I.; Lopez, N.; Parisi, K.; Saks, B.; Siegl, A.; Hentschel, U.: REDUCTIVE DEBRONIMATING MICROORGANISMS ASSOCIATED WITH ORGANOHALIDE-CONTAINING MARINE SPONGES
- ECOL-15 Wegley, L.; Edwards, R.; Rodriguez-Brito, B.; Liu, H.; Rohwer, F.: METAGENOME OF THE MICROBIAL COMMUNITY INHABITING THE CORAL PORITES ASTREOIDES

## CS25: TROPHIC INTERACTIONS

- Chair(s): Orlando Sarnelle, sarnelle@msu.edu  
Kimberly L. Schulz, kschulz@syr.edu
- ECOL-16 Acharya, K.; Stone, M. C.; Fisk, T. T.; Bower, M. R.: IS FOOD AVAILABILITY HURTING DEVIL'S HOLE PUPFISH?
- ECOL-17 Massaut, L.; Salcedo, J.: ESTIMATION OF ROTIFER FILTRATION RATE ON DIFFERENT PHYTOPLANKTON SPECIES AS THE BASIS FOR A FOOD WEB MODEL
- ECOL-18 Smith Siuda, A. N.; Dam, H. G.: LATITUDINAL CONTRASTS IN PLANKTONIC TROPHIC CASCADES IN THE WESTERN NORTH ATLANTIC OCEAN
- ECOL-19 Hodgson, J. R.; Provost, M. M.; Weidel, B.: IMPACT OF LAKE SIZE ON DIET DIVERSITY OF LARGEMOUTH BASS

- ECOL-20 Harvey Michel, M. H.; Marion Alexandra, A. M.: INVASIVE RANGE EXPANSION BY THE ARCTIC HYPERIID AMPHIPOD THEMISTO LIBELLULA INTO THE ST. LAWRENCE MARINE SYSTEM DURING THE 1990S: FEEDING AND PREDATION IMPACT

## CS26: ULTRAVIOLET RADIATION AND PHOTOCHEMISTRY

- METAL-05 Jeffrey, W. H.; Connelly, S.; Guida, T. A.; Mitchell, D. L.; Neale, P. J.: DIEL PATTERNS OF UVR INDUCED DNA DAMAGE AND REPAIR IN THE MICROBIAL COMMUNITY OF LAKE GILES, PA
- METAL-06 Rogers, J. E.; Marcovich , D. T.: BIOLOGICAL WEIGHTING FUNCTIONS FOR THE EFFECTS OF UV ON THE GROWTH OF CLADE A, B AND C SYMBIODINOUM ISOLATES CULTURED NEAR THEIR THERMAL LIMIT.
- METAL-07 Ortiz-Rosa, S.; Corredor, J. E.: PHOTOCHEMICAL RESPONSE AND OPTICAL PROPERTIES OF COLORED DISSOLVED ORGANIC MATTER (CDOM)
- METAL-08 Hayakawa, K.; Sugiyama, Y.; Yoshioka, T.: VARIABILITY IN ATTENUATION OF UV RADIATION IN LAKE BIWA AND THE ROLE OF CHROMOPHORIC DISSOLVED ORGANIC MATTER
- METAL-09 Young, D. L.; Wiegand, M.; Huebner, J. D.; Simmons, K.; Loadman, N. L.: DOES TIME OF COLLECTION AFFECT THE GROWTH OF LEMNA MINOR AND SPIRODELA POLYRHIZA EXPOSED TO ARTIFICIAL UV-B RADIATION?
- METAL-10 Loadman, N. L.; Huebner, J. D.; Young, D. L.; Wiegand, M.: THE EFFECTS OF PARENTAL EXPOSURE TO UV-B RADIATION ON OFFSPRING SURVIVAL, GROWTH AND REPRODUCTION IN DAPHNIA MAGNA
- METAL-11 Goodwin, D. S.; Morrison, J. R.; Lesser, M. P.: TEMPORAL VARIATION IN SURFACE WATER MYCOSPORINE-LIKE AMINO ACIDS (MAAS) IN THE WESTERN GULF OF MAINE

## SS01: WATER ON EARTH: ANALOGUES FOR OTHER WORLDS

- Chair(s): Cristina Takacs-Vesbach, cvesbach@unm.edu  
John Priscu, jpriscu@montana.edu
- CHG-19 Eddie, B. J.; Kremls, C.; Neuer, S.: GROWTH RATE RESPONSE OF PSYCHROPHILIC CHLAMYDOMONAS SP. ARC FROM ARCTIC SEA ICE TO TEMPERATURE AND SALINITY
- CHG-20 Stanish, L.; McKnight, D. M.: THE RETURN OF THE DIATOMS: BENTHIC DIATOMS IN AN EXPERIMENTALLY REACTIVATED GLACIAL MELTWATER STREAM IN THE MCMURDO DRY VALLEYS, ANTARCTICA
- CHG-21 Mitchell, K. R.; Takacs-Vesbach, C.: GEOCHEMICAL CONTROLS ON MICROBIAL COMMUNITY COMPOSITION FROM VARIED HOT SPRING ENVIRONMENTS

## **SS04: DISSOLVED ORGANIC MATTER QUALITY: LINKING ENVIRONMENTAL DYNAMICS TO MOLECULAR STRUCTURE**

- Chair(s): William J. Cooper  
Rudolf Jaffe, jaffer@fiu.edu  
Thursten Dittmar, dittmart@ocean.fsu.edu  
Leigh McCallister, leigh@vims.edu
- DOM-06 Rusak, S. A.; Richard, L. E.; Gonsior, M.; Peake, B. M.; Cooper, W. J.: STEADY-STATE HYDROGEN PEROXIDE CONCENTRATIONS ACROSS THE SUBTROPICAL CONVERGENCE EAST OF NEW ZEALAND
- DOM-07 Walker, B. D.; Beaupre, S. R.; Roland, L. A.; Guilderson, T. P.; Druffel, E. R.; McCarthy, M. D.: CARBON ISOTOPIC COMPOSITION AND REACTIVITY ACROSS THE MARINE ORGANIC MATTER SIZE CONTINUUM: IMPLICATIONS FOR CARBON CYCLING IN THE CENTRAL PACIFIC OCEAN
- DOM-08 Eglite, L.; Klavins, M.; Peuravuori, J.; Sire, J.; Purmalis, O.: COMPLEX CHARACTERIZATION OF DISSOLVED ORGANIC MATTER ISOLATED FROM SURFACE WATERS OF LATVIA
- DOM-09 Eiler, A.; Beier, S. E.; Karlsson, J.; Bertilsson, S.: THE DISTRIBUTION OF BACTERIOCHLOROPHYLL-A CONTAINING BACTERIA IN AEROBIC AQUATIC ENVIRONMENTS
- DOM-10 Larsen, L. G.; Aiken, G. R.; Harvey, J. W.; Noe, G. B.; Crimaldi, J. P.: INFERENCE ABOUT SMALL-SCALE MICROBIAL DYNAMICS, TRANSPORT PROCESSES, AND HYDROLOGIC MIXING FROM DISSOLVED ORGANIC MATTER QUALITY IN THE FLORIDA EVERGLADES
- DOM-11 Gonsior, M.; Peake, B. M.; Cooper, W. J.: PHOTODEGRADATION OF CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) AT FRESHWATER-SEAWATER INTERFACES
- DOM-12 Maie, N.; Briceno, H.; Pisani, O.; Jaffe, R.: MOLECULAR CHARACTERIZATION OF DISSOLVED ORGANIC MATTER IN TROPICAL RIVERS OF SE VENEZUELA: AN OPTICAL PROPERTIES BASED STUDY
- DOM-13 Wickland, K. P.; Neff, J. C.; Aiken, G. R.: CHEMISTRY AND BIODEGRADABILITY OF TERRESTRIALLY-DERIVED DOC IN BOREAL BLACK SPRUCE FORESTS OF ALASKA
- DOM-14 Chen, M.; Viteri, R.; Pisani, O.; Calvo, M.; Maie, N.; Jaffé, R.: DISSOLVED ORGANIC MATTER DYNAMICS IN THE FLORIDA COASTAL EVERGLADES: APPLICATION OF DOM QUANTITY VS. QUALITY MEASUREMENTS

## **SS05: HYPOXIA IMPACTS ON AQUATIC FOOD WEB COMPOSITION, DYNAMICS AND PRODUCTION**

- Chair(s): David G. Kimmel, dkimmel@hpl.umces.edu  
Stuart A. Ludsin, Stuart.Ludsin@noaa.gov
- BGC-29 Thronson, A. M.; Quigg, A. S.: DETERMINING THE EFFECT OF 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (TCDD) AND LOW DISSOLVED OXYGEN ON RED DRUM (SCIAENOPS OCCELLATUS)

## **SS06: BIOFILMS IN AQUATIC FOOD WEBS**

- Chair(s): Willem Goedkoop, willem.goedkoop@ma.slu.se  
Alan Decho, Audecho@gwm.sc.edu
- DOM-01 Lundqvist, A. M.; Goedkoop, W.; Bertilsson, S.: EFFECTS OF ARTIFICIAL AND NATURAL EXTRACELLULAR POLYMERIC SUBSTANCES AND HUMIC SUBSTANCES ON CHLORPYRIFOS BIOAVAILABILITY TO CHIRONOMUS RIPARIUS
- DOM-02 Visser, L. A.; Thornton, D. C.: C:N RATIOS IN MARINE BENTHIC DIATOMS
- DOM-03 Burgos-Caraballo, S.; Caceres, R. I.; Ramirez, L. A.: THE EFFECT OF LAND USE CHANGE IN BENTHIC BIOFILM METABOLISM
- DOM-04 Samo, T. J.; Malfatti, F.; Azam, F.: A CLASS OF TRANSPARENT PARTICLES VISUALIZED WITH A NOVEL STAINING TECHNIQUE
- DOM-05 Magana, H. A.: FEEDING PREFERENCE OF THE RIO GRANDE SILVERY MINNOW

## **SS07: CARBON CYCLING AT THE LAND-OCEAN INTERFACE**

- Chair(s): Antonio Mannino, antonio.mannino@nasa.gov  
Marjorie Friedrichs, marjy@ccpo.odu.edu  
Dale Haidvogel, dale@imcs.rutgers.edu
- BGC-30 Velez, J. F.; Fabres, J.; Tesi, T.; Abramson, L.; Lee, C.; Calafat, A.: ORGANIC MATTER ISOTOPIC AND PIGMENT COMPOSITION AS MARKERS OF THE PROVENANCE AND TRANSPORT OF PARTICULATE MATTER AT THE GULF OF LION UPPER MARGIN
- BGC-31 Benítez Joubert, Rafael J., R. J.; Ortiz-Zayas, Jorge R., J. R.: THE EFFECTS OF WASTEWATER EFFLUENTS ON THE METABOLISM OF TROPICAL ISLAND ESTUARIES.
- BGC-32 Cherrier, J.; Cable, J. E.; Martin, J. B.; Smith, C. G.: PORE-WATER DISSOLVED ORGANIC CARBON GRADIENTS IN A SUBTERRANEAN ESTUARY
- BGC-33 Spencer, R. G.; Pellerin, B. A.; Hernes, P. J.; Bergamaschi, B. A.: THE FATE OF TERRIGENOUS DISSOLVED ORGANIC MATTER IN THE SAN FRANCISCO BAY ESTUARY

## **SS08: RECRUITMENT OF MARINE LARVAE: EXPERIMENTAL AND MODELING STUDIES**

- Chair(s): Donal T. Manahan, manahan@usc.edu  
Eileen Hofmann, hotmann@ccpo.odu.edu
- ECOL-21 Chaffey, T. F.; Mitarai, S.; Siegel, D. A.: A DESCRIPTION OF THE EFFECTS OF HEADLANDS ON MARINE LARVAL DISPERSAL USING COMPUTATIONAL MODELS
- ECOL-22 Watson, J. R.; Siegel, D. A.; Mitarai, S.: SIMULATING LARVAL DISPERSAL IN THE SANTA BARBARA CHANNEL USING DIFFERENT VELOCITY FIELD RESOLUTIONS WITH A LAGRANGIAN FLUCTUATING COMPONENT

- ECOL-23 Hammond, L. M.; Hofmann, G. E.: COMPARING THERMOTOLERANCE AND HSP70 GENE EXPRESSION IN EARLY LIFE HISTORY STAGES OF STRONGYLOCENTROTUS PURPURATUS LARVAE ACROSS A LARGE BIOGEOGRAPHIC SCALE
- ECOL-24 Fielman, K. T.; Hofmann, G. E.: COMPARATIVE LARVAL THERMOTOLERANCE AMONG WESTERN STRONGYLOCENTROTID URCHIN CONGENERS: INSIGHTS FROM PHYSIOLOGICAL GENOMICS
- ECOL-25 Rodriguez, G. E.; Sulkin, S. D.: MANIPULATING NUTRITIONAL VALUE OF CRAB LARVAE (CANCER MAGISTER) PREY, THE ROTIFER (BRACHIONUS PLICATILIS)
- ECOL-26 Muhlin, J. F.; Coleman, M. A.; Brawley, S. H.: REPRODUCTIVE TIMING IN THE INTERTIDAL: DEVELOPING A REGIONAL MODEL OF REPRODUCTION FOR FUOID ALGAE
- ECOL-27 Gerrish, G. A.: INTEGRATING A MARK AND RECAPTURE BASED KERNEL MODEL OF DISPERSAL WITH GIS HABITAT MAPPING TO DEVELOP HABITAT MOVEMENT PROBABILITIES FOR A MARINE OSTRACOD

## SS09: STUDYING THE ECOLOGY, BIODIVERSITY, AND ABUNDANCE OF AQUATIC ANIMALS

- Chair(s): David Bailey, d.bailey@abdn.ac.uk  
Nikki King, n.king@abdn.ac.uk
- ECOL-28 Vardaro, M. F.; Parmley, D.; Smith, K. L.: A STUDY OF POSSIBLE "REEF EFFECTS" ON FISH AGGREGATION CAUSED BY A LONG-TERM TIME-LAPSE CAMERA IN THE DEEP NORTH PACIFIC
- ECOL-29 Edgington, D. R.; Cline, D. E.; Mariette, J.; Kerkez, I.: DETECTING, TRACKING AND CLASSIFYING ANIMALS IN UNDERWATER VIDEO
- ECOL-30 Norbin, M. F.; Jacobsen, H. P.; Eilertsen, H. C.; Kristiansen, S. A.: FINE-SCALE VERTICAL STRUCTURE OF CALANUS POPULATIONS IN DIFFERENT BLOOM SITUATIONS AND WATER MASSES IN THE BARENTS SEA AND POLAR SEA NORTH OF SVALBARD
- ECOL-31 Francis Rodríguez, V.; Núñez, J.; Vega, J.; Sastre, M. P.: A THREE-YEAR STUDY ON POPULATION DYNAMICS OF DINOFLAGELLATES PYRODINIUM BAHAMENSE AND CERATIUM FURCA

## SS10: DESERT RIPARIAN ECOSYSTEMS: MULTIDISCIPLINARY INVESTIGATIONS OF ENVIRONMENTAL CHANGE

- Chair(s): Thomas Meixner, tmeixner@hwr.arizona.edu  
Julie Stromberg, jstrom@asu.edu  
Steve Stewart, sstewart@hwr.arizona.edu  
Paul Brooks, brooks@hwr.arizona.edu
- CHG-22 Thomas Meixner, T.; James Hogan, ; Scott Simpson, .: ALLUVIAL AQUIFERS: REVERSIBLE SURFACE WATER-GROUNDWATER INTERACTION

- CHG-23 Tibbets, T. M.; Harner, M. J.; Follstad Shah, J. J.: POTENTIAL ALTERATION OF RIPARIAN ECOSYSTEM FUNCTION BY ELAEAGNUS ANGUSTIFOLIA, A NON-NATIVE NITROGEN FIXER

## SS11: FORM AND FUNCTION OF ZOOPLANKTON

- Chair(s): J. Rudi Strickler, jrs@uwm.edu  
Petra Lenz, petra@pbrc.hawaii.edu  
Gus Paffenhofer, cmp@skio.peachnet.edu
- ECOL-32 Arneson, L. K.; Strickler, J. R.: ALTERNATING MOTIONS OF COPEPOD MOUTH APPENDAGES
- ECOL-33 Regula, C.; Kordula, H.; Colin, S. P.: MECHANISMS OF PREY SELECTION IN AMBUSHING HYDROMEDUSAEE
- ECOL-34 Feitl, K. E.; Millett, A.; Colin, S. P.; Costello, J. H.: ONTOGENY AND FLUID ENVIRONMENT IN SCYPHOZOAN DEVELOPMENT
- ECOL-35 Williams, J. J.; Schulz, K.: THE IMPORTANCE OF LIGHT AND CHEMICAL CUES FOR THE SWARMING BEHAVIOR OF A PREDATORY CLADOCERAN (POLYPHEMUS PEDICULUS)
- ECOL-36 Wiggert, J. D.; Paffenhofer, G. A.; Hofmann, E. E.: THE IMPACT OF SAMPLING PREFERENCE AND DIFFERENT IN SITU CONDITIONS ON THE GRAZING SUCCESS OF OLIGOTROPHIC COPEPOD POPULATIONS: A MODELING STUDY
- ECOL-37 Parrish, A. N.: COPEPOD ABUNDANCE IN THE CHESAPEAKE BAY.

## SS12: ASLO MULTICULTURAL STUDENT SYMPOSIUM

- Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
- EDUC-09 Zayas-Santiago, C. C.; Gilbes-Santaella, F.; Armstrong, R.; Lopez-Gonzalez, M.: MAPPING A BENTHIC COMMUNITY IN SOUTHWESTERN PUERTO RICO USING IKONOS

## SS13: CALCIFICATION IN AQUATIC ECOSYSTEMS: PHYSIOLOGY, BIOGEOCHEMISTRY, AND RESPONSE TO ENVIRONMENTAL CHANGE

- Chair(s): Jean-Pierre Gattuso, gattuso@obs-vlfr.fr  
Joanie Kleypas, kleypas@ucar.edu
- CHG-24 Tanaka, Y.; Miyajima, T.; Koike, I.; Hayashibara, T.; Ogawa, H.: EFFECTS OF NUTRIENT ENRICHMENT ON THE BALANCE BETWEEN PHOTOSYNTHESIS AND CALCIFICATION IN A ZOOXANTHELLATE CORAL
- CHG-25 von Dassow, P.; Iglesias-Rodriguez, M. D.; Rehm, E.; Armbrust, E. V.; van den Engh, G.: USE OF POLARIZATION FLOW CYTOMETRY TO QUANTIFY CALCIFICATION IN SINGLE COCCOLITHOPHORID CELLS
- CHG-26 Yates, K. K.; Halley, R. B.; Kuffner, I. B.; Brock, J. B.: IN SITU MEASUREMENTS OF CALCIFICATION RATES IN CORAL REEF COMMUNITIES OF SOUTH FLORIDA AND THE U.S. VIRGIN ISLANDS

WEDNESDAY

- CHG-27 Souder, H. L.; Hallock, P.: MORPHOLOGICAL ABNORMALITIES IN ARCHAIAS ANGULATUS (FORAMINIFERA) FROM THE FLORIDA KEYS, USA: AN INDICATION OF ENVIRONMENTAL CHANGE?
- CHG-28 Maier, C.; Duyl, F. C.; Hegeman, J.; Weinbauer, M. G.: CALCIFICATION RATES OF DEEP WATER CORALS LOPHELIA PERTUSA AND DESMOPHYLLUM SP ASSESSED BY RADIOISOTOPE LABELING WITH CALCIUM-45 AND CARBON-14
- CHG-29 Watanabe, A.; Kayanne, H.; Yamamoto, S.; Nozaki, K.; Kato, K.; Negishi, A.: DISSOLUTION RATE OF CALCIUM CARBONATE UNDER HIGH CO<sub>2</sub> CONCENTRATION
- CHG-30 Suzuki, A.; Morimoto, N.; Nagao, M.; Furushima, Y.; Kawahata, H.: CALCIFICATION SEASONALITY IN A HIGH-LATITUDE CORAL REEF: ECOSYSTEM-LEVEL APPROACH TO SEKISEI REEF IN THE RYUKYU ISLANDS, JAPAN

## **SS14: NEW TECHNOLOGIES FOR THE STUDY OF CONTINENTAL MARGIN BENTHIC ECOSYSTEMS AND THE NEED FOR BENTHIC OBSERVATORIES**

- Chair(s): Dr. Christophe Rabouille, rabouill@lsce.cnrs-gif.fr  
Dr. Elanor Bell, ebell@rz.uni-potsdam.de
- PHYS-13 Spagnoli, F.; Fiesoletti, F.; Bartholini, G.; Andresini, A.; Soltwedel, T.; Hasemann, C.: EARLY DIAGENESIS PROCESSES IN A FISH FARM AffECTED AREA (LOCH CRERAN, SCOTLAND): PRELIMINARY RESULTS
- PHYS-14 Stahl, H.; Glud, R. N.: AN AUTONOMOUS IN SITU PLANAR OPTODE MODULE: A USEFUL TOOL FOR STUDYING 2D DISTRIBUTIONS OF OXYGEN AND PH IN MARINE BENTHIC ENVIRONMENTS.
- PHYS-15 Burke, K.; Walpersdorf, E.; Witte, U.; Nickell, L. A.; Harvey, S. M.: BENTHIC NUTRIENT CYCLING IN AN ORGANICALLY ENRICHED ENVIRONMENT, LOCH CRERAN, SCOTLAND
- PHYS-16 Banahan, S.; Daly, K.: THE OCEAN OBSERVATORIES INITIATIVE (OOI) AND THE OCEAN RESEARCH INTERACTIVE OBSERVATORY NETWORKS (ORION) PROGRAM
- PHYS-17 Nunnally, C. C.; Brinkmeyer, R. L.; Quigg, A. S.; Guillen, G. J.; Roehrborn, L.; Rowe, G. T.: AN URBAN BENTHIC OBSERVATORY IN A SHALLOW HYPOXIC MARINE BASIN

## **SS16: QUANTIFYING ECOLOGICAL SUBSIDY AND RESOURCE SHEDS**

- Chair(s): David Raikow, david.raikow@noaa.gov
- ECOL-38 Frashure, K. M.; Chen, R. F.; Bowen, R. E.; Frankic, A.; Padawer, S.: A PROTOCOL FOR SELECTING INDICATORS OF ECOSYSTEM HEALTH IN URBAN ESTUARIES

## **SS17: A NEW LOOK AT DARWIN'S LAST IDEA: BIOTURBATION AND BIO-IRRIGATION IN AQUATIC SEDIMENTS**

- Chair(s): Filip Meysman, f.meysman@nioo.knaw.nl  
Yoko Furukawa, yoko.furukawa@nrlssc.navy.mil
- PHYS-18 Maire, O.; Duchêne, J. C.; Amouroux, J. M.; Grémare, A.: ACTIVITY PATTERNS IN THE TEREBELLID POLYCHAETE EUPOLYNIA NEBULOSA ASSESSED USING A NEW IMAGE ANALYSIS SYSTEM

## **SS18: PREDICTING THE EFFECT OF CHANGES IN THE TERRESTRIAL ENVIRONMENT ON AQUATIC DOC**

- Chair(s): Kevin Bishop, kevin.bishop@ma.slu.se  
Rick Bourbonniere, Rick.Bourbon@ec.gc.ca  
Tom Clair, tom.clair@ec.gc.ca
- CHG-31 Kokorite, I.; Klavins, M.; Rodinov, V.: FLOWS OF DISSOLVED ORGANIC MATTER FROM TERRITORY OF LATVIA IN CONDITIONS OF CHANGING ENVIRONMENT
- CHG-32 Riise, G.; Haaland, S.; Hongye, D.: THE INFLUENCE OF HYDROLOGY ON COLOURED DOC-SPECIES – A LONG TERM STUDY IN A FOREST LAKE ECOSYSTEM-SE NORWAY

## **SS19: SUPPLY-SIDE ECOLOGY: WHAT HAVE WE LEARNED SINCE (LEWIN) 1986?**

- Chair(s): Gil Rilov, rilovg@science.oregonstate.edu  
Sarah Dudas, Sarah.Dudas@science.oregonstate.edu
- ECOL-39 Simmons, K.: ALgal COLONIZATION OF HAIR AND CLOTH AS AN ESTIMATION OF SUBMERGENCE INTERVAL.

## **SS20: ADVANCES IN BIOGEOCHEMICAL MODELING: BRIDGING PHYSICS, CHEMISTRY, AND BIOLOGY**

- Chair(s): Parisa Jourabchi, parisa@geo.uu.nl  
Sandra Arndt, arndt@geo.uu.nl  
Philippe Van Cappellen, pvc@geo.uu.nl
- BGC-34 Mogollón, J. M.; L'Heureux, I.; Dale, A.; Rodríguez Aguilera, D.; Regnier, P.: METHANE GENERATION, TRANSPORT, AND CONSUMPTION IN MARINE SEDIMENTS
- BGC-35 Krishnamurthy, A.; Moore, J. K.; Luo, C.; Zender, C. S.: THE EFFECTS OF ATMOSPHERIC INORGANIC NITROGEN DEPOSITION ON OCEAN BIOGEOCHEMISTRY
- BGC-36 Wilson, B. A.; Olsen, C. R.; Chen, R. F.; Gontz, A. M.: THE USE OF SHORT-LIVED RADIONUCLIDES TO TRACK SEWAGE CONTAMINANTS IN URBANIZED ESTUARINE SYSTEMS
- BGC-37 Das, A.; Justic, D.; Swenson, E.: MODELING THE IMPACTS OF MISSISSIPPI RIVER DIVERSIONS ON WATER QUALITY IN THE BARATARIA BAY ESTUARY

- BGC-38 McDonald, C. P.; Urban, N. R.: APPLICATION OF BIOGEOCHEMICAL MODELS OF VARYING COMPLEXITY TO LAKE SUPERIOR, USA
- BGC-39 Ossianer, L. A.; Murray, J. W.; Aumont, O.; Gorgues, T.: THE LEAKY EQUATORIAL PACIFIC BUCKET: RECYCLING OF NITRATE AND FATE OF IRON IN AN HNLC REGION
- BGC-40 Koch, J. C.; McKnight, D. M.; Gooseff, M. N.; Baeseman, J.: QUANTIFYING NITRATE UPTAKE IN AN UNSTEADY, ANABRANCHING, ANTARCTIC STREAM

## **SS21: PRODUCTION AND CYCLING OF DISSOLVED ORGANIC MATTER IN AQUATIC SYSTEMS STUDIED THROUGH EXPERIMENTAL, FIELD, AND MODELING APPROACHES**

- Chair(s): Daniel Repeta, drepeta@whoi.edu  
Craig Carlson, carlson@lifesci.ucsb.edu  
Raleigh R. Hood, rhood@hpl.umces.edu
- DOM-15 Duhamel, S.; Mauriac, R.; Van Wambeke, F.; Nedoma, J.: PHOSPHATASE ACTIVITY OF HETEROTROPHIC BACTERIA AT SINGLE CELL LEVEL BY EPIFLUORESCENCE MICROSCOPY AND FLOW CYTOMETRY.
- DOM-16 Yamashita, Y.; Tsukasaki, A.; Nishida, T.; Tanoue, E.: DISTRIBUTION OF FLUORESCENT DISSOLVED ORGANIC MATTER IN THE SOUTHERN OCEAN
- DOM-17 Prasil, O.; Koblizek, M.: PHOTOACCLIMATION OF MARINE AEROBIC ANOXYGENIC PHOTOTROPHS
- DOM-18 Lehman, J. C.; McCarthy, M. D.: COUPLED  $^{13}\text{C}$  AND  $^{15}\text{N}$  INDIVIDUAL AMINO ACID SIGNATURES OF SUSPENDED PARTICULATE ORGANIC MATTER (POM) FROM CENTRAL NORTH PACIFIC
- DOM-19 Gustafson, E. S.; Zhao, X.; Button, D. K.: KINETICS OF TEMPERATURE ADAPTATION BY BACTERIOPLANKTON IN A NEAR-ARCTIC LAKE
- DOM-20 Shank, G. C.; Rosenfeld, C. E.; Zepp, R. G.: THE IMPACT OF CDOM PHOTOBLEACHING ON UV ATTENUATION NEAR CORAL REEFS IN THE FLORIDA KEYS
- DOM-21 Porter, J. A.; Moeller, R. E.; Morris, D. P.: RESPONSE OF BACTERIAL COMMUNITIES TO DISSOLVED ORGANIC MATTER OF A TERRESTRIAL NATURE: IMPLICATIONS OF ULTRAVIOLET RADIATION EXPOSURE
- DOM-22 Valentine, S. K.; Cherrier, J.; Leon-Soon, S.; Hamill, B. J.: RELEASE OF DOM BY COASTAL PHYTOPLANKTON ASSEMBLAGES AS A FUNCTION OF CHANGING LIGHT INTENSITY

## **SS22: EVOLUTIONARY RESPONSES OF PLANKTON COMMUNITIES TO NATURAL AND HUMAN-INDUCED STRESS**

- Chair(s): Alison Derry, derrya@biology.queensu.ca
- CHG-33 Koester, Julie, A.; Armbrust, Ginger, : PHYSIOLOGICAL VARIATION IN THE MARINE DIATOM DITYLUM BRIGHTWELLII

## **SS23: CONUNDRUMS AND CONTROVERSIES: WHAT CONTRIBUTES TO THE VERTICAL FLUX OF CARBON, NITROGEN, AND PHOSPHORUS IN AQUATIC ECOSYSTEMS?**

- Chair(s): Tammi Richardson, richardson@biol.sc.edu  
Claudia Benitez-Nelson, cbnelson@geol.sc.edu
- BGC-41 Lyons, G. C.; Benitez-Nelson, C.; Thunell, R.: PHOSPHORUS COMPOSITION OF SINKING PARTICLES FROM GUAYMAS BASIN, CALIFORNIA.
- BGC-42 Pilskaln, C. H.; Brown, J.; Anderson, D. M.; Keafer, B. A.; Faulkner, C.; Norton, K.; Roesler, C.: FROM THE BOTTOM UP: MODULATION OF POM DELIVERY BY BIOGEOCHEMICAL PROCESSES OCCURRING IN THE CONTINENTAL MARGIN BENTHIC NEPHELOID LAYER
- BGC-43 Lopez, J. M.; Morell, J. M.; Corredor, J. E.; Capella, J. E.; Gilbes, F.: CARIBBEAN MESOSCALE EDDY BIO-OPTICS
- BGC-44 Hammond, D. E.; Esther, T. A.; Johnson, H. P.; Hautala, S. L.; Schwartz, R. J.: SI IN CASCADIA BASIN: OPAL DISSOLUTION OR HYDROTHERMAL?
- BGC-45 Mohler, J. A.; Massana, R.; Anderson, I. J.; Neuer, S.: CONTRIBUTION OF VARIOUS PHYTOPLANKTON TAXA TO PARTICLE FLUX AT THE TIME-SERIES STATION ESTOC
- BGC-46 Hidaka, K.; Nakata, K.: APPENDICULARIAN COMMUNITY IN THE OCEANIC REGIONS SOUTH OF JAPAN AND THEIR ECOLOGICAL SIGNIFICANCE
- BGC-47 DuBois, S. L.; Benitez-Nelson, C.; Paneva, R.; Berelson, W.; Hammond, D.; Paukert, A.: ORGANIC AND INORGANIC PHOSPHORUS COMPOSITION WITHIN SAN PEDRO SEDIMENT TRAPS
- BGC-48 Williams, B.; Grottoli, A. G.: CARBON AND NITROGEN STABLE ISOTOPES FROM GORGONIAN SOFT CORALS AS RECORDERS OF NUTRIENT FLUXES IN THE WESTERN EQUATORIAL PACIFIC
- BGC-49 Kish, J. L.; Bergen, J. M.; Werne, J. P.; Hicks, R. E.: PLANKTONIC ARCHAEA AND NITROGEN CYCLING IN LAKE SUPERIOR

## **SS24: THE AQUATIC GEL PHASE, ITS ROLE IN BIOGEOCHEMICAL CYCLES**

- Chair(s): Pedro Verdugo, verdugo@u.washington.edu  
Peter H. Santschi, Santschi@tamug.edu
- BGC-50 DING, Y.; CHIN, W.; ORELLANA, M.; BENNER, R.; VERDUGO, P.: A SIMPLE FLUORESCENCE QUENCHING ASSAY TO MEASURE THE FRACTION OF TOC ASSEMBLED AS MICROGELS IN SEAWATER.
- BGC-51 Moon, A.; Oviedo, A.; Ng, C.; Tuthill, J.; Dmitrijeva, J.; Quesada, I.; Verdugo, P.: MASSIVE BACTERIAL COLONIZATION OF MARINE POLYMER GELS
- BGC-52 Chateauvert, C. A.; Lesack, L. F.; Bothwell, M. L.: BACTERIAL COLONIZATION OF TRANSPARENT EXOPOLYMER PARTICLES IN THE MACKENZIE RIVER DELTA

## SS27: TRACE METALS, MICROBIAL PROCESSES, AND BIOGEOCHEMICAL CYCLES THROUGH SPACE AND TIME

- Chair(s): Kathy Barbeau, kbarbeau@ucsd.edu  
Alison Butler, butler@chem.ucsb.edu  
Felisa Wolfe-Simon, fwolfe@asu.edu
- METAL-12 Hollweg, T. A.; Gilmour, C. C.; Mason, R. P.: BIOCHEMICAL FACTORS AFFECTING MERCURY METHYLATION IN THE CHESAPEAKE BAY AND MID-ATLANTIC CONTINENTAL SHELF
- METAL-13 Shiller, A. M.: MICROBIAL CONTROL OF DISSOLVED MANGANESE IN RIVERS
- METAL-14 Anderson, C. M.; Hopkinson, B. M.; Podell, S.; Roe, K. L.; Barbeau, K. A.; Gaasterland, T.; Haygood, M. G.: GENOMIC STUDIES OF TRACE METAL PHYSIOLOGY IN *MICROSCILLA MARINA*, A PARTICLE-ASSOCIATED MARINE BACTERIUM
- METAL-15 Poulain, A. J.; Ni Chadhain, S. M.; Ariya, P. A.; Amyot, M.; Garcia, E.; Campell, P. G.; Zylstra, G. J.; Barkay, T.: MICROBES EXPRESS MERCURY RESISTANCE IN THE HIGH ARCTIC
- METAL-16 Glass, J. B.; Krieg, M. L.; Wolfe-Simon, F.; Anbar, A. D.: TRACE METAL CONTROLS ON THE EFFICIENCY OF NITROGEN FIXATION: ASSESSING MICROBIAL METAL REQUIREMENTS IN ANCIENT OCEANS
- METAL-17 Pretto, P.; Han, S.; Castellani, C.; Tebo, B. M.: MICROBIAL COMMUNITY ANALYSIS AND MERCURY BIOGEOCHEMISTRY IN VENICE LAGOON

## SS30: STIRRING AND MIXING IN BIOLOGICAL AND ECOLOGICAL SYSTEMS

- Chair(s): John Crimaldi, crimaldi@colorado.edu
- PHYS-19 Novembre, N. J.; Crimaldi, J. P.: TURBULENT STIRRING AND MIXING: LAB STUDY INVESTIGATING STIRRING AND MIXING OF TWO SCALARS BY A SINGLE IDEAL VORTEX
- PHYS-20 Smith, C. G.; Cable, J. E.; Martin, J. B.: LOW FREQUENCY, HIGH-INTENSITY MIXING EVENTS IN A SUBTERRANEAN ESTUARY: IMPACTS OF HURRICANES AND OTHER TROPICAL SYSTEMS
- PHYS-21 Steinbuck, J. V.; Monismith, S. G.; Koseff, J. R.; Genin, A.; Holtzman, R.: TURBULENCE OBSERVATIONS IN THE SURFACE MIXED LAYER OF THE GULF OF AQABA
- PHYS-22 Weitzman, J. S.; Lowe, R. J.; Koseff, J. R.; Thomas, F. I.: DETAILED OBSERVATION AND QUANTIFICATION OF VEGETATED CANOPY HYDRODYNAMICS IN FLORIDA BAY

## SS31: MORTALITY AMONG MICROBES

- Chair(s): Janice Lawrence, jlawrenc@unb.ca  
Kay Bidle, bidle@marine.rutgers.edu
- LOWER-18 Frick, W. E.; Ge, Z.: NOWCASTING AND FORECASTING BEACH BACTERIA CONCENTRATIONS USING EPAS VIRTUAL BEACH SOFTWARE

## SS34: PHYTOPLANKTON NUTRIENT UPTAKE AND REQUIREMENTS: FROM MOLECULAR MECHANISMS TO ECOSYSTEM IMPACTS

- Chair(s): Adam Kustka, kustka@princeton.edu  
Elena Litchman, litchman@msu.edu
- BGC-53 Heidenreich, M. J.; Morrison, J. R.; McDowell, W. H.; Pennock, J. R.: HUMIC ACID AND IRON: WILL THEY INCREASE ALgal CULTURE GROWTH?
- BGC-54 Bernhardt, P. W.; Mulholland, M. R.; Cutter, L. S.; Cutter, G. A.: HYDROGEN SULFIDE PRODUCTION BY A CULTURED DIATOM AND CYANOBACTERIA.
- BGC-55 del Re, L. W.; Wurtsbaugh, W. A.; Mills, A. L.: NUTRIENT AVAILABILITY FOR ALgal GROWTH ABOVE AND BELOW A MOUNTAIN LAKE: DIN VS DON BIOAVAILABILITY
- BGC-56 Pennebaker, K. M.; Mondragon, E.; Rabouille, S.; van den Engh, G.; Zehr, J. P.: CIRCADIAN EXPRESSION OF NIFH IN *CROCOSPHAERA WATSONII* WH 8501 AND PROPOSED RELATIONSHIP WITH CHROMOSOME COMPACTION
- BGC-57 Boneillo, G. E.; Lomas, M. W.; Bernhardt, P. W.; Mulholland, M. R.: NITROGEN UPTAKE BY *AUREOCOCCUS ANOPHAGEFFERENS* VERSUS CO-OCCURRING BACTERIA DURING A BLOOM, A FLOW CYTOMETRY APPROACH
- BGC-58 Daggett, C. T.; Saros, J. E.; McKay, R. M.: IRON LIMITATION IN SALINE LAKES OF THE NORTHERN GREAT PLAINS
- BGC-59 Czubakowski, J. L.; Saros, J. E.: DO PARTICULATE NUTRIENT RATIOS REFLECT NUTRIENT LIMITATION PATTERNS IN PRAIRIE SALINE LAKES?
- BGC-60 Benner, I.: ORGANIC NUTRIENT ASSIMILATION AND THEIR EFFECTS ON CALCIFICATION IN THE COCCOLITHOPHORE *COCCOLITHUS PELAGICUS* (HAPTOPHYCEAE)
- BGC-61 Pael, R. W.; Foster, R. A.; Jenkins, B. D.; Zehr, J. P.: THE DIVERSITY AND DISTRIBUTION OF THE CYANOBACTERIAL NARB GENE FROM SELECT MARINE ENVIRONMENTS.
- BGC-62 Morse, R. E.; Egerton, T. A.; Marshall, H. G.; Mulholland, M. R.: TIMESCALES OF VARIABILITY IN PHYTOPLANKTON COMMUNITY STRUCTURE AND NUTRIENT UPTAKE DYNAMICS
- BGC-63 Salm, C. R.; Saros, J. E.: SEASONAL PATTERNS OF NUTRIENT LIMITATION IN PRAIRIE SALINE LAKES: A TEST OF CLASSIFICATION AND REGRESSION MODELS
- BGC-64 Haddock, T. L.; Zehr, J. P.; Jenkins, B. D.: SHIFTS IN CYANOBACTERIAL COMMUNITY COMPOSITION REVEALED BY COMPARISON OF ASSIMILATORY NITRATE REDUCTASE SEQUENCES
- BGC-65 Pritchard, L. B.; Wells, M. L.; Hughes, M. P.; Jenkins, B. D.: MOLECULAR UNDERPINNINGS FOR THE ACCLIMATION OF LARGE AND SMALL DIATOMS IN IRON LIMITING CONDITIONS

## SS35: OXYGEN UPTAKE DYNAMICS AT THE SEDIMENT-WATER INTERFACE

Chair(s): Bernhard Wehrli, wehrli@eawag.ch  
John Little, jcl@vt.edu

PHYS-23 Briggs, R. A.; Ruttenberg, K. C.; Glazer, B. T.: DIURNAL SHIFTS IN SURFICIAL OXYGEN IN SANDY VS MUDDY SEDIMENTS: IMPACTS ON BENTHIC NUTRIENT FLUXES

## SS37: THE INFLUENCE OF GLOBAL CLIMATE CHANGE ON BIOLOGICAL PROCESSES IN SURFACE WATERS

Chair(s): Steven W. Wilhelm, wilhelm@utk.edu  
David A. Hutchins, dahutch@udel.edu  
Giacomo R. DiTullio, ditullioj@cofc.edu

CHG-34 Lee, P. A.; DiTullio, G. R.; Neeley, A. R.; Riseman, S. F.; Feng, Y.; Hare, C. E.; Leblanc, K.; Hutchins, D. A.: THE POTENTIAL IMPACT OF INCREASED TEMPERATURE, CARBON DIOXIDE, AND IRON ON ALGAL COMMUNITY STRUCTURE AND PARTICULATE DIMETHYLSULFONIOPROPIONATE.

CHG-35 Dupuis, A.; Hann, B. J.: DRIVING A SHIFT FROM CLEAR TO TURBID WATER STATES: BIOLOGICAL IMPLICATIONS OF CLIMATE CHANGE IN SHALLOW EUTROPHIC LAKES IN THE CANADIAN PRAIRIES.

CHG-36 Brown, C. W.; O'Malley, R.; Corliss, B. H.: VARIABILITY IN THE INTERMITTENCY OF OCEANIC PRIMARY PRODUCTION

CHG-37 Hunt, G. L.; Hyrenbach, K. D.: THE BERING SEA ECOSYSTEM STUDY (BEST): A NEW PROGRAM FOR THE EASTERN BERING SEA

CHG-38 Wong, C. S.: CO<sub>2</sub> CHANGES DURING AN IRON FERTILIZATION EXPERIMENT AND COMPARISON TO GLACIAL-INTERGLACIAL CO<sub>2</sub> DOWNDOWN

CHG-39 Tucker, A. J.; Williamson, C. E.; Rose, K. C.; Winder, M.; Oris, J. T.: SEASONAL AND SPATIAL VARIATION OF ULTRAVIOLET RADIATION IN LAKE TAHOE, USA: IMPLICATIONS FOR ZOOPLANKTON AND FISH COMMUNITIES

## SS39: RIVER PLUME DYNAMICS AND BIOGEOCHEMISTRY

Chair(s): John Reinfelder, reinfelder@envsci.rutgers.edu  
Tom Frazer, frazer@ufl.edu

BGC-66 Mueller-Spitz, S. R.; Klump, J. V.; McLellan, S. L.: DISTRIBUTION OF PARTICLE ATTACHED FECAL INDICATOR BACTERIA IN LAKE MICHIGAN FOLLOWING STORM EVENTS

BGC-67. Palacios, S. L.; Peterson, T. D.; Kudela, R. M.: TRACKING THE AGE OF THE COLUMBIA RIVER PLUME USING EVOLVING OPTICAL PROPERTIES

## SS41: RESEARCH EXPERIENCES OF UNDERGRADUATES

Chair(s): Russell L. Cuhel, rcuhel@uwm.edu  
Carmen Aguilar, aguilar@uwm.edu

EDUC-10 Badger, C.; Sobrino, C.; Tzortziou, M.; Neale, P.: EXPORT OF DISSOLVED INORGANIC AND ORGANIC CARBON FROM A TIDAL MARSH

EDUC-11 Stoner, E. W.; Schupack, B. B.: INVESTIGATION OF DIVERSITY AND ABUNDANCE OF MANGROVE VEGETATION AND ORGANISMS AS BIOINDICATORS OF NUTRIENT CONTAMINATION, SOUTH CAICOS, BRITISH WEST INDIES

EDUC-12 Ocampo, L. M.; Ghobrial, S.; Arnosti, C.: INVESTIGATING STRUCTURE-ACTIVITY RELATIONSHIPS OF PHYTOPLANKTON-DERIVED POLYSACCHARIDES IN SEAWATER AND SEDIMENTS

EDUC-13 Griffith, J. J.; Coyne, K. J.: FATTY ACID BIOSYNTHESIS IN ALGAL CHLOROPLASTS

EDUC-14 Swearman, J. W.; Kelly, R. P.; Moran, S. B.: VARIABILITY IN COASTAL GROUNDWATER RADIUM ACTIVITY: IMPLICATIONS FOR RADIUM-DERIVED RESIDENCE TIME AND GROUNDWATER FLUX

EDUC-15 Bauska, T. K.; Sommerfield, C.; Billups, K.; Martin, P.: SUB-MILLENNIAL SCALE HYDROGRAPHIC VARIATION ON THE NEW JERSEY MARGIN

EDUC-16 Morris, M. S.; Vinzant, M.; Morgan, D.; Eckert, G. L.: GROWTH AND DISTRIBUTION OF JUVENILE DUNGENESS CRAB, CANCER MAGISTER, NEAR JUNEAU, ALASKA

EDUC-17 Pierce, K.; Gustafson, A. B.; Fox, R.; Fisher, T. R.: METHANOGENESIS AND DENITRIFICATION IN GROUNDWATERS OF AGRICULTURAL AREAS ON THE DELMARVA PENINSULA

EDUC-18 Kormanyos, R. E.; Black, B. A.: FINE-SCALE RECONSTRUCTIONS OF OCEAN VARIABILITY USING GROWTH INCREMENTS OF LONG-LIVED GEODUCK CLAMS IN THE NORTHEAST PACIFIC.

EDUC-19 Bohdan, E.; Ramsey, P. A.: POLYGORDIUS SP., AN AMBITIOUS MARINE WORM

EDUC-20 Yamato, M.; Ketten, D. R.; Arruda, J.; Cramer, S.: ANATOMICAL STUDIES OF MYSTICETE HEARING: A KEY TO UNDERSTANDING HOW AND WHAT WHALES HEAR

EDUC-21 Maticch, P.; Douglass, J.; Duffy, J. E.: MIGRATION RATES OF INVERTEBRATE GRAZERS IN EELGRASS (*ZOSTERA MARINA*): VARIATION WITH SPECIES, TIME, AND DISTANCE AMONG PATCHES

EDUC-22 Nosal, A. P.; Yu, P. C.; Manahan, D. T.: STARVATION RESISTANCE AND AMINO ACID TRANSPORTER GENES IN MEROPLANKTONIC LARVAE

EDUC-23 Kniffin, M. L.; Neill, C.; McHorney, R.: NUTRIENT LIMITATION OF PERIPHYTON AND PHYTOPLANKTON GROWTH IN FRESHWATER COASTAL PLAIN PONDS ON CAPE COD

- EDUC-24 Knowlton, P.; Coffman, J.: EFFECTS OF RUNX TRANSCRIPTION FACTOR KNOCKDOWN ON BLASTULA STAGE CELL PROLIFERATION IN THE *STRONGYLOCENTROTUS PURPURATUS* EMBRYO
- EDUC-25 Rossell, L. A.: TEMPERATURE AND SHADING EFFECTS ON SURF SMELT, HYPOMESUS PRETIOSUS, EGG SURVIVAL
- EDUC-26 Fan, X.; Cornillon, P.; Eichmann, A.; Sherenet, V.: THE EFFECT OF DENSITY STRATIFICATION AND A CAPE IN A BAROCLINIC WESTERN BOUNDARY CURRENT SEPARATION EXPERIMENT
- EDUC-27 Knesting, K.; Waples, J. T.: HOW OLD IS YOUR DRINKING WATER? ASK THE ATOM BOMB!
- EDUC-28 Friberg, S. E.; Matthew, M. E.; Williams, S. L.: FUNCTIONAL CONSEQUENCES OF REALISTIC SPECIES LOSSES IN A MARINE ECOSYSTEM
- EDUC-29 Harrold, S. A.; Cobb, K. M.: FLUORESCENCE WAVELENGTH VARIATIONS IN SPELEOTHEMS BETWEEN THE LGM AND THE MID-HOLOCENE AND IN DRIPWATERS FROM THE WEST PACIFIC WARM POOL
- EDUC-30 Blachly, C. R.; Peterson, B. J.: A BENEVOLENT INVADER? SALTMARSH TRAIT-MEDIATED INTERACTION BETWEEN THE ASIAN SHORE CRAB, *HEMIGRAPSUS SANGUINEUS* AND THE GREEN CRAB, *CARCINUS MAENAS*.
- EDUC-31 Jones, P. L.; Shulman, M. J.: THE PRESENCE AND EFFECTS OF *HOMARUS AMERICANUS* IN THE INTERTIDAL ZONE OF THE GULF OF MAINE, USA
- EDUC-32 Thurston, K. J.; Sherwood, C. R.; Butman, B.: SEDIMENT-TRANSPORT DYNAMICS IN THE HUDSON SHELF VALLEY
- EDUC-33 Clayton, S.; Bracco, A.: THE ROLE OF HORIZONTAL ADVECTION AND DIFFUSION IN DETERMINING THE PATCHINESS OF PASSIVE AND REACTIVE TRACERS AT THE SEA SURFACE.
- EDUC-34 Allen, L.; Pennington, P. L.; Wirth, E.: THE EFFECTS OF PBDE-47 (A BROMINATED FLAME RETARDANT) ON THE BENTHIC AMPHIPOD, *LEPTOCHEIRUS PLUMULOSUS* AND THE GRASS SHRIMP, *PALAEMONETES PUGIO*
- EDUC-35 Johnson, T. L.; Crump, B. C.; Apple, J. K.: THE INFLUENCE OF SPATIAL VARIATION AND DISPERSAL ON THE COMPOSITION OF MICROBIAL COMMUNITIES
- EDUC-36 Martinez-Rivera, E.: ASSESSING HABITAT QUALITY IN CHESAPEAKE BAY: APPLICATION OF RNA:DNA INDICES TO BLUE CRAB (*CALLINECTES SAPIDUS*, RATHBUN, 1896).
- EDUC-37 Mitchelmore, C. L.; Santos-Corujo, S.: A COMPARISON OF MICROBIAL PATHOGEN BIOACCUMULATION IN *CRASSOSTREA VIRGINICA* AND *CRASSOSTREA ARIAKENSIS*
- EDUC-38 Kuenzel, N. A.; deJesus, S.; Harris, M. S.; Bailey, C. M.; Marchetti, D.: BOTTOM MORPHOLOGY OF FISH LAKE: A HIGH-ALTITUDE, LAKE-FILLED GRABEN IN SOUTHERN UTAH
- EDUC-39 McCormick, J. M.; Devlin, S. P.; Vadeboncouer, Y.: EFFECTS OF GROUNDWATER FLOW AND SUBSTRATE ON PERiphyton PRODUCTIVITY AND BIOMASS IN AN OLIGOTROPHIC SEEPAGE LAKE
- EDUC-40 Dunning, K. A.; Kuang, Y.; Elser, J. J.: EFFECTS OF LIGHT INTENSITY ON DAPHNIA DYNAMICS AND COEXISTENCE: A STOICHIOMETRIC PERSPECTIVE
- EDUC-41 Leon, R. I.; Kerkhof, L. J.; McGuinness, L. M.: ASSESSING THE DOMINANT DENITRIFYING BACTERIA IN THE MID-ATLANTIC BIGHT SEDIMENTS
- EDUC-42 Stephen Levas, S. J.; Dr. James Morin, J. G.: DYNAMICS OF SUPRALITTORAL FRESHWATER ROCK POOLS IN THE GULF OF MAINE
- EDUC-43 Kading, T. J.; Mason, R. P.: HISTORY OF MERCURY INPUTS TO THE CHESAPEAKE BAY RECONSTRUCTED BY PB-210 DATED CORES
- EDUC-44 Engstrom, M. E.; Watts, J. M.; Elser, J. J.: AMPHIPODS ON A STOICHIOMETRIC KNIFE EDGE? EFFECTS OF LOW FOOD C:P RATIO ON GROWTH & SURVIVAL IN A HYALELLA AZTECA
- EDUC-45 Tully, B. J.; Bidle, K. D.: ASSESSING THE BIOCHEMICAL DIVERSITY OF MARINE ECTOPROTEASES
- EDUC-46 Guajardo, M. B.; Gelsleichter, J.: THIAMINE CONCENTRATIONS IN EGG YOLKS OF BONNETHEAD SHARKS AND THEIR ASSOCIATION WITH INFERTILITY
- EDUC-47 Martin, R. A.; Harms, T. K.; Grimm, N. B.: EFFECTS OF LAND USE ON NITROGEN STORAGE AND REMOVAL IN A LARGE SEMI-ARID RIVER
- SS42: GELATA ON THE EDGE: INNOVATIVE APPROACHES TO UNDERSTANDING THE DIVERSITY AND ECOLOGY OF GELATINOUS ORGANISMS**
- Chair(s): Rebecca D. Scheinberg Hoover, rebecca@mbari.org  
Steven H.D. Haddock, haddock@mbari.org
- ECOL-40 Bayha, K. M.; Miller, M. E.; Graham, W. M.: DEVELOPMENT OF A TAQMAN® REAL-TIME PCR ASSAY FOR THE DETECTION OF BENTHIC SCYPHOZOAN JELLYFISH POLyps
- SS45: THE PARADOX OF DIDYMOSPHENIA GEMINATA**
- Chair(s): Craig Cary, caryc@waikoto.ac.nz  
Max Bothwell, bothwellm@pac.dfo-mpo.gc.ca  
Sarah Spaulding, spaulding.sarah@epa.gov
- LOWER-19 Greene, A.; Vietti, K.; McKnight, D.; Miller, M.: EFFECT OF SUMMER STORMS ON DIDYMOSPHENIA GROWTH ABD STREAMBED COVERAGE IN SUB-ALPINE STREAMS IN COLORADO
- LOWER-20 Gamble, C. A.; McNyset, K. M.; Julius, M. L.: GEOGRAPHIC DISTRIBUTION OF DIDYMOSPHENIA GEMINATA (LYGBYE) M. SCHMIDT IN NORTH AMERICA BASED ON ECOLOGICAL NICHE MODELS
- LOWER-21 Vietti, K.; Greene, A.; McKnight, D.; Miller, M.: APPROACHES FOR MEASURING GROWTH OF DIDYMOSPHENIA IN SUB-ALPINE STREAMS

# THURSDAY, FEBRUARY 8, 2007

## CS03: BEHAVIORAL AND PHYSIOLOGICAL ECOLOGY

Chair(s):	Don K. Button, dkbutton@ims.uaf.edu
Location:	Hilton Mesa C
9:45 am	<u>Button, D. K.</u> ; Gustafson, E. S.: OLIGOBACTERIAL THERMOKINETICS
10:00 am	<u>Edna Graneli, E.</u> ; Carvalho, W. F.: CONTRIBUTION OF NITROGEN AND PHOSPHORUS FROM PHAGOTROPHY VERSUS AUTOTROPHY TO PRYMNESIUM PARVUM GROWTH UNDER N AND P SUFFICIENCY AND DEFICIENCY
10:15 am	<u>Bell, E. M.</u> ; Davidson, A. T.; Laybourn-Parry, J.: NUTRITIONAL VERSATILITY IN ANTARCTIC PHYTOFLAGELLATES
10:30 am	<u>Latz, M. I.</u> ; Chen, A. K.; Sobolewski, P.; Frangos, J. A.: EVIDENCE FOR THE ROLE OF G-PROTEINS IN FLOW STIMULATION OF DINOFLAGELLATE BIOLUMINESCENCE
10:45 am	<u>Luoma, S. N.</u> ; Rainbow, P. S.; Buchwalter, D.; Cain, D. J.: WHAT DETERMINES SPECIES-SPECIFIC VULNERABILITY TO METAL CONTAMINATION?
11:00 am	<u>Tran, J.</u> : MULTIDRUG RESISTANCE IN THE LIMPET LOTTIA PELTA, BODEGA BAY, USA
11:15 am	<u>Portune, K. J.</u> ; Cary, S. C.; Warner, M. E.: REACTIVE OXYGEN SPECIES PRODUCTION AND ENZYME RESPONSE IN MARINE RAPHIDOPHYTES
11:30 am	<u>Speaks, C. M.</u> ; Brill , R.; Bushnel, P. G.: THE EFFECT OF MAGNETS ON THE FEEDING BEHAVIOR OF JUVENILE SANDBAR SHARKS (C. PLUMBEUS)
11:45 am	<u>Kremer, P.</u> ; Madin, L. P.: SEASONAL AND SPATIAL PATTERNS FOR NUTRITION AND METABOLISM OF SALPS IN THE SOUTHERN OCEAN

## CS09: EDUCATION AND OUTREACH (NATIONAL AND INTERNATIONAL)

Chair(s):	Paula Keener-Chavis, paula.keener-chavis@noaa.gov
Location:	Hilton Mesa B
4:30 pm	<u>Gilligan, M. R.</u> ; Byus, F.; Robinson, L.; Vergun, J. R.: WILL OCEAN, COASTAL, AND GREAT LAKES LITERACY EFFORTS HELP BUILD A DIVERSE AND INNOVATIVE OCEAN WORKFORCE?
4:45 pm	<u>Muscio, C.</u> ; Flimlin, G.: MAKING THE WATER QUALITY CONNECTION: SHELLFISH RESTORATION AS COMMUNITY STEWARDSHIP EDUCATION
5:00 pm	<u>Detres, Y.</u> ; Armstrong, R.: TRAINING MINORITY STUDENTS IN REMOTE SENSING, ATMOSPHERIC, AND OCEANOGRAPHIC SCIENCES AT THE UNIVERSITY OF PUERTO RICO
5:15 pm	<u>Martinez, C.</u> ; Keener-Chavis, P.: STRIVING FOR EQUITY IN ACCESS TO IMPROVE OCEAN LITERACY THROUGH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S OFFICE OF OCEAN EXPLORATION (OE)

5:30 pm	<u>Keener-Chavis, P.</u> ; Martinez, C.: NOAA'S SHIP OKEANOS EXPLORER: TELEPRESENCE IN THE SERVICE OF SCIENCE, EDUCATION AND OUTREACH
5:45 pm	<u>Cuker, B. E.</u> ; Moser, F. C.: BUILDING SYNERGY BETWEEN A MINORITY SERVING PROGRAM AND A MAJORITY INSTITUTION: MAST AND MARYLAND SEA GRANT'S REU ACTIVE LEARNING MODEL

## CS11: EVOLUTION AND POPULATION BIOLOGY

Chair(s):	Paola G. Batta Lona, paola.batta_lona@uconn.edu
Location:	Hilton Mesa B
9:45 am	<u>Thornhill, D. J.</u> ; Struck, T. H.; Mendoza, G. F.; Ebbe, B.; Levin, L.; Halanych, K. M.: EVOLUTIONARY HISTORY OF DORVILLEID ANNELIDS ASSOCIATED WITH METHANE SEEP ENVIRONMENTS
10:00 am	<u>Subia, M. D.</u> ; Barber, P. H.: PHYLOGEOGRAPHIC STRUCTURE OF THE GIANT BORING CLAM (TRIDACNA CROcea) ACROSS THE INDONESIAN ARCHIPELAGO
10:15 am	<u>Halanych, K. M.</u> ; Wilson, N. G.; Hunter, R. L.; Cox, L. N.: RECENT EVOLUTIONARY HISTORY OF SHELF FAUNA AROUND ANTARCTICA: IS THERE GENE FLOW ACROSS THE DRAKE PASSAGE?
10:30 am	<u>Rozenfeld, A. F.</u> ; <u>Arnaud-Haond, S.</u> ; Hernandez-Garcia, E.; Eguiluz, V. M.; Serrao, E. M.; Duarte, C. M.: POPULATION GENETICS NETWORK: GENELOW, SOURCE AND SINKS IN THE METAPOPULATION SYSTEM OF THE SEAGRASS POSIDONIA OCEANICA
11:00 am	<u>Cheung, M. K.</u> ; Wong, C. K.; Chu, K. H.: SPATIAL AND SEASONAL VARIABILITIES OF PICOEUKARYOTE COMMUNITIES IN A SUBTROPICAL EUTROPHIC COASTAL ECOSYSTEM BASED ON ANALYSIS OF 18S rRNA SEQUENCES
11:15 am	<u>Allen, M. R.</u> : GENETIC AND ENVIRONMENTAL VARIATION CONTROL HATCHING EXPRESSION IN DAPHNIA
11:30 am	<u>Kramer, A. M.</u> ; Sarnelle, O.: ALLEE EFFECT ON POPULATION GROWTH RATE IN SEXUALLY REPRODUCING ZOOPLANKTON

## CS18/14: OCEANS, LAKES, AND STREAMS IN A CHANGING ENVIRONMENT

Chair(s):	
Location:	Hilton Mesa A
9:45 am	<u>Gawel, J. E.</u> ; Asplund, J. A.; Chynoweth, J. W.; Sage, M. D.; Burdick, S. M.; Tollefson, A. S.: THE LONG-TERM IMPACT OF METAL SMELTING OPERATIONS ON ARSENIC AVAILABILITY IN LAKES OF THE SOUTH-CENTRAL PUGET SOUND REGION, WASHINGTON, USA
10:00 am	<u>Reed, T.</u> ; Webster, K. E.: CHIRONomid COMMUNITY CHANGE IN AN EXPERIMENTALLY ACIDIFIED LAKE 1985-1996: ACIDIFICATION THROUGH RECOVERY

THURSDAY

(\*) represents Invited presentations

10:15 am	<u>Bixby, R. J.</u> ; Pringle, C. M.; Wydrzycka, U. M.: SPATIAL PATTERNS OF DIATOM RESPONSE TO SOLUTE CONCENTRATIONS AND VARIABILITY IN NEOTROPICAL LOWLAND STREAMS
10:30 am	<u>Ramstack, J. M.</u> ; Edlund, M. B.; Triplett, L. D.; Engstrom, D. R.: PALEOLIMNOLOGY OF A LARGE RIVER SYSTEM USING SEDIMENT DIATOMS AND MULTIPLE DATING TECHNIQUES
11:00 am	<u>Keatley, B. E.</u> ; Douglas, M.; Mallory, M.; Blais, J. M.; Smol, J. P.: TRACKING SEABIRDS THROUGH TIME: A MULTIPROXY PALEOLIMNOLOGICAL STUDY IN THE CANADIAN HIGH ARCTIC
11:15 am	<u>Johnson, L. B.</u> ; Guntenspergen, G.; Olker, J. H.; Johnson, C.; Schoff, P.: PREDICTING EFFECTS OF CLIMATE CHANGE ON AMPHIBIAN COMMUNITIES FROM PRAIRIE POTHOLE WETLANDS
11:30 am	<u>Williamson, C. E.</u> : THE OPTICAL NICHE: UV TRANSPARENCY AS A SENSITIVE INDICATOR OF ENVIRONMENTAL CHANGE AND BIOTIC RESPONSE IN LAKES
11:45 am	<u>Saros, J. E.</u> ; Williamson, C. E.: MULTIPLE EFFECTS OF ENHANCED ATMOSPHERIC NITROGEN DEPOSITION ON ALPINE LAKES: EVIDENCE FROM PALEOLIMNOLOGICAL RECORDS AND COMPARATIVE LAKE SAMPLING
1:30 pm	<u>Austin, J. A.</u> ; Colman, S.: INCREASES IN SUMMERTIME SURFACE WATER TEMPERATURES IN LAKE SUPERIOR OVER THE LAST CENTURY
1:45 pm	<u>MacKay, M. D.</u> : MODELING THE REGIONAL CLIMATE IMPACT OF BOREAL LAKES
2:00 pm	<u>Powell, T. M.</u> ; Large, W. G.; Yeager, S.; Curchitser, E. N.; Haidvogel, D. B.: CORRELATES OF MODELED REGIME-SHIFTS IN THE NORTH PACIFIC
2:15 pm	<u>Ruhl, H. A.</u> ; Smith, K. L.: CONTEMPORARY CLIMATIC CONNECTIONS TO ABYSSAL ECOLOGY IN THE NE PACIFIC

## SS04: DISSOLVED ORGANIC MATTER QUALITY: LINKING ENVIRONMENTAL DYNAMICS TO MOLECULAR STRUCTURE

Chair(s):	William J. Cooper Rudolf Jaffe, jaffer@fiu.edu Thursten Dittmar, dittmar@ocean.fsu.edu Leigh McCallister, leigh@vims.edu
Location:	Eldorado Sunset
9:45 am	<u>Tranvik, L. J.</u> : LIMITS TO THE MICROBIAL UTILIZATION OF DISSOLVED ORGANIC MATTER ~
10:15 am	<u>Guilmette, F.</u> ; del Giorgio, P. A.: PATTERNS IN SHORT- AND LONG-TERM BACTERIAL CONSUMPTION OF DISSOLVED ORGANIC CARBON IN FRESHWATER ECOSYSTEMS: A DYNAMIC STUDY ALONG A WATERSHED FLOW PATH.
10:30 am	<u>McCallister, S. L.</u> ; del Giorgio, P. A.: THE SOURCE AND AGE OF CARBON RESPIRED IN FRESHWATERS

11:00 am	<u>Henderson, G. K.</u> ; Steinberg, D. K.: THE IMPACTS OF CARNIVOROUS FEEDING BY ACARTIA TONSA COPEPODS ON PRODUCTION OF DISSOLVED ORGANIC MATTER (DOM)
11:15 am	<u>Pasulka, A. L.</u> ; Hartnett, H.; Neuer, S.: ROLE OF PHAGOTROPHIC PROTISTS IN SHAPING THE SPECTRUM OF MARINE DOC
11:30 am	<u>First, M. R.</u> ; Hollibaugh, J. T.: DIRECT UPTAKE OF HIGH MOLECULAR WEIGHT DISSOLVED ORGANIC CARBON BY BENTHIC CILIATES
11:45 am	<u>Williams, C. J.</u> ; Jochem, F. J.: RELATIVE CONTRIBUTION OF MICROBIAL COMMUNITIES TO ORGANIC MATTER CYCLING IN A SUBTROPICAL SEAGRASS ESTUARY
1:30 pm	<u>Veuger, B.</u> ; Eyre, B. D.; Maher, D.; Middelburg, J. J.: STRONG NITROGEN RETENTION THROUGH MICROBIAL RECYCLING IN A SUBTROPICAL ESTUARINE SEDIMENT: A 15N LABELING STUDY
1:45 pm	<u>Koblizek, M.</u> ; Masin, M.; Prasil, O.: GLOBAL DISTRIBUTION AND DYNAMICS OF AEROBIC ANOXYGENIC PHOTOTROPHS IN THE MARINE ENVIRONMENT
2:00 pm	<u>Ortiz-Zayas, J. R.</u> ; Scatena, F. N.; Saunders, J. F.; Lewis, W. M.: ORGANIC CARBON CYCLING IN A TROPICAL RAIN FOREST RIVER
2:15 pm	<u>Roehm, C. L.</u> ; del Giorgio, P. A.; Prairie, Y. T.: DOC LABILITY IN BOREAL AQUATIC ECOSYSTEMS AND LINKS TO WHOLE SYSTEM METABOLISM AND NET GAS EXCHANGE
2:30 pm	<u>Wozniak, A. S.</u> ; Bauer, J. E.; Dickhut, R. M.; Keesee, E. E.: DEPOSITION AND REACTIVITY OF AEROSOL-DERIVED ORGANIC CARBON IN TEMPERATE WATERSHEDS

## SS10: DESERT RIPARIAN ECOSYSTEMS: MULTIDISCIPLINARY INVESTIGATIONS OF ENVIRONMENTAL CHANGE

Chair(s):	Thomas Meixner, tmeixner@hwr.arizona.edu Julie Stromberg, jstrom@asu.edu Steve Stewart, sstewart@hwr.arizona.edu Paul Brooks, brooks@hwr.arizona.edu
Location:	Eldorado Sunset
3:00 pm	<u>Heffernan, J. B.</u> ; Fisher, S. G.: WETLAND AS AN ALTERNATE STATE IN DESERT STREAMS
3:15 pm	<u>McDonnell, D. E.</u> ; Dahm, C. N.; Coonrod, J. E.; Cleverly, J. R.: SCALING SEASONAL EVAPOTRANSPIRATION TO MIDDLE RIO GRANDE RIPARIAN CANOPIES IN CENTRAL NEW MEXICO
3:30 pm	<u>Garner, C. B.</u> ; McGwire, K. C.: MODELING THE EFFECT OF RIPARIAN SHADING ON WATER TEMPERATURE FOR PORTIONS OF THE CARSON RIVER, WESTERN NEVADA, USA
3:45 pm	<u>Shirey, P. D.</u> ; Cowley, D. E.: RIVER PALEOLIMNOLOGY USING DIATOMS FROM THE GUT CONTENTS OF RIO GRANDE SILVERY MINNOWS COLLECTED IN NORTHERN NEW MEXICO IN 1874 AND 1978

(\*) represents Tutorial presentations

4:00 pm	Morino, K. A.; Scott, R. L.: CAN TREE RINGS BE USED TO CHARACTERIZE CHANGES IN SEASONAL STREAMFLOW INTERMITTENCY IN DRYLAND RIPARIAN ECOSYSTEMS?
4:15 pm	<u>Stromberg, J. C.</u> : STREAM FLOW REGIMES AND ABUNDANCE PATTERNS OF <i>POPULUS</i> , <i>SALIX</i> , AND <i>TAMARIX</i> TREES
<b>SS11: FORM AND FUNCTION OF ZOOPLANKTON</b>	
Chair(s):	J. Rudi Strickler, jrs@uwm.edu Petra Lenz, petra@pbrc.hawaii.edu Gus Paffenhofer, cmp@skio.peachnet.edu
Location:	Hilton Mesa C
1:30 pm	<u>Malkiel, E.</u> ; Pfitsch, D. W.; Sheng, J.; Katz, J.: OBSERVING THE 3-DIMENSIONAL ZOOPLANKTON WORLD WITH HOLOGRAPHY~
2:00 pm	<u>Sheng, J.</u> ; Malkiel, E.; Katz, J.; Adolf, J.; Belas, R.; Place, A. R.: HIGH RESOLUTION 4D LAGRANGIAN MEASUREMENT OF MICRO-ORGANISMS IN DENSE SUSPENSIONS
2:15 pm	<u>Jiang, H.</u> ; Strickler, J. R.; Paffenhöfer, G. A.: REVISIT TO MECHANICAL ENERGY CONSUMPTION OF THE HOP-AND-SINK BEHAVIOR OF CALANOID COPEPODS
2:30 pm	<u>Catton, K. B.</u> ; Webster, D. R.; Yen, J.; Brown, J.: QUANTIFICATION OF THE HYDRODYNAMIC WAKE OF SWIMMING EUPHAUSIA PACIFICA AND EUPHAUSIA SUPERBA
3:00 pm	<u>Strickler, J. R.</u> ; Jiang, H. S.: UNSTEADY FLOW GENERATION BY CALANOID COPEPODS
3:15 pm	<u>Buskey, E. J.</u> ; Strickler, J. R.; Lenz, P. H.; Hartline, D. K.: HIGH SPEED VIDEO ANALYSIS OF ESCAPE BEHAVIOR OF EARLY DEVELOPMENTAL STAGES OF THE CALANOID COPEPODS <i>ACARTIA TONSA</i> AND <i>BESTIOLINA SIMILIS</i>
3:30 pm	<u>Fields, D. M.</u> ; Jiang, H.: SENSORY MORPHOLOGY AND FLUID STRUCTURE: DETERMINING THE FORM FUNCTION RELATIONSHIP IN MECHANOSENSORY HAIRS.
3:45 pm	<u>Costello, J. H.</u> ; Colin, S. P.; Dabiri, J. O.: CONSTRAINTS AND CONSEQUENCES IN MEDUSAN EVOLUTION
4:00 pm	<u>Colin, S. P.</u> ; Costello, J. H.: DEVELOPMENTAL CHANGING IN THE FORM AND FUNCTION OF ROWING HYDROMEDUSAE
4:30 pm	<u>Lenz, P. H.</u> ; Kong, J. H.; Wilson, C.; Hartline, D. K.; Buskey, E. J.; Strickler, J. R.: DEVELOPMENTAL CHANGES IN COPEPOD FORM ASSOCIATED WITH INCREASED SWIMMING PERFORMANCE
4:45 pm	<u>Ziarek, J. J.</u> ; Nihongi, A.; Nagai, T.; Uttieri, M.; Strickler, J. R.: SWIMMING BEHAVIOR COMPARISON OF <i>DAPHNIA PULICARIA</i> IN SEASONAL AMBIENT WATER TEMPERATURES
5:00 pm	<u>Choi, K.</u> ; Kimmerer, W.: MATING SUCCESS AND ITS CONSEQUENCE FOR POPULATION GROWTH OF ESTUARINE COPEPODS, WITH IMPLICATIONS FOR MARINE BIOINVASIONS

5:15 pm	Nihongi, A.; Ziarek, J. J.; Nagai, T.; Uttieri, M.; Strickler, J. R.: RISK ASSESSMENT IN <i>DAPHNIA PULICARIA</i> : VIBRIO CHOLERAE VERSUS FISH PREDATION
5:30 pm	<u>Cuhel, R. L.</u> ; Aguilar, C.; Poulsom, K.: TRILLIONS OF VELIGERS! HOW COMPETITIVE EDGE IN ADULTS CAN LEAD TO MASSIVE WATER COLUMN PLANKTIVORY.
5:45 pm	<u>Paffenhofer, G. A.</u> : MORPHOLOGY, BEHAVIOR AND IN SITU OCCURRENCE OF MARINE PLANKTONIC COPEPODS

## SS17: A NEW LOOK AT DARWIN'S LAST IDEA: BIOTURBATION AND BIO-IRRIGATION IN AQUATIC SEDIMENTS

Chair(s):	Filip Meysman, f.meysman@nioo.knaw.nl Yoko Furukawa, yoko.furukawa@nrlssc.navy.mil
Location:	Eldorado Ana. North
9:45 am	<u>Levin, L. A.</u> : THE MYSTERY OF BIOTURBATION: WHAT, WHEN, WHERE, HOW, AND WHODUNIT?~
10:15 am	<u>Johnson, D. L.</u> ; Johnson, D. N.: THE PLANETARY SOIL AND ITS EPIDERMAL BIOMANTLE
10:30 am	<u>Thibodeaux, L. J.</u> ; Rodriguez, M. D.: DARWIN'S BIOTURBATION DATA ON WORMS IN SOIL AND PCB UPTAKE FROM THE ATMOSPHERE
11:00 am	<u>Wethey, D. S.</u> ; Woodin, S. A.; Volkenborn, N.; Reise, K.: HYDRAULIC ACTIVITIES OF THE LUGWORM ARENICOLA MARINA – EFFECTS ON BIOGEOCHEMISTRY IN SEDIMENTS
11:15 am	<u>Böer, S. I.</u> ; Ramette, A.; Volkenborn, N.; Fuhrman, J. A.; Boetius, A.: DOES BIOTURBATION INFLUENCE BACTERIAL COMMUNITY STRUCTURE IN INTERTIDAL SANDS? RESULTS FROM A LARGE SCALE LUGWORM EXCLUSION EXPERIMENT IN THE GERMAN WADDEN SEA
11:30 am	Timmermann, K.; <u>Banta, G. T.</u> ; Glud, R. N.: LINKING ARENICOLA MARINA IRRIGATION BEHAVIOR TO OXYGEN TRANSPORT AND DYNAMICS IN SANDY SEDIMENTS
11:45 am	<u>Na, T. H.</u> ; Gribsholt, B.; Meysman, F.; Lee, T. S.: THE IMPACT OF BIO-IRRIGATION ON SANDY SEDIMENT BIOGEOCHEMISTRY: INCUBATIONS WITH LUGWORMS AND MECHANICAL MIMICS
1:30 pm	<u>Waldbusser, G. G.</u> ; Marinelli, R. L.: MACROFAUNAL EFFECTS ON PERMEABLE SEDIMENT FUNCTION: THE INTERSECTION OF POREWATER ADVECTION, SPECIES BEHAVIOR, AND STOICHIOMETRY OF BENTHIC-PELAGIC EXCHANGE
1:45 pm	<u>Cable, J. E.</u> ; Martin, J. B.; Jaeger, J.; Smith, C. G.: SUBMARINE GROUNDWATER DISCHARGE OR BIOIRRIGATION?
2:00 pm	<u>Morford, J. L.</u> ; Martin, W. R.; Kalnejais, L. H.; François, R.; Bothner, M. H.; Karle, I. M.: IMPORTANCE OF IRRIGATION IN COASTAL SEDIMENTS FOR THE CYCLING OF REDOX-SENSITIVE TRACE METALS (U, MO AND RE)

THURSDAY

(\*) represents Invited presentations

2:15 pm	Galaktionov, O. S.; Meysman, F. J.; Middelburg, J. J.; Glud, R. N.: OXYGEN DISTRIBUTIONS AROUND BURROWS AND ROOTS, AND THEIR DISTORTION BY PLANAR OPTODE	10:30 am	Steinberg, D. K.; Van Mooy, B. A.; Buesseler, K. O.; Boyd, P. W.; Kobari, T.; Karl, D. M.: MICROBIAL VS. ZOOPLANKTON CONTROL OF SINKING PARTICLE FLUX IN THE OCEAN'S TWILIGHT ZONE
2:30 pm	Reed, D. C.; Boudreau, B. P.; Huang, K.: TRANSIENT TRACER DYNAMICS IN A LATTICE-AUTOMATON MODEL OF BIOTURBATION	11:00 am	Phillips, B. T.; Kremer, P.: THE CONTRIBUTION OF SALPS TO VERTICAL FLUX IN THE SOUTHERN OCEAN
3:00 pm	Dufour, S. C.; Desrosiers, G.; Sundby, B.; Mucci, A.; Archambault, P.: CT-SCAN INVESTIGATION OF BIOGENIC STRUCTURES IN SEDIMENTS OF THE HYPOXIC LOWER ST-LAWRENCE ESTUARY, QUEBEC, CANADA	11:15 am	Bochdansky, A. B.; Bollens, S. M.; Rollwagen-Bollens, G. C.; Gibson, A.: CONTRIBUTION OF MICRO- AND MESOZOOPLANKTON GRAZERS TO VERTICAL CARBON FLUXES FROM THIN LAYERS: AN EXPERIMENTAL STUDY USING RADIOLABELED PHYTOPLANKTON
3:15 pm	Widdicombe, S.; Lowe, D.; Rees, A. P.; Spicer, J. I.: BIOTURBATION IN AN INCREASINGLY ACIDIC OCEAN: CONSEQUENCES FOR SEDIMENT NUTRIENT FLUX	11:30 am	Hanley, T. C.; Post, D. M.: ELEMENTAL STOICHIOMETRY AND LIFE HISTORY OF DAPHNIA: EXAMINING FOOD QUALITY AND ALEWIFE PREDATION IN THE FIELD
3:30 pm	McCall, P. L.; Matisoff, G.; Wang, X.; Robbins, J. A.: PARTICLE BIOTURBATION BY THE MARINE BIVALVE YOLDIA LIMATULA (SAY)	11:45 am	Villareal, T. A.; Schoenbaechler, C. A.: SIZE-FRACTION VARIABILITY IN CHLOROPHYLL DISTRIBUTION IN THE NORTH PACIFIC GYRE
3:45 pm	Ray, G. C.; Hufford, G. L.: PACIFIC WALRUSES: BENTHIC BIOTURBATORS OF BERINGIA AND THE IMPLICATIONS OF CLIMATE CHANGE	1:30 pm	Scharek, R.; Latasa, M.; Vila, G.; Fernández de Puelles, M. L.: SEDIMENTATION OF ORGANIC MATTER AND PHYTOPLANKTON IN THE DEEP CONVECTION AREA OF THE GULF OF LYON (NW MEDITERRANEAN)
4:00 pm	McCormick-Ray, M. G.: BIOTURBATION AT MULTIPLE SPATIAL SCALES	1:45 pm	Rellinger, A. N.; Kiene, R. P.; Slezak, D.; del Valle, D. A.; Harada, H.; Bisgrove, J.; Kieber, D. J.; Brinkley, J.: OCCURRENCE AND PHYSIOLOGICAL STATE OF PHAEOCYSTIS ANTARCTICA IN SUB-EUPHOTIC WATERS OF THE ROSS SEA, ANTARCTICA
4:30 pm	Kanaya, G.; Nobata, E.; Toya, T.; Kikuchi, E.: BIOTURBATION BY INFANAL DEPOSIT- AND SUSPENSION-FEEDING BIVALVES: A FIELD EXPERIMENT IN A SHALLOW BRACKISH LAGOON	2:00 pm	Rabouille, S. A.; Edwards, C. A.; Zehr, J. P.: SEASONAL AND INTERANNUAL TRENDS IN THE VERTICAL DISTRIBUTION OF PROCHLOROCOCCUS AND SYNECHOCOCCUS IN THE NORTH TROPICAL PACIFIC OCEAN
4:45 pm	Hedman, J. E.; Bradshaw, C.; Thorsson, M.; Gunnarsson, J. S.; Gilek, M.: FATE OF CONTAMINANTS IN BALTIC SEA SEDIMENT ECOSYSTEMS: THE ROLE OF BIOTURBATION AND SETTLING ORGANIC MATTER	2:15 pm	Richardson, T. L.; Jackson, G. A.: SMALL PHYTOPLANKTON AND CARBON EXPORT FROM THE SURFACE OCEAN
5:00 pm	Lagauzère, S.; Stora, G.; Bonzom, J. M.: EFFECT OF URANIUM ON BIOTURBATION ACTIVITY OF TUBIFEX TUBIFEX WORMS (OLIGOCHAETA) AND CHIRONOMUS RIPARIUS LARVAE (DIPTERA) EXPOSED TO CONTAMINATED SEDIMENT	2:30 pm	Collins, L. E.; Berelson, W.: THE FLUX OF BACTERIA ON SEDIMENTING PARTICLES IN THE SOUTHERN CALIFORNIA BORDERLANDS: A MICROBIAL HITCHHIKERS GUIDE
5:15 pm	Furukawa, Y.; Kim, J.; O'Reilly, S. E.: MICROFABRIC OF ORGANIC MATTER-RICH FINE-GRAINED SEDIMENTS IN DYNAMIC REDOX ENVIRONMENT	3:00 pm	Ewart, C. S.; Carlson, C. A.; Wallner, E.; Meyers, M.: BACTERIOPLANKTON DYNAMICS IN A CYCLONIC AND A MODE-WATER EDDY IN THE SARGASSO SEA.
		3:15 pm	Pommier, J.; Michel, C.; Gosselin, M.: COUPLING BETWEEN PRIMARY AND EXPORT PRODUCTION IN THE MESOPELAGIC ZONE OF THE NORTHWEST ATLANTIC OCEAN DURING THE DECLINE OF THE SPRING PHYTOPLANKTON BLOOM
		3:30 pm	Westberry, T. K.; Behrenfeld, M. J.; Siegel, D. A.: FROM SATELLITE-BASED PRIMARY PRODUCTION TO EXPORT PRODUCTION
		3:45 pm	Guidi, L.; Stemmann, L.; Jackson, G.; Picheral, M.; Legendre, L.; Gorsky, G.: CHARACTERIZATION OF PARTICULATE MATTER ( $PM > 100 \mu m$ ) DISTRIBUTION IN THE OCEANS
		4:00 pm	Campbell, R. W.; Gust, G.; Antia, A. N.; St. John, M. A.: CONTROL OF SINKING VELOCITY PROFILES OF MARINE PARTICLES WITH DEPTH BY PHYSICOQUÍMICAL AND BIOCHEMICAL PARAMETERS

## SS23: CONUNDRUMS AND CONTROVERSIES: WHAT CONTRIBUTES TO THE VERTICAL FLUX OF CARBON, NITROGEN, AND PHOSPHORUS IN AQUATIC ECOSYSTEMS?

Chair(s):	Tammi Richardson, richardson@biol.sc.edu Claudia Benitez-Nelson, cbnelson@geol.sc.edu
Location:	Eldorado Ana. South
9:45 am	Wakeham, S. G.; Lee, C.; Armstrong, R. A.; Peterson, M. L.: NEW INSIGHTS INTO CARBON FLUXES IN THE OCEAN: RESULTS FROM MEDFLUX <sup>~</sup>
10:15 am	Burd, A. B.: PARTICLE FLUX MEASUREMENTS AND MODELS: WHAT ARE WE MEASURING?

(\*) represents Tutorial presentations

4:30 pm	<u>Abramson, L.</u> ; Lee, C.; Wakeham, S. G.; Cochran, J. K.; Aller, R. C.: ORGANIC COMPOSITION OF IN SITU PUMP VS. SEDIMENT TRAP SAMPLES: IMPLICATIONS FOR THE EXCHANGE OF MATERIAL BETWEEN SUSPENDED AND SINKING PARTICLES
4:45 pm	<u>Collier, R.</u> ; Dymond, J.; Moser, C.; Collier, P.; Buktenica, M.; Girdner, S.; Crawford, G.; Fennel, K.: CHALLENGES TO FLUX MODELS IN A SIMPLE CLOSED BASIN – A 23-YEAR SEDIMENT TRAP RECORD FROM CRATER LAKE, OREGON.
5:00 pm	<u>Urban, N. R.</u> : PATHWAYS OF CARBON AND NUTRIENT TRANSPORT IN LAKE SUPERIOR: CLOSER TO VERTIGO THAN VERTICAL
5:15 pm	<u>Berelson, W.</u> ; Hammond, D.; Collins, L.; Buchwald, C.; Schwartz, R.; Beaumont, W.; Capone, D.; Michaels, A.: RELATING THE TIMING OF PHYSICAL FORCING TO PARTICULATE CARBON FLUX IN SAN PEDRO BASIN, SOUTHERN CALIFORNIA BORDERLANDS
5:30 pm	<u>Waite, A. M.</u> ; Feng, M.; Picheral, M.; Gorsky, G.; Holliday, D.; Beckley, L.; Thompson, P. A.; Pesant, S.; Paterson, H.; Duarte, C. M.; Agusti, S.: PARTICLE TRAPPING BY A VORTEX OFF WESTERN AUSTRALIA
5:45 pm	<u>Najjar, R.</u> ; Jin, X.; Louanchi, F.; Aumont, O.; Caldeira, K.; Doney, S.; Dutay, J.; Follows, M.; Gruber, N.; Joos, F.; Lindsay, K.; Maier-Reimer, E.; Matear, R. J.; Matsumoto, K.; Monfray, P.; Mouchet, A.; Orr, J. C.; Plattner, G. K.; Sarmiento, J. L.; Schlitzer, R.; Weirig, M. F.; Yamanaka, Y.; Yool, A.: IMPACT OF CIRCULATION ON EXPORT PRODUCTION, DISSOLVED ORGANIC MATTER AND DISSOLVED OXYGEN IN THE OCEAN: RESULTS FROM OCMP-2

## SS27: TRACE METALS, MICROBIAL PROCESSES, AND BIOGEOCHEMICAL CYCLES THROUGH SPACE AND TIME

Chair(s):	Kathy Barbeau, kbarbeau@ucsd.edu Alison Butler, butler@chem.ucsb.edu Felisa Wolfe-Simon, fwolfe@asu.edu
Location:	La Fonda La Terraza
9:45 am	<u>Mason, R. P.</u> ; Gilmour, C. C.; Hollweg, T. A.; Kim, E. H.: AN EXAMINATION OF MERCURY TRANSFORMATIONS IN ESTUARINE AND COASTAL WATERS OF THE CHESAPEAKE BAY
10:00 am	<u>Gilmour, C. C.</u> ; Orem, W. H.; Krabbenhoft, D. P.; Aiken, G. R.; Rumbold, D.: SULFUR CONTAMINATION OF THE EVERGLADES: EFFECTS ON METHYLMERCURY PRODUCTION AND IMPLICATIONS FOR ECOSYSTEM RESTORATION
10:15 am	<u>Hines, M. E.</u> ; Adatto, I.: METHYLMERCURY ACCUMULATION IN NORTHERN WETLANDS MAY BE DUE TO THE LACK OF DEGRADATION BY METHANOGENIC BACTERIA
10:30 am	<u>Ollivier, P.</u> ; Bahrou, A.; Cox, T.; Marcus, S.; Church, T. M.; <u>Hanson, T. E.</u> : TELLURIUM VOLATILIZNG MICROBES ISOLATED FROM DELAWARE SALT MARSHES

11:00 am	<u>Schaefer, J. K.</u> ; Barkay, T.; Morel, F. M.: INORGANIC MERCURY BIOAVAILABILITY STUDIES IN IRON-REDUCING BACTERIA
11:15 am	<u>Pala, F.</u> ; Li, L.; Wallace, G. T.: APPLICATION AND VALIDATION OF A DYNAMIC EQUILIBRIUM MODEL FOR THE PREDICTION OF FREE COPPER ION ACTIVITY IN THE MARINE ENVIRONMENT
11:30 am	<u>Behrends, T.</u> ; Scheinost, A.; Van Cappellen, P.: REDUCTION OF U(VI) ACCOMPANYING DISSIMILATORY IRON REDUCTION – EVIDENCE FROM X-RAY ABSORPTION SPECTROSCOPY (XAS)
11:45 am	<u>Willey, J. D.</u> ; Skrabal, S. A.; Parler, N. E.; Kieber, R. J.: RAINWATER AS A SOURCE OF DISSOLVED GASEOUS MERCURY DHG(0) TO SEAWATER

## SS29: APEX PREDATORS IN AQUATIC FOOD WEBS

Chair(s):	Douglas Biggs, dbiggs@ocean.tamu.edu Bruce Mate, bruce.mate@oregonstate.edu
Location:	Hilton Mesa B
1:30 pm	<u>Kitchell, J. F.</u> ; Essington, T. E.; Walters, C. J.; Martell, S. J.; Kaplan, I.; Jensen, O.; Hilborn, R. W.: APEX PREDATORS AND THE FISHERY CRISIS: ALTERNATIVE MANAGEMENT POLICIES IN THE ECOSYSTEM CONTEXT
1:45 pm	<u>Costa, D. P.</u> ; Simmons, S.; Robinson, P.; Tremblay, Y.; Weber, R.; Walli, A.: HYDROGRAPHIC DESCRIPTION AND HABITAT USE OF EDDIES BY NORTHERN ELEPHANT SEALS IN THE NORTH EAST PACIFIC
2:00 pm	<u>Biggs, D. C.</u> ; Jochens, A. E.; Hu, C.; Leben, R. R.: ASSOCIATIONS OF DEEP-DIVING APEX PREDATORS WITH EXPORT PRODUCTION IN THE GULF OF MEXICO
2:15 pm	<u>O'Hern, J. E.</u> ; Biggs, D. C.; Gordon, J.: INTERANNUAL DIFFERENCES IN ENCOUNTERS WITH SPERM WHALES IN THE GULF OF MEXICO SUMMERS 2004 AND 2005
2:30 pm	<u>Gordon, J.</u> ; Scott-Hayward, L.; Richter, C.; Wursig, B.; Biggs, D.; McKenzie, M.: HABITAT PREFERENCES AND FORAGING OF SPERM WHALES, APEX PREDATORS IN THE DEEP SEA ECOSYSTEM OF THE GULF OF MEXICO
3:00 pm	<u>Mate, B. R.</u> ; Ortega-Ortiz, J. G.; Engelhardt, D.: ANNUAL MOVEMENTS AND HOME RANGE OF SPERM WHALES IN THE GULF OF MEXICO
3:15 pm	<u>Glaser, S. M.</u> : QUANTIFYING PREDATOR-PREY INTERACTIONS FOR NORTH PACIFIC ALBACORE
3:30 pm	Huckstadt, L. A.; Costa, D. P.; McDonald, B.; Tremblay, Y.; Goebel, M. E.; Crocker, D. E.; Fedak, M.: FORAGING BEHAVIOR AND HABITAT UTILIZATION OF THE SOUTHERN ELEPHANT SEALS FROM SOUTH SHETLAND ISLANDS IN RELATION TO OCEANOGRAPHY
3:45 pm	<u>Jay, C. V.</u> ; Outridge, P. M.; Garlich-Miller, J. L.: PRELIMINARY IDENTIFICATION OF PACIFIC WALRUS SUBPOPULATIONS FROM WHOLE TOOTH ELEMENTAL ANALYSIS

THURSDAY

(\*) represents Invited presentations

## SS30: STIRRING AND MIXING IN BIOLOGICAL AND ECOLOGICAL SYSTEMS

Chair(s):	John Crimaldi, crimaldi@colorado.edu
Location:	La Fonda La Terraza
1:30 pm	<u>Siegel, D. A.</u> ; Mitarai, S.: MIXING AND STIRRING IN AQUATIC ECOSYSTEMS: A MICRO SCALE REVIEW <sup>(*)</sup>
2:00 pm	<u>Waugh, D. W.</u> : SPATIAL VARIATIONS IN STIRRING IN THE SURFACE OCEAN
2:15 pm	<u>Eden, B. R.</u> ; Steinberg, D. K.; Goldthwait, S. A.; McGillicuddy, D.: THE EFFECT OF MESOSCALE EDDIES ON ZOOPLANKTON COMMUNITY STRUCTURE IN THE SARGASSO SEA
2:30 pm	Hartford, J. R.; Crimaldi, J. P.; Weiss, J. B.: BROADCAST SPAWNING: EFFECTS OF TURBULENT PROCESSES ON FERTILIZATION EFFICIENCY
3:00 pm	Mitarai, S.; Siegel, D. A.; Warner, R. R.; Gaines, S. D.; Kendall, B. E.; Winters, K. B.: A SCALING TOOL TO ACCOUNT FOR INHERENT STOCHASTICITY IN LARVAL DISPERSAL
3:15 pm	<u>Dombrowski, D. E.</u> ; Crimaldi, J. P.: HIGH RESOLUTION 3-D PLIF IN THE TURBULENT BOUNDARY LAYER OF A LABORATORY FLUME
3:30 pm	<u>Reidenbach, M. A.</u> ; Koseff, J. R.; Koehl, M. A.: SNIFFING FAR AND NEAR: HOW FLICKING LOBSTER ANTENNALES SAMPLE THE SPATIO-TEMPORAL STRUCTURE OF AN ODOR PLUME AT DIFFERENT DISTANCES FROM THE SOURCE
3:45 pm	<u>Dickman, b. d.</u> ; jackson, j. l.; weissburg, m. j.; webster, d. r.: QUANTIFYING TURBULENT PLUME SIGNALS USED BY ACTIVELY TRACKING BLUE CRABS
4:00 pm	Ianson, D.; Voelker, C.; Denman, K. L.; Kunze, E.; Steiner, N.: IRON FERTILIZATION PATCH SIZE AND ECOLGICAL RESPONSE
4:30 pm	Falter, J. L.; Atkinson, M. J.; Lowe, R. J.; Monismith, S. G.; Koseff, J. R.: EFFECTS OF NON-LOCAL TURBULENCE ON THE MASS TRANSFER OF DISSOLVED SPECIES TO REEF CORALS
4:45 pm	<u>Clarke, R. D.</u> ; Buskey, E. J.; Finelli, C. M.: MICROHABITAT AFFECTS WATER MOTION AND PREY CAPTURE BY TWO CHAENOPSID BLENNIES
5:00 pm	<u>Ramette, A.</u> ; Böer, S. I.; Boetius, A.: HOW MIXING AFFECTS BACTERIAL DIVERSITY IN MARINE SEDIMENTS
5:15 pm	<u>Anthony, J. L.</u> ; Lewis, W. M.: MODERATION OF EPILIMNETIC NUTRIENT CONCENTRATIONS BY SEDIMENT-WATER EXCHANGE
5:30 pm	<u>Carmack, E.</u> ; Vagle, S.; Morrison, J.; McLaughlin, F.; Laval, B.; Potts, D.; James, C.: DYNAMICS AND THERMODYNAMICS OF SEASONAL CONVECTIVE OVERTURN IN A VERY DEEP LAKE
5:45 pm	Sluss, T.: THE EFFECT OF VELOCITY AND COMPETITION ON FOOD SELECTION BY RIVERINE ZOOPLANKTON

## SS34: PHYTOPLANKTON NUTRIENT UPTAKE AND REQUIREMENTS: FROM MOLECULAR MECHANISMS TO ECOSYSTEM IMPACTS

Chair(s):	Adam Kustka, kustka@princeton.edu Elena Litchman, litchman@msu.edu
Location:	Eldorado Zia
9:45 am	<u>Laws, E. A.</u> : PHYTOPLANKTON NUTRIENT UTILIZATION: THE CHALLENGE OF TRANSLATING INFORMATION FROM THE MOLECULAR SCALE TO ECOSYSTEMS <sup>(*)</sup>
10:15 am	<u>Van Mooy, B.</u> ; Dyhrman, S.; Fredricks, H.; Pedler, B.; Koblížek, M.; Moore, L.; Moutin, T.; Brandon, M.; Rappé, M.; Rocap, G.; Webb, E.: MEMBRANE LIPID SUBSTITUTIONS ARE A WIDELY DISTRIBUTED AND QUANTITATIVELY SIGNIFICANT BIOCHEMICAL MECHANISM FOR PHYTOPLANKTON TO ALTER NUTRIENT REQUIREMENTS
10:30 am	<u>Orchard, E. D.</u> ; Ammerman, J. W.; Benitez-Nelson, C. R.; Lomas, M. W.; Dyhrman, S. T.; Dyhrman, S. T.: POLYPHOSPHATE METABOLISM IN THE MARINE CYANOBACTERIA TRICHODESMIUM AND CROCOSPHAERA
11:00 am	Horst, G. P.; Sarnelle, O.: PHOSPHORUS UPTAKE PHYSIOLOGY OF MICROCYSTIS AND COMPETING TAXA ALONG NUTRIENT GRADIENTS AND THE POTENTIAL FOR HARMFUL ALGAL BLOOMS
11:15 am	<u>Moffett, J. W.</u> ; Wisniewksi, R. J.; Dyhrman, S. T.: RELATIONSHIPS BETWEEN THE MACRONUTRIENT PHOSPHORUS AND THE MICRONUTRIENTS COBALT AND ZINC
11:30 am	<u>Litchman, E.</u> ; Klausmeier, C. A.: THE ROLE OF THE LIMITING NUTRIENT IDENTITY AND PHYSIOLOGICAL ALLOMETRIES IN SIZE SELECTION IN PHYTOPLANKTON
11:45 am	<u>Sunda, W. G.</u> ; Hardison, D. R.: AMMONIUM UPTAKE AND GROWTH LIMITATION IN MARINE PHYTOPLANKTON
1:30 pm	Killberg, L. M.; Bronk, D. A.; Heil, C. A.; Richardson, B.: VARIATIONS IN INORGANIC AND ORGANIC NITROGEN UPTAKE KINETICS AMONG FIVE CULTURED STRAINS OF KARENIA BREVIS
1:45 pm	<u>Boyd, C. M.</u> ; Boyd, J. M.: NITRATE UPTAKE IN MARINE DIATOMS EXPLORSED WITH ELECTROPHYSIOLOGICAL AND MOLECULAR BIOLOGICAL APPROACHES
2:00 pm	Egleston, E. S.; Morel, F. M.: THE EFFECT OF NI LIMITATION ON CELL SURFACE TRANSPORT PROCESSES IN DIATOMS
2:15 pm	<u>Yokota, K.</u> ; Sterner, R. W.: INTERACTION BETWEEN NUTRIENT AVAILABILITY AND KAIROMONE-INDUCED COLONY FORMATION IN DESMODESMUS: COMPARISON OF DAPHNIA KAIROMONES AND A SYNTHETIC SUBSTITUTE

<sup>(\*)</sup> represents Tutorial presentations

2:30 pm	McGinn, P. J.; Morel, F. M.: EVIDENCE FOR C4 PHOTOSYNTHESIS IN THE MARINE DIATOM THALASSIOSIRA PSEUDONANA
3:00 pm	Durkin, C. A.; Mock, T.; Armbrust, E. V.: UNEXPECTED PRESENCE, DIVERSITY, AND EXPRESSION OF CHITIN SYNTHASE GENES IN DIATOMS
3:15 pm	Parker, M. S.; Marchetti, A.; Lin, E. O.; Armbrust, E. V.: IRON STORAGE BY FERRITIN IN MARINE PENNATE DIATOMS – PART I: DISCOVERY OF A FERRITIN GENE IN DIATOMS AND COMPARATIVE SEQUENCE ANALYSES
3:30 pm	Marchetti, A.; Parker, M. S.; Lin, E. O.; Armbrust, E. V.: IRON STORAGE BY FERRITIN IN MARINE PENNATE DIATOMS – PART II: REGULATION OF GENE EXPRESSION AND ECOLOGICAL SIGNIFICANCE
3:45 pm	Kustka, A. B.; Morel, F. M.: COMPARISON OF FE UPTAKE MECHANISMS OF TWO MARINE DIATOMS THROUGH QPCR AND KINETICS
4:00 pm	Mock, T.; Robison, M.; Berthiaume, C.; Iverson, V.; Rodesch, M.; Splinter BonDurant, S.; Holtermann, K.; Samanta, M.; Sussman, M.; Armbrust, E. V.: WHOLE GENOME EXPRESSION PROFILING OF THE MARINE DIATOM THALASSIOSIRA PSEUDONANA: NEW INSIGHTS INTO THE MOLECULAR UNDERPINNINGS OF GLOBAL-SCALE PROCESSES
4:30 pm	Dyhrman, S. T.; Haley, S. T.; Birkeland, S. R.; Wurch, L. L.; Cipriano, M. J.; McArthur, A. G.: GENOMIC APPROACHES FOR STUDYING NUTRIENT ACQUISITION STRATEGIES IN THE COCCOLITHOPHORE EMILIANIA HUXLEYI.
4:45 pm	Palenik, B.; Grimwood, J.; Rouze, P.; Moreau, H.; Grigoriev, I.; The Ostreococcus Genome Consortium, : THE GENOME OF OSTREOCOCCUS LUCIMARINUS
5:00 pm	Bhadury, P.; Ward, B. B.: EUKARYOTIC PHYTOPLANKTON DIVERSITY AS REVEALED BY ANALYSIS OF FUNCTIONAL GENES
5:15 pm	Latasa, M.; Vila, G.; Gasol, J. M.; Scharek, R.; Vidal, M.: PHYTOPLANKTON GROUPS DISTRIBUTION DURING CONTRASTING SITUATIONS IN THE WESTERN MEDITERANEAN USING PIGMENTS AND CHEMTAX
5:30 pm	Gobler, C. J.; Norman, C.; Panzeca, C.; Taylor, G. T.; Sanudo-Wilhelmy, S. A.: REGULATION OF COASTAL PHYTOPLANKTON DYNAMICS BY VITAMINS
5:45 pm	Smith, A. S.; Acharya, K.; Jack, J. D.: EFFECTS OF OVERCROWDING, FOOD LIMITATION, AND LIGHT LEVEL ON DAPHNIA LUMHOLTZI RESTING EGG PRODUCTION

## SS35: OXYGEN UPTAKE DYNAMICS AT THE SEDIMENT-WATER INTERFACE

Chair(s):	Bernhard Wehrli, wehrli@eawag.ch John Little, jcl@vt.edu
Location:	Hilton Mesa A
3:00 pm	Kirf, M. K.; Røy, H.: SHEAR INDUCED ENHANCED DIFFUSIVITY IN THE UPPERMOST MILLIMETERS OF SANDY SEDIMENTS
3:15 pm	Berg, P.; Hume, A.; Koopmans, D. J.; Huettel, M.; Røy, H.; Meyer, V.; Glud, R. N.: OXYGEN EXCHANGE DYNAMICS MEASURED WITH THE NEW EDDY CORRELATION TECHNIQUE
3:30 pm	Brand, A.; McGinnis, D.; Wüest, A. J.; Wehrli, B.: EDDY CORRELATION MEASUREMENTS IN A SEICHE DRIVEN PREALPINE LAKE
3:45 pm	Fischer, J. P.; Wenzhoefer, F.: SMALL SCALE BENTHIC OXYGEN DYNAMICS IN THE PHOTIC ZONE – SPATIAL ORGANIZATION OF OXYGEN PRODUCTION AND RESPIRATION MEASURED IN HIGH-RESOLUTION 2D
4:00 pm	Huettel, M.; Kostka, J. E.; Arnosti, C.; Berg, P.; Higgs, M. K.; Laschet, M.; Chipman, L.: OXYGEN DYNAMICS CONTROLLED BY ADVECTIVE PORE WATER EXCHANGE IN PERMEABLE GULF OF MEXICO SEDIMENT
4:30 pm	Smith, D. A.; Matisoff, G.: RATES OF OXYGEN CONSUMPTION IN LAKE ERIE SEDIMENTS
4:45 pm	Dent, S. R.; Beutel, M. W.: THE USE OF OXYGENATION TREATMENTS FOR REDUCING METHYLMERCURY FLUX FROM SEDIMENT IN CONTROLLED INCUBATIONS
5:00 pm	Beutel, M. W.; Burley, N.; Culmer, K.: INDUCED SEDIMENT OXYGEN DEMAND AND SEDIMENT NITRATE DEMAND
5:15 pm	Little, J. C.; Bryant, L. D.: VARIATION IN SEDIMENT OXYGEN DEMAND AS A FUNCTION OF DIFFUSER-INDUCED TURBULENCE
5:30 pm	Bryant, L. D.; Little, J. C.: SEDIMENT-WATER FLUXES OF DISSOLVED IRON AND MANGANESE DURING HYPOLIMNETIC OXYGENATION
5:45 pm	Riedel, T.; Berelson, W.; Abboud, R.; Nealon, K.; Finkel, S.: MICROBIAL OXYGEN UTILIZATION UNDER VARYING GROWTH CONDITIONS AND NUTRIENT AVAILABILITY; L.T.S.P. AS AN ANALOG TO LIFE IN THE DEEP SUBSURFACE

THURSDAY

(\*) represents Invited presentations

# FRIDAY, FEBRUARY 9, 2007

## CS06: BIOGEOCHEMISTRY

Chair(s):	Matthew A. Charette, mcharette@whoi.edu Pia Engstrom, piae@u.washington.edu
Location:	Eldorado Zia
9:45 am	Judd, K. E.; Likens, G. E.; Groffman, P. M.: NITRATE RETENTION IN WATERSHED-ECOSYSTEMS DURING WINTER MONTHS AT THE HUBBARD BROOK EXPERIMENTAL FOREST
10:00 am	Beaulieu, J. J.; Arango, C. P.; Tank, J. L.; Hamilton, S. K.: NITROUS OXIDE EMISSIONS FROM HEADWATER STREAMS IN THE UPPER MIDWEST
10:15 am	Roberts, B. J.; Mulholland, P. J.: IN-STREAM BIOTIC CONTROL ON NUTRIENT BIOGEOCHEMISTRY IN A FORESTED STREAM, WEST FORK OF WALKER BRANCH
10:30 am	Harms, T. K.; Grimm, N. B.: PATCHINESS IN SOIL CHARACTERISTICS INFLUENCES TRACE GAS FLUX IN RESPONSE TO HYDROLOGIC FLOWPATHS IN A SEMI-ARID RIPARIAN ZONE
11:00 am	Kroeger, K. D.; Charette, M. A.; Casciotti, K.: NITROGEN TRANSFORMATIONS IN SUBMARINE GROUNDWATER DISCHARGE ZONES
11:15 am	Engström, P.; Penton, C. R.; Devol, A. H.: THE ROLE OF ANAMMOX AS A NITROGEN SINK IN DEEP SEA SEDIMENTS OFF THE WASHINGTON MARGIN
11:30 am	Pantoja, S.; Soto, J.; Casciotti, K.: FRACTIONATION OF NITROGEN STABLE ISOTOPES IN THE HUMBOLDT CURRENT SYSTEM OFF CHILE
11:45 am	Holl, C. M.; Tallamy, C. J.; Moss, S. M.: STABLE ISOTOPES AND MICROBIAL NITROGEN CYCLING IN RECIRCULATING AQUACULTURE SYSTEMS
1:30 pm	Johnson, K. S.; Chavez, F. P.; Friederich, G. E.: OBSERVING THE REDFIELD RATIO IN REAL TIME
1:45 pm	Charette, M. A.; Gonanea, M. E.; Henderson, P. B.: A TWO-YEAR TIME-SERIES OF TRACE METALS AND NUTRIENTS IN A COASTAL AQUIFER
2:00 pm	Tank, S. E.; Lesack, L.; Hesslein, R. H.: DIVERGENT PARTIAL PRESSURES OF CARBON DIOXIDE IN LAKES OF THE MACKENZIE DELTA, NORTHWEST TERRITORIES
2:15 pm	Striegl, R. G.: LOTIC CARBON GAS EXCHANGE IN THE YUKON RIVER BASIN
2:30 pm	Jonsson, A.; Åberg, J.; Jansson, M.; Lindroth, A.: DIRECT MEASUREMENTS OF THE EMISSION OF CO <sub>2</sub> FROM A HUMIC LAKE IN NORTHERN SWEDEN
3:00 pm	Paytan, A.; Mackey, K.; Young, M.: CONTROLS ON THE BIOLOGICALLY MEDIATED OXYGEN ISOTOPE EXCHANGE BETWEEN WATER AND PHOSPHATE
3:15 pm	Maerki, M.; Mueller, B.; Dinkel, C.; Wehrli, B.: OXYGEN GRADIENTS AND MINERALIZATION IN EUTROPHIC LAKE SEDIMENTS
3:30 pm	Reese, B. K.; Anderson, M. A.: SULFIDE AND OTHER REDUCED CHEMICAL SPECIES IN THE SALTON SEA, CALIFORNIA

3:45 pm	Bushey, J. T.; Driscoll, C. T.; Selvendiran, P.; Mason, E. F.; Choi, H. D.; Holsen, T. M.; Huang, L.: FATE OF ATMOSPHERICALLY-DEPOSITED MERCURY WITHIN A NORTHERN FOREST LANDSCAPE, USA
4:00 pm	Dudel, E. G.; Dienemann, H.; Feibicke, M.; Mkandawire, M.; Ottenstoer, T.; Ross, H.; Vogel, K.; weiske, A.: PHOTOSYNTHETIC C ASSIMILATION, SEDIMENTATION AND C ACCUMULATION IN SEDIMENTS ARE MAIN DRIVERS OF URANIUM IMMOBILISATION
4:30 pm	Boschker, H. T.; Moodley, L.: CHEMOAUTOTROPHY IN INTERTIDAL MARINE SEDIMENTS
4:45 pm	Newell-Bulow, S. E.; Ward, B. B.: DENITRIFIER COMMUNITY COMPOSITION AND ACTIVITY IN MARINE SEDIMENTS INVESTIGATED WITH DNA AND mRNA FUNCTIONAL GENE MICROARRAYS
5:00 pm	Grzymski, J. J.; Murray, A. E.; Kaplarevic, M.; Feldman, R. F.; Campbell, B. J.; Gao, G. R.; Cary, S. C.: ENVIRONMENTAL GENOME ANALYSIS OF THE ALVINELLA POMPEJANA EPIBIONT CONSORTIA
5:15 pm	Lever, M. A.; Teske, A. P.: VERTICAL DISTRIBUTION OF METHANOGENS AND ACTIVE ARCHAEA IN SUBSURFACE SEDIMENTS OF THE PERU TRENCH AS EVALUATED FROM FUNCTIONAL GENES AND 16S rRNA PROFILES
5:30 pm	Fulweiler, R. W.; Nixon, S. W.: CLIMATE INDUCED REVERSAL OF THE NET N <sub>2</sub> FLUX AT THE SEDIMENT-WATER INTERFACE IN NARRAGANSETT BAY, R.I.

## CS08: ECOSYSTEM MANAGEMENT, RESTORATION, AND SCIENCE POLICY

Chair(s):	Randall E. Hicks, rhicks@d.umn.edu Tobias Vrede, tobias.vrede@emg.umu.se
Location:	Hilton Mesa B
9:45 am	Hansen, D. L.; Ishii, S.; Sadowsky, M. J.; Hicks, R. E.: IDENTIFYING SEASONAL SOURCES OF ESCHERICHIA COLI AT BEACHES IN THE DULUTH-SUPERIOR HARBOR
10:00 am	Hersha, D. K.; Williams, L. R.: PROTOZOAN ASSEMBLAGE DYNAMICS IN HEADWATER STREAMS: A POTENTIAL WATER QUALITY BIOASSESSMENT TOOL
10:15 am	Malet, N.; McLellan, S. L.; Bootsma, H. A.: UTILIZATION OF QUAGGA MUSSEL (DREISSENA BUGENSIS) AND STABLE ISOTOPE AS A BIOINDICATOR OF POLLUTION EFFLUENTS
10:30 am	Volety, A. K.; Crean, D. J.; Doering, P.; Barnes, T. K.: RELATIONSHIP BETWEEN FRESHWATER INFLOWS AND SHELLFISH RESPONSES IN ESTERO BAY, FLORIDA: UTILIZING SHELLFISH RESPONSES IN ECOSYSTEM MANAGEMENT AND RESTORATION
11:00 am	Fisher, T. R.; Gustafson, A. B.; Sutton, A. J.; Kana, T.; McCarty, G.; Staver, K.; Jordan, T. E.; Fogel, M.: GROUNDWATER DENITRIFICATION OF AGRICULTURAL NITRATE

(\*) represents Tutorial presentations

11:15 am	<u>Lehman, P. W.</u> ; Sommer, T.: MANAGEMENT OF FLOODPLAIN AND RIVERINE HABITAT TO ENHANCE CARBON PRODUCTION FOR THE AQUATIC FOOD WEB IN SAN FRANCISCO ESTUARY	11:15 am	Calliari, D. L.; Britos, A.; Conde, D.: LOW GRAZING PRESSURE BY COPEPODS IN A PRODUCTIVE ESTUARINE LAGOON
11:30 am	<u>Kim, H.</u> ; Li, X.; Gallegos, C. L.; Weller, D. E.; Jordan, T. E.: A REGIONAL COMPARISON STUDY ON THE ECOLOGICAL RESPONSE OF SUBESTUARINE ECOSYSTEM TO DIFFERENT WATERSHED LOADINGS IN THE CHESAPEAKE BAY: A MODELING STUDY	11:30 am	<u>Tönnesson, K.</u> ; Nielsen, T. G.; Arendt, K. E.: FEEDING OF CARNIVOROUS ZOOPLANKTON IN WEST GREENLANDIC WATERS
11:45 am	<u>Forbes, M. G.</u> ; Dunton, K. H.: COMPARATIVE PLANT POPULATION AND COMMUNITY DYNAMICS IN A SOUTH TEXAS SALT MARSH RECEIVING TREATED WASTEWATER	11:45 am	<u>Nicolle, A.</u> ; Hansson, L.; Brodersen, J.; Romare, P.; Nilsson, A.; Brönmark, C.: THE RELATIVE IMPORTANCE OF AGE-0 FISH PREDATION AND RESOURCES FOR ZOOPLANKTON SPRING AND SUMMER DYNAMICS
1:30 pm	<u>Vrede, T.</u> ; Milbrink, G.; Rydin, E.; Holmgren, S. K.; Persson, J.; Jansson, M.; Tranvik, L. T.: ECOSYSTEM DAMAGE IN OLIGOTROPHIC RESERVOIRS CAUSED BY IMPOUNDMENT - MITIGATION BY NUTRIENT ENRICHMENT	1:30 pm	Potthoff, A. J.; Zimmer, K. D.; Herwig, B. R.; <u>Butler, M. G.</u> ; Hanson, M. A.; Reed, J. R.; Parsons, B. G.; Ward, M. C.; Willis, D. W.: EFFECTS OF PISCIVORE INTRODUCTION ON PRAIRIE WETLAND ECOSYSTEMS: TROPHIC INTERACTIONS CAN ALTER ECOSYSTEM STRUCTURE
1:45 pm	<u>Solidoro, C.</u> ; Bandelj, V.; Cossarini, G.; Melaku Canu, D.: TYPOLOGY, CLASSIFICATION AND ZONING IN TRANSITIONAL HABITATS	1:45 pm	<u>Rodríguez-Graña, L. M.</u> ; Calliari, D. L.; Conde, D.; Sellanes, J.: STRONG BENTHIC-PELAGIC COUPLING IN A SHALLOW LAGOON OF THE SUBTROPICAL SOUTH ATLANTIC AS REVEALED BY STABLE ISOTOPE ANALYSIS OF TROPHIC WEB STRUCTURE
2:00 pm	Katz, S. L.; Barnas, K. A.: COORDINATING REGIONAL RESTORATION EFFECTIVENESS MONITORING PROGRAMS: DESIGN OF AN IMPLEMENTATION TRACKING SYSTEM FOR THE PACIFIC NORTHWEST	2:00 pm	<u>Schielke, E. G.</u> ; Post, D. M.; Palkovacs, E. P.: DO LIFE HISTORY DIFFERENCES CAUSE TROPHIC SHIFTS IN ALEWIVES?
2:15 pm	<u>Barnas, K. A.</u> ; Katz, S. L.: TRACKING FRESHWATER HABITAT RESTORATION OVER MULTIPLE SCALES AND JURISDICTIONS	2:15 pm	<u>McEwen, D. C.</u> ; Butler, M. G.: TIME-SERIES ANALYSIS FOR SHIFTS IN ALTERNATIVE STABLE-STATES OF A LARGE SHALLOW LAKE IN CENTRAL MINNESOTA
2:30 pm	<u>Poikane, S.</u> ; van de Berg, M.; Ortiz - Casas, J.; Phillips, G.; Solheim, A.; Tierney, D.; Wolfram, G.: REFERENCE CONDITIONS OF LAKES - COMPARISON OF THE EU AND USA APPROACHES	2:30 pm	Chrzanowski, T. H.; <u>Grover, J. P.</u> : SIMULTANEOUS DETERMINATION OF GROWTH AND INGESTION KINETICS FOR A PHAGOTROPHIC FLAGELLATE PREYING ON BACTERIA OF DEFINED NUTRIENT COMPOSITION
		3:00 pm	Jones, A. C.; Moorthi, S. D.; Countway, P. D.; Caron, D. A.: TROPHIC INTERACTIONS BETWEEN A CRYPTOPHYTE ALGA AND THE SMALLEST KNOWN EUKARYOTE THE PRASINOPHYTE OSTREOCOCCUS SP.
		3:15 pm	<u>Schulz, K. L.</u> ; Teece, M. A.: EFFECTS OF A POLYUNSATURATED FATTY ACID ON TROPHIC TRANSFER EFFICIENCY, GROWTH AND BODY COMPOSITION IN A THREE TROPHIC LEVEL MODEL SYSTEM
		3:30 pm	Richoux, N. B.; Froneman, P. W.: TROPHIC ECOLOGY OF DOMINANT ZOOPLANKTON AND MACROFAUNA IN A TEMPERATE AND OLIGOTROPHIC SOUTH AFRICAN ESTUARY: A FATTY ACID APPROACH
		3:45 pm	<u>Chu, F. L.</u> ; Lund, E. D.; Podbesek, J. A.; Tang, K. W.: EFFICIENCY OF ESSENTIAL NUTRIENT UPGRADING AND TRANSFER AT THE PHYTOPLANKTON-HETEROTROPHIC PROTIST INTERFACE
		4:00 pm	<u>Lund, E. D.</u> ; Chu, F. L.; Harvey, E.; Adlof, R. O.: MECHANISMS OF ESSENTIAL LIPID UPGRADING IN TWO HETEROTROPHIC PROTISTS
		4:15 pm	<u>Small, G. E.</u> ; Pringle, C. M.: EFFECTS OF FOOD QUALITY ON NUTRIENT STORAGE AND RETENTION IN A FRESHWATER INVERTEBRATE CONSUMER

## SS01: WATER ON EARTH: ANALOGUES FOR OTHER WORLDS

Chair(s):	Cristina Takacs-Vesbach, cvesbach@unm.edu John Priscu, jpriscu@montana.edu
Location:	Hilton Mesa A
9:45 am	<u>Cady, S. L.</u> : TERRESTRIAL ANALOGUES FOR OTHER WORLDS AND CHALLENGES FOR LIFE DETECTION <sup>(*)</sup>
10:15 am	<u>Christner, B. C.</u> ; Skidmore, M. L.; Montross, S. N.: SUBZERO REALMS FOR MICROORGANISMS: EXPANDING THE CIRCUMSTELLAR HABITABLE ZONE FOR LIFE
10:30 am	<u>Fritsen, C. H.</u> ; Murray, A. E.; Doran, P. D.; Kenig, F.; McKay, C. P.: LOW TEMPERATURE BRINE BENEATH THE 20 METER ICE OVER OF LAKE VIDA: ACCESS, GEOCHEMISTRY, AND CELLS.
11:00 am	<u>Murray, A. E.</u> ; Fritsen, C. H.; Kenig, F.; McKay, C.; Doran, P.: MICROBIAL LIFE IN COLD BRINES COLLECTED FROM PERMANENTLY ICE-COVERED LAKE VIDA, ANTARCTICA
11:15 am	<u>Jepsen, S. M.</u> ; Priscu, J. C.; Grimm, R. E.; Bullock, M. A.: THE POTENTIAL FOR LITHOAUTOTROPHIC LIFE ON MARS: APPLICATION TO SHALLOW INTERFACIAL-WATER ENVIRONMENTS
11:30 am	<u>Hedlund, B. P.</u> ; Navarro, J. B.; Costa, K. C.; Shock, E.; Zhang, C.: GREAT BASIN HOT SPRING CAFE: WHO IS THE CLIENTELE AND WHAT'S ON THE MENU?
11:45 am	<u>Takacs-Vesbach, C.</u> ; Mitchell, K. R.; Zeglin, L.; Barrett, J. E.; Gooseff, M.: MICROBIAL DIVERSITY AND TEMPERATURE: DIFFERING PROCESSES AT THE HOT AND COLD EXTREMES
1:30 pm	<u>Moser, D. P.</u> ; Hedlund, B. P.; Navarro, J. B.: PLAYA LAKES: INSIGHTS INTO MARS' LAST AQUATIC ECOSYSTEMS?
1:45 pm	<u>Joye, S. B.</u> ; Samarkin, V. A.; Orcutt, B. N.; Bowles, M. W.; MacDonald, I. R.; Montoya, J. P.; Roberts, H. H.: MICROBIAL ABUNDANCE AND ACTIVITY IN SEAFLOOR BRINES FROM THE NORTHERN GULF OF MEXICO
2:00 pm	<u>Paerl, H. W.</u> ; Yanarell, A. C.; Steppe, T. F.: WATER FEAST AND FAMINE: OPTIMIZATION OF MICROBIAL MAT DYNAMICS IN A BAHAMIAN HYPER SALINE LAKE PERIODICALLY "FRESHENED" BY HURRICANES
2:15 pm	<u>Potter, E. G.</u> ; Kelley, C. A.; Bebout, B. M.: STABLE CARBON ISOTOPES OF METHANE IN HYPER SALINE MICROBIAL MATS
2:30 pm	<u>Taub, F. B.</u> : ELEMENT RECYCLING AS A BIOSPHERE PROPERTY

## SS05: HYPOXIA IMPACTS ON AQUATIC FOOD WEB COMPOSITION, DYNAMICS AND PRODUCTION

Chair(s):	David G. Kimmel, dkimmel@hpl.umces.edu Stuart A. Ludsin, Stuart.Ludsin@noaa.gov
Location:	Hilton Mesa B
3:00 pm	<u>Breitburg, D. L.</u> : LOW DISSOLVED OXYGEN EFFECTS ON FISH AND FISHERIES: WHERE SHOULD WE EXPECT NEGATIVE EFFECTS? <sup>(*)</sup>
3:30 pm	<u>Craig, J. K.</u> ; Leonard, J.; Crowder, L. B.: BROWN SHRIMP BODY SIZE AND LIPID LEVELS ON THE NORTHWESTERN GULF OF MEXICO SHELF: LINKING HYPOXIA-INDUCED HABITAT LOSS TO GROWTH AND CONDITION
3:45 pm	<u>Ludsin, S. A.</u> ; Brandt, S. B.; Mason, D. M.; Roman, M. R.; Kimmel, D. G.; Boicourt, W. C.; Zhang, X.; Rae, C. M.: EFFECTS OF HYPOXIA ON THE DISTRIBUTION AND BEHAVIOR OF FISH IN THE NORTHERN GULF OF MEXICO
4:00 pm	<u>Kolesar, S. E.</u> ; Rose, K. A.; Breitburg, D. L.: THE EFFECT OF HYPOXIA ON INTRAGUILD PREDATION IN A PLANKTONIC ESTUARINE FOOD WEB: AN INDIVIDUAL-BASED MODEL OF CTENOPHORES, FISH LARVAE AND COPEPODS
4:15 pm	<u>Hann, B. J.</u> : EFFECTS OF STRATIFICATION AND HYPOLIMNETIC HYPOXIA ON ZOOBENTHOS IN LAKE WINNIPEG.
4:30 pm	<u>Roman, M.</u> ; Kimmel, D.; Pierson, J.; Hozyash, K.; Boicourt, W.; Zhang, X.: SPATIAL AND TEMPORAL VARIABILITY OF ZOOPLANKTON IN THE NORTHERN GULF OF MEXICO: EFFECTS OF LOW OXYGEN BOTTOM WATERS
4:45 pm	<u>Kimmel, D. G.</u> ; Roman, M. R.; Boicourt, W. C.; Hozyash, K.; Zhang, X.: ZOOPLANKTON RESPONSE TO HYPOXIA IN CHESAPEAKE BAY AND THE NORTHERN GULF OF MEXICO: EVIDENCE FROM BIOMASS SIZE SPECTRA
5:00 pm	<u>Lavrentyev, P. J.</u> ; Jochem, F. J.; Moats, K. M.; Duff, R. J.: MICROZOOPLANKTON COMPOSITION AND DYNAMICS DURING SEASONAL HYPOXIA IN LAKE ERIE AND THE GULF OF MEXICO
5:15 pm	<u>Carrick, H. J.</u> ; Jones, L.; Ripple, S.; Nalepa, T.; Hawley, N.: PHYTOPLANKTON DYNAMICS AND HYPOXIA IN LAKE ERIE
5:30 pm	<u>Fox, S. E.</u> ; Teichberg, M.; Olsen, Y. S.; Valielia, I.: UNDERSTANDING THE ROLE OF INCREASING N LOADS IN DETERMINING MACROALGAL AND CONSUMER ASSEMBLAGES AND TROPHIC RELATIONSHIPS
5:45 pm	<u>Ruhl, N. A.</u> ; Currie, W. J.: PHOTOAUTOTROPH DISTRIBUTION AND ANOXIA RESULTING FROM STRATIFICATION IN A SMALL RESERVOIR: IMPLICATIONS OF BUOYANCY AND LIGHT ATTENUATION

<sup>(\*)</sup> represents Tutorial presentations

## SS09: STUDYING THE ECOLOGY, BIODIVERSITY, AND ABUNDANCE OF AQUATIC ANIMALS

Chair(s):	David Bailey, d.bailey@abdn.ac.uk Nikki King, n.king@abdn.ac.uk
Location:	Eldorado Ana. North
9:45 am	<u>Priede, I. G.</u> : BAITED CAMERA LANDER METHODS FOR INVESTIGATION OF DEMERSAL FISHES OF THE DEEP SEA.
10:00 am	<u>Raymond, E. H.</u> ; Widder, E. A.: COMPARISON OF THE ACOUSTICAL SIGNATURES OF THREE DEEP-SEA VEHICLES RECORDED FROM THE EYE-IN-THE-SEA OBSERVATORY
10:15 am	<u>Bailey, D. M.</u> ; Priede, I. G.; Gordon, J. D.; Collins, M. A.: EFFECTS OF CLIMATIC VARIATION AND FISHING PRESSURE ON DEEP-SEA FISH POPULATIONS IN THE NORTH-EAST ATLANTIC
10:30 am	<u>Wei, C.</u> ; Rowe, G. T.: THE BOTTOM-UP CONTROL OF MACROFAUNAL ZONATION (BETA DIVERSITY) IN THE DEEP-SEA NORTHERN GULF OF MEXICO
10:45 am	<u>Harvey, E. S.</u> ; Cappo, M.; Shortis, M. R.: THE USE OF BAITED VIDEO TECHNIQUES FOR ASSESSING THE ABUNDANCE AND DISTRIBUTION OF DEMERSAL FISH ON THE CONTINENTAL SHELF OF AUSTRALIA: HOW MANY AND HOW BIG?
11:00 am	<u>Jones, E. G.</u> ; Davie, S.; Martinez, I.; Jamieson, A.; Wigham, B.; Fraser, H.: USE OF A BAITED UNDERWATER CAMERA SYSTEM FOR SAMPLING NORTH SEA SPECIES DIVERSITY AND ABUNDANCE, COMPARISON WITH ROV, OTTER TRAWL AND BEAM TRAWL TECHNIQUES.
11:15 am	<u>Yeh, J.</u> ; Smith, C. R.; Vetter, E. W.: EFFECTS OF SUBMARINE CANYONS ON MEGAFAUNAL SCAVENGERS OF THE HAWAIIAN ISLANDS
11:30 am	<u>King, N. J.</u> ; Bailey, D. M.: TEMPORAL SUCCESSION OF DEEP-SEA SCAVENGING FAUNA AT BAITED CAMERAS
11:45 am	<u>Kilgour, M. J.</u> ; Shirley, T. C.: DISTRIBUTION OF DECAPOD CRUSTACEANS ON WWII SHIPWRECKS IN THE GULF OF MEXICO

## SS13: CALCIFICATION IN AQUATIC ECOSYSTEMS: PHYSIOLOGY, BIOGEOCHEMISTRY, AND RESPONSE TO ENVIRONMENTAL CHANGE

Chair(s):	Jean-Pierre Gattuso, gattuso@obs-vlfr.fr Joanie Kleypas, kleypas@ucar.edu
Location:	Eldorado Sunset
9:45 am	<u>Ries, J. B.</u> : BIOCALCIFICATION - STATE OF THE KNOWLEDGE~
10:15 am	<u>Robbins, L. L.</u> ; Yates, K. K.: MICROBIAL CALCIFICATION: IMPLICATIONS FOR INORGANIC AND ORGANIC CARBON CYCLING
10:30 am	<u>de Beer, D.</u> ; Werner, U.; Jonkers, H.: MARINE CALCIFICATION AND DECALCIFICATION STUDIED WITH MICROSENSORS FOR CALCIUM, PH AND OXYGEN

11:00 am	<u>Bissett, A.</u> ; Zippell, ; deBeer, D.; Schoon, R.; Reimer, A.; Arp, G.: MICROBIAL INFLUENCE ON TUFA FORMATION IN GERMAN KARST-WATER CREEKS
11:15 am	<u>Dittrich, M.</u> ; Siebler, S.; Matsko, N.: EPS OF PICOCYANOBACTERIA: FUNCTIONAL GROUPS AND ABILITY TO PRECIPITATION CALCITE
11:30 am	<u>Zippe, B.</u> ; Mohr, K.; Shiraishi, F.; Arp, G.; Neu, T. R.: EXTRACELLULAR POLYMERIC SUBSTANCES (EPS) AS HOT SPOTS OF CALCIFICATION PROCESSES IN TUFA-FORMING BIOFILMS
11:45 am	<u>Schoon, R.</u> ; Bissett, A.; de Beer, D.: CALCIFICATION IN CORAL-SEDIMENT INVESTIGATED WITH CA <sup>2+</sup> , PH-, CO <sub>3</sub> <sup>2-</sup> , AND O <sub>2</sub> MICROSENSORS
1:30 pm	<u>Kayanne, H.</u> ; <u>Watanabe, A.</u> ; Hata, H.; Kudo, S.; Nozaki, K.; Kato, K.; Negishi, A.; Ikeda, Y.; Yamano, H.: FACTORS CONTROLLING CALCIFICATION IN SHIRAHO AND PALAU REEFS
1:45 pm	<u>Gattuso, J. P.</u> ; Bensoussan, N.; Boucher, G.; Clavier, J.; Cuet, P.; Hata, H.; Kayanne, H.; Kleypas, J. A.; Martin, S.; Taddei, D.; Watanabe, A.; Yates, K.: EFFECT OF DIURNAL CHANGES IN IRRADIANCE AND CARBONATE ION CONCENTRATION ON CALCIFICATION OF MARINE BENTHIC COMMUNITIES
2:00 pm	<u>Grottoli, A. G.</u> : CALCIFICATION IN SCLEROSPONGES: IMPLICATIONS FOR RECONSTRUCTING CO <sub>2</sub> FLUXES IN THE TROPICS
2:15 pm	<u>Taylor, A. R.</u> ; Brownlee, C.: CALCIFICATION IN COCCOLITHOPHORES: ION TRANSPORT AND CELLULAR HOMEOSTASIS.
2:30 pm	<u>Balch, W. M.</u> ; Drapeau, D. T.; Bowler, B. C.; Booth, E. S.; Poulton, A. J.; Windecker, L. A.: INDICES OF COCCOLITHOPHORE CALCIFICATION
3:00 pm	<u>Gledhill, D. K.</u> ; Langdon, C.; Eakin, C. M.; Liu, G.; Christensen, T.; Heron, S.; Morgan, J.; Skirving, W.; Strong, A.: NEAR-REAL-TIME ESTIMATES OF AIR-SEA CO <sub>2</sub> FLUX OVERLYING A CARIBBEAN CORAL REEF COMMUNITY COMPARED AGAINST SATELLITE DERIVED FIELDS OF SEA SURFACE PCO <sub>2</sub>
3:15 pm	<u>Iglesias-Rodriguez, M. D.</u> ; Gittins, J. R.: EFFECT OF CO <sub>2</sub> LEVELS ON CALCIFICATION IN COCCOLITHOPHORES
3:30 pm	<u>Kurihara, H.</u> ; Kato, S.; Shirayama, Y.; Ishimatsu, A.: EFFECTS OF OCEAN ACIDIFICATION ON THE EARLY LIFE STAGES OF CALCIFIED MARINE ORGANISMS
3:45 pm	<u>Martin, S.</u> ; Gattuso, J. P.: RESPONSE OF THE TEMPERATE CORALLINE ALGA, LITHOPHYLLUM CABIOCHAE, TO Elevated PCO <sub>2</sub> AND TEMPERATURE
4:00 pm	<u>Erez, J.</u> ; Schneider, K.; Silverman, J.; Lazar, B.: THE COMBINED EFFECT OF TEMPERATURE AND CARBON DIOXIDE ON CALCIFICATION IN HERMATYPIC CORALS AND IN CORAL REEF COMMUNITIES

(\*) represents Invited presentations

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4:30 pm	Gazeau, E.; Quiblier, C.; Jansen, J. M.; Gattuso, J. P.; Middelburg, J. J.; Heip, C. H.: OCEAN ACIDIFICATION DRAMATICALLY LOWERS SHELLFISH YIELD
4:45 pm	<u>Matthews, K. A.</u> ; Grottoli, A. G.; McDonough, W. F.: NATURAL VARIABILITY OF CORAL CD/CA FROM AN UPWELLING REGION: IMPLICATIONS FOR PROXY RECORD INTERPRETATION

## SS16: QUANTIFYING ECOLOGICAL SUBSIDY AND RESOURCE SHEDS

Chair(s):	David Raikow, david.raikow@noaa.gov
Location:	Hilton Mesa A
3:00 pm	<u>Raikow, D. F.</u> ; Atkinson, J. F.; Croley III, T. E.: APPLYING RESOURCE SHEDS TO COASTS AND LAKES
3:15 pm	<u>Atkinson, J. F.</u> ; Raikow, D. F.; Croley, T. E.: HYDRODYNAMIC MODELING FOR RESOURCE SHED DELINEATION IN THE GREAT LAKES
3:30 pm	<u>Croley, T. E.</u> : HYDROLOGICAL "RESOURCE SHEDS"
3:45 pm	<u>Scott, J. T.</u> ; Doyle, R. D.; Prochnow, S. J.; White, J. D.: WATERSHED AND PELAGIC PREDICTORS OF CYANOBACTERIAL N <sub>2</sub> FIXATION IN A EUTROPHIC RESERVOIR
4:00 pm	<u>Francis, T. B.</u> ; Schindler, D. E.: TERRESTRIAL INSECT SUBSIDIES TO FISH POPULATIONS WEAKENED WITH LAKESHORE DEVELOPMENT IN THE PACIFIC NORTHWEST
4:30 pm	<u>Rundio, D. E.</u> ; Lindley, S. T.: TERRESTRIAL SUBSIDIES TO STEELHEAD IN BIG SUR, CALIFORNIA: SEASONAL PATTERNS AND NON-NATIVE PREY
4:45 pm	<u>Kline, T. C.</u> : QUANTIFICATION OF ANADROMOUS SALMON DERIVED ECOLOGICAL SUBSIDIES USING STABLE ISOTOPES OF NITROGEN, SULFUR, AND CARBON IN COASTAL ALASKAN WATERSHEDS
5:00 pm	<u>Walters, A. W.</u> ; Post, D. M.: THE IMPACTS OF MARINE-DERIVED NUTRIENTS IN ANADROMOUS ALEWIFE STREAMS
5:15 pm	<u>Wurtsbaugh, W. A.</u> ; Naftz, D. L.; Bradt, S. R.: NUTRIENT SUBSIDIES FROM EMBAYMENTS INFLUENCE BRINE SHRIMP GROWTH RATES IN THE GREAT SALT LAKE
5:30 pm	<u>Walters, D. M.</u> ; Fritz, K. M.; Otter, R. R.: THE DARK SIDE OF SUBSIDIES: EXPORT OF POLYCHLORINATED BIPHENYLS (PCBS) TO STREAM RIPARIAN PREDATORS BY EMERGENT INSECTS

## SS23: CONUNDRUMS AND CONTROVERSIES: WHAT CONTRIBUTES TO THE VERTICAL FLUX OF CARBON, NITROGEN, AND PHOSPHORUS IN AQUATIC ECOSYSTEMS?

Chair(s):	Tammi Richardson, richardson@biol.sc.edu Claudia Benitez-Nelson, cbnelson@geol.sc.edu
Location:	Eldorado Ana. South
9:45 am	<u>DeGrandpre, M. D.</u> ; Martz, T. R.; Strutton, P. G.; Drennan, W. M.; McGillivray, W. R.: ATMOSPHERIC CARBON DIOXIDE UPTAKE AND ORGANIC CARBON EXPORT IN THE LABRADOR SEA

10:00 am	Mouriño-Caballido, B.; Neuer, S.: ROLE OF MESOSCALE VARIABILITY IN THE UNBALANCED NORTH ATLANTIC SUBTROPICAL GYRE
10:15 am	<u>Maiti, K.</u> ; Benitez-Nelson, C.; Rii, Y.; Bidigare, R.: EXTENSIVE PARTICLE REMINERALIZATION WITHIN HIGHLY PRODUCTIVE COLD-CORE CYCLONIC EDDIES IN THE LEE OF THE HAWAIIAN ISLANDS
10:30 am	Rodriguez y Baena, A. M.; <u>Fowler, S. W.</u> ; Warnau, M.: COULD KRILL MOLTING AFFECT TH-234 BASED EXPORT FLUX ESTIMATES?
11:00 am	<u>Dulaiova, H.</u> ; Charette, M. A.; Mitchell, G. B.; Measures, C.; Henderson, P.; Supcharoen, R.; Biller, D.: NATURAL IRON FERTILIZATION IN THE SOUTHERN OCEAN: INVESTIGATING HORIZONTAL IRON TRANSPORT AND VERTICAL CARBON FLUX USING RADIUM ISOTOPES AND THORIUM-234.
11:15 am	<u>Waples, J. T.</u> ; Orlandini, K. A.; Klump, J. V.: FLUX AND REFLUX: QUANTIFYING THE CONTRIBUTION OF NEWLY RESUSPENDED PARTICULATE MATTER IN SHALLOW AQUATIC SYSTEMS.
11:30 am	<u>Klump, J. V.</u> ; Waples, J. T.; Weckerly, K.; Szmania, D. C.; Anderson, P. D.: TRACKING PARTICLE FLUXES, RESUSPENSION AND POC REMINERALIZATION VIA TIME SERIES MEASUREMENTS OF BE-7
11:45 am	<u>Benitez-Nelson, C. R.</u> ; Sannigrahi, P.; Pellechia, P.; Thunell, R. C.: PARTICULATE PHOSPHORUS COMPOSITION IN THE CARIACO BASIN, INSIGHTS FROM PHOSPHORUS AND CARBON NMR
1:30 pm	<u>Brandes, J. A.</u> ; Ingall, E.; Benitez-Nelson, C. ; Paterson, D.; de Jonge, M.; Northrup, P.: NANOSCALE DISTRIBUTION AND SPECIATION OF PHOSPHORUS WITHIN CARIACO BASIN SINKING PARTICULATES
1:45 pm	Burke, A.; <u>Lomas, M. W.</u> ; Ammerman, J. W.; Dyhrman, S. T.: DOES ASSIMILATION OF DISSOLVED ORGANIC PHOSPHORUS SUPPORT PARTICULATE PHOSPHORUS EXPORT FLUXES IN THE SARGASSO SEA?
2:00 pm	<u>Sekula, E. N.</u> ; Benitez-Nelson, C.; Thunell, R.; Tappa, E.; Styles, R. M.: PHOSPHORUS CYCLING IN A SUBOXIC BASIN
2:15 pm	<u>Young, E. B.</u> : NEARSHORE NUTRIENT FLUXES AND ORGANIC P USE BY BENTHIC ALGAE
2:30 pm	<u>Albertin, A. R.</u> ; Anderson, M. W.; Sickman, J. O.; Pinowska, A.; Stevenson, R. J.: VERTICAL FLUX OF NUTRIENTS IN FLORIDA SPRINGS AND ITS RELATIONSHIP TO PERSISTENCE OF ALGAL MATS
3:00 pm	<u>Aguilar, C.</u> ; Cuhel, R. L.: BIOGEOCHEMICAL CYCLING INTERRUPTED: BENTHIC BIVALVE FILTER-FEEDING ALTERS BASIN-SCALE NUTRIENT CYCLING.
3:15 pm	<u>Deibel, D. R.</u> ; Parrish, C. C.; Thompson, R. J.: EFFECT OF THE SPRING PHYTOPLANKTON BLOOM ON LIPID CLASS AND FATTY ACID CONTENT OF BENTHIC BOUNDARY LAYER INVERTEBRATES AT SUB-ZERO WATER TEMPERATURES
3:30 pm	<u>Schreiber, F.</u> ; de Beer, D.: CRUCIAL BUT UNMEASURED: IN-SITU MICROPROFILES OF NITRIC OXIDE IN UNDISTURBED MARINE AND FRESHWATER SEDIMENTS

(\*) represents Tutorial presentations

3:45 pm	Fuchsman, C. A.; Murray, J. W.; Konovalov, S. K.: MASS BALANCE OF NITROGEN IN THE SUBOXIC ZONE OF THE BLACK SEA: VARIABLE IMPORTANCE OF ORGANIC NITROGEN FLUXES	3:30 pm	Robinson, K. L.; Frazer, T. K.; Jacoby, C. A.; Youngbluth, M. J.: INTERACTIONS BETWEEN PHYTOPLANKTON, MICRO- AND MESOZOOPLANKTON IN RIVER-DOMINATED COASTAL SYSTEMS ALONG THE BIG BEND REGION, FLORIDA, USA
4:00 pm	Lam, P.; Lavik, G.; Jensen, M. M.; Thamdrup, B.; Hamersley, M. R.; Kuypers, M. M.: MARINE NITROGEN CYCLE REVISITED – ENIGMA FROM MARINE SUBOXIC WATER COLUMNS	3:45 pm	Sylvan, J. B.; Ammerman, J. W.: DISTRIBUTION OF INORGANIC AND ORGANIC NUTRIENTS ON THE LOUISIANA SHELF DURING SPRING AND SUMMER 2004 AND ITS IMPLICATIONS FOR SUMMER HYPOXIA FORMATION
4:30 pm	Goebel, N. L.; Edwards, C. A.; Church, M. J.; Achilles, K. M.; Zehr, J. P.: RELATIVE CONTRIBUTIONS OF THREE CYANOBACTERIA PHYLOTYPES TO TOTAL NITROGEN (N <sub>2</sub> ) FIXATION AT STATION ALOHA	4:00 pm	Corredor, J. E.; Morell, J. M.; Lopez, J. M.; Cabrera, A.; Antoun, H.: WHO PUT OUT THE LIGHT? CARIBBEAN DEEP PHYTOPLANKTON COMMUNITY RESPONSE TO ORINOCO RIVER PLUME INTRUSION
4:45 pm	Olson, N. D.; Takabayashi, M.: THE NITROGENASE EXPRESSION OF A DIAZOTROPHIC CYANOBACTERIAL SYMBIONT IN CORALS AND ITS POTENTIAL ROLE IN THE CORAL REEF NITROGEN CYCLE.	4:30 pm	Williams, W. J.; Carmack, E. C.; Vagle, S.: SEASONAL VARIATION AND WIND DRIVEN ASPECTS OF THE MACKENZIE RIVER PLUME
5:00 pm	Yamamoto, A.; Cromar, N. J.; Sweeney, D. G.; Nixon, J. B.; Fallowfield, H. J.: NITROGEN CYCLING IN WASTE STABILIZATION PONDS	4:45 pm	Reifel, K. M.; Johnson, S.; DiGiacomo, P. M.; Jones, B. H.: CORRELATIONS BETWEEN IN SITU PARAMETERS IN STORMWATER PLUMES: CAN PLUMES BE TRACKED USING OCEAN COLOR?
5:15 pm	Russell, M. J.; Jordan, T. E.; Weller, D. E.: NITROGEN TO PHOSPHORUS RATIOS IN ANTHROPOGENIC INPUTS AND WATERSHED DISCHARGES TO CHESAPEAKE BAY	5:00 pm	Twiss, M. R.; Macleod, I. R.: PHYTOPLANKTON COMMUNITY COMPOSITION AND HEALTH MEASURED USING FLUORIMETRIC TECHNIQUES ALONG WATER QUALITY GRADIENTS IN TRIBUTARIES TO LAKE ONTARIO

## SS39: RIVER PLUME DYNAMICS AND BIOGEOCHEMISTRY

Chair(s):	John Reinfelder, reinfelder@envsci.rutgers.edu Tom Frazer, frazer@ufl.edu
Location:	Eldorado Ana. North
1:30 pm	Chant, R. J.; Reinfelder, J. R.; Frazer, T. K.; Houghton, R.; Glenn, S. M.; Schofield, O.; Wilkin, J.; Chen, R. F.; Zhou, M.: CIRCULATION AND MIXING OF THE HUDSON RIVER OUTFLOW: IMPLICATIONS ON THE TRANSPORT AND TRANSFORMATION OF TERRESTRIAL MATERIAL INTO THE COASTAL OCEAN.
1:45 pm	Chen, R. F.; Gardner, G. B.; Huang, W.; Peri, F.: CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) DYNAMICS IN THE HUDSON RIVER PLUME
2:00 pm	Yost, J. M.; Moline, M. A.; Frazer, T. K.; Schofield, O. M.; Reinfelder, J. R.; Connolly, J. A.; Boland, C.: PHYTOPLANKTON COMMUNITY STRUCTURE AND DYNAMICS WITHIN A BUOYANT RIVER PLUME
2:15 pm	Reinfelder, J. R.; Frazer, T. K.; Wright, D. D.; Moline, M. A.; Schofield, O.: TRACE METAL ACCUMULATION IN ZOOPLANKTON OF THE HUDSON RIVER BUOYANT PLUME
2:30 pm	Filippino, K. C.; Mulholland, M. R.; Bernhardt, P. W.: NITROGEN AND CARBON DYNAMICS IN THE CHESAPEAKE BAY OUTFLOW PLUME
3:00 pm	Mulholland, M. R.; Filippino, K. C.; Bernhardt, P. W.; Mondragon, L.; Zehr, J. P.: N <sub>2</sub> FIXATION IN MID-ATLANTIC COASTAL WATERS
3:15 pm	Conmy, R. N.; Heil, C. A.; Coble, P. G.: SEASONAL VARIATIONS IN CDOM SPECTRAL PROPERTIES AND DISTRIBUTION ON THE SOUTHWEST FLORIDA SHELF

3:30 pm	Robinson, K. L.; Frazer, T. K.; Jacoby, C. A.; Youngbluth, M. J.: INTERACTIONS BETWEEN PHYTOPLANKTON, MICRO- AND MESOZOOPLANKTON IN RIVER-DOMINATED COASTAL SYSTEMS ALONG THE BIG BEND REGION, FLORIDA, USA
3:45 pm	Sylvan, J. B.; Ammerman, J. W.: DISTRIBUTION OF INORGANIC AND ORGANIC NUTRIENTS ON THE LOUISIANA SHELF DURING SPRING AND SUMMER 2004 AND ITS IMPLICATIONS FOR SUMMER HYPOXIA FORMATION
4:00 pm	Corredor, J. E.; Morell, J. M.; Lopez, J. M.; Cabrera, A.; Antoun, H.: WHO PUT OUT THE LIGHT? CARIBBEAN DEEP PHYTOPLANKTON COMMUNITY RESPONSE TO ORINOCO RIVER PLUME INTRUSION
4:30 pm	Williams, W. J.; Carmack, E. C.; Vagle, S.: SEASONAL VARIATION AND WIND DRIVEN ASPECTS OF THE MACKENZIE RIVER PLUME
4:45 pm	Reifel, K. M.; Johnson, S.; DiGiacomo, P. M.; Jones, B. H.: CORRELATIONS BETWEEN IN SITU PARAMETERS IN STORMWATER PLUMES: CAN PLUMES BE TRACKED USING OCEAN COLOR?
5:00 pm	Twiss, M. R.; Macleod, I. R.: PHYTOPLANKTON COMMUNITY COMPOSITION AND HEALTH MEASURED USING FLUORIMETRIC TECHNIQUES ALONG WATER QUALITY GRADIENTS IN TRIBUTARIES TO LAKE ONTARIO
5:15 pm	Martinet, M. C.; Dahm, C. N.: THE EFFECTS OF WASTEWATER TREATMENT PLANT EFFLUENT ON THE FATE OF NO <sub>3</sub> IN THE SHALLOW ALLUVIAL AQUIFER ALONG THE RIO GRANDE RIVER, NEW MEXICO, USA.
5:30 pm	Spivey, A. J.: LAKE ONTARIO WATER QUALITY MONITORING MODEL

## SS42: GELATA ON THE EDGE: INNOVATIVE APPROACHES TO UNDERSTANDING THE DIVERSITY AND ECOLOGY OF GELATINOUS ORGANISMS

Chair(s):	Rebecca D. Scheinberg Hoover, rebecca@mbari.org Steven H.D. Haddock, haddock@mbari.org
Location:	Hilton Mesa C
9:45 am	Madin, L. P.; Horgan, E. F.; Gallager, S.; Eaton, J.; Girard, A.: LAPIS: AN IMAGING SURVEY INSTRUMENT FOR GELATINOUS ZOOPLANKTON~
10:15 am	Robison, B. H.; Sherlock, R. E.; Reisenbichler, K. R.; Osborn, K. J.: BATHYPELAGIC GELATA
10:30 am	Pagès, F.; Lindsay, D. J.; Madin, L. P.; Hopcroft, R.; Wiebe, P. H.; Horgan, E.; Ortman, B.: A COMPREHENSIVE ASSESSMENT OF GELATINOUS ZOOPLANKTON DIVERSITY IN THE SARGASSO SEA DOWN TO 5000M DEPTH.
11:00 am	Choe, N.; Deibel, D.: USE OF THE STATOLITH AS AN AGE INDICATOR FOR THE STUDY OF THE LIFE HISTORY OF APPENDICULARIANS

(\*) represents Invited presentations

FRIDAY

11:15 am	<u>Houghton, J. D.</u> ; Doyle, T. K.; Davenport, J.; Hays, G. C.: DEVELOPING A SIMPLE, RAPID METHOD FOR IDENTIFYING AND MONITORING JELLYFISH AGGREGATIONS FROM THE AIR	2:30 pm	Chiaverano, L. M.; Graham, W. M.: SEASONAL DYNAMICS OF PARASITISM AND ITS EFFECT ON MORPHOLOGY AND REPRODUCTION OF THE MOON JELLYFISH <i>AURELIA</i> SP. FROM A MARINE LAKE IN CROATIA
11:30 am	<u>Reisenbichler, K. R.</u> ; Okuda, C. M.; Robison, B. H.: IN SITU MIDWATER RESPIROMETRY AT MBARI: CURRENT DEVELOPMENT, INITIAL RESULTS AND FUTURE PLANS	3:00 pm	Ottensmeyer, A.; Madin, L. P.; <u>Horgan, E. F.</u> ; Harbison, G. R.; Sampson, B.; Myers, R.: OCCURRENCE OF GELATINOUS ZOOPLANKTON IN THE WESTERN NORTH ATLANTIC: A BLUE-WATER DIVE ANALYSIS
11:45 am	Sherlock, R.; <u>Matsumoto, G. I.</u> ; Robison, B. H.: LITTLE RED JELLIES: RESOURCE PARTITIONING IN THE DEEP?	3:15 pm	<u>Doyle, T. K.</u> ; Houghton, J. D.; Buckley, S. M.; Hays, G. C.; Davenport, J.: THE BROAD-SCALE DISTRIBUTION OF FIVE JELLYFISH SPECIES ACROSS A TEMPERATE COASTAL ENVIRONMENT
1:30 pm	<u>Båmstedt, U.</u> : REPRODUCTION DRIVES VERTICAL MIGRATION IN DEEPWATER ZOOPLANKTON. A GENERAL THEORY EXEMPLIFIED BY THE CORONATE SCYPHOMEDUSA PERIPHULLA PERIPHULLA.	3:30 pm	Ford, M. D.; Link, J. S.: ENERGETIC SIGNIFICANCE OF CTENOPHORES IN THE DIET OF SPINY DOGFISH <i>SQUALUS ACANTHIAS</i> AND OTHER PREDATORS ON THE NORTHEAST CONTINENTAL SHELF OF THE U.S.
1:45 pm	<u>Graham, W. M.</u> ; Costello, J. H.; Colin, S. P.; Malej, A.; Lucic, D.; Onofri, V.; Benovic, A.: SWIMMING WITH MESOPELAGICS	3:45 pm	Marshalonis, D.; Pinckney, J. L.; Richardson, T. L.: EFFECTS OF HYDROMEDUSAE GRAZING UPON ALgal COMMUNITY COMPOSITION IN A TEMPERATE TIDAL CREEK ESTUARY
2:00 pm	<u>Haddock, S. H.</u> ; Harbison, G. R.; Podar, M.: MOLECULAR AND MORPHOLOGICAL CLUES TO BENTHIC-PLANKTONIC LINKS IN THE COMB JELLIES (CTENOPHORA)		
2:15 pm	Hoover, R. S.; Haddock, S. H.; Christianson, L. M.: THE BENEFITS OF HITCHING A GELATINOUS RIDE: A MOLECULAR INVESTIGATION OF THE FEEDING ECOLOGY OF DEEP-SEA AMPHIPODS		

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## SUNDAY AT-A-GLANCE

9 AM - 5 PM	Digital Photography for Aquatic Scientists Workshop - Hilton Hotel, Mesa A	9 AM - 5 PM
1:00 - 9:00 PM	Presentation Room - Hilton Hotel, Ortiz	1:00 - 9:00 PM
1:00 - 9:00 PM	Speaker Ready Room - Hilton Hotel, Aspen	1:00 - 9:00 PM
3:00 - 9:00 PM	Registration - Eldorado Pavilion	3:00 - 9:00 PM
6:30 - 9 PM	Welcome Mixer/Reception - Eldorado Pavilion	6:30 - 9 PM

## MONDAY AT-A-GLANCE

7 AM - 5 PM	Registration - Eldorado Pavilion Prefunction Area	7 AM - 5 PM							
7 AM - 5 PM	Email Room - La Fonda Hotel, Stihla	7 AM - 5 PM							
7 AM - 7 PM	Presentation Room - Hilton Hotel, Ortiz	7 AM - 7 PM							
7 AM - 7 PM	Speaker Ready Room - Hilton Hotel, Aspen	7 AM - 7 PM							
8:30 - 9:30 AM	Opening and Plenary Address - Lensic Theater  J. Craig Venter, J. Craig Venter Institute, Rockville, MD  Genomics: From Medicine to the Environment	8:30 - 9:30 AM							
9:30 AM	BREAK	9:30 AM							
Location	Eldorado	Hilton							
Room	Anasazi North	Anasazi South	Sunset	Zia	Mesa A	Mesa B	Mesa C	La Terraza	Location
Session	CS13	SS04	SS07	CS17		SS12	CS21	SS37	Room
Title	Invasive Species	Dissolved Organic Matter Quality	Carbon Cycling at the Land-Ocean Interface	Molecular Techniques and Perspectives		ASLO Multicultural Student Symposium	Physical-biological Interactions	The Influence of Global Climate Change on Biological Processes in Surface Waters	Title
9:45 AM	Hambright, K. D.	Koch, B. P.	Jahneke, R. A.	Gast, R. J.		Cousins, J. L.	Nielsen, S. L.	Tortell, P. D.	9:45 AM
10:00 AM	De Stasio, B. T.	Bialk, H. M.	Jahneke, R. A.	Petrikk, K. L.		Babineaux, C. R.	Skinner, A. C.	Tortell, P. D.	10:00 AM
10:15 AM	Schrumpf, M. B.	Gonsior, M.	Nagai, T.	Erdner, D. L.		McCadney, D. M.	Lawson, R. L.	Sedwick, P. N.	10:15 AM
10:30 AM	Julius, M. L.	Hartnett, H. E.	Lucas, A. J.	Hynes, A. M.		Rodriguez-Calderon, C.	Capello, H. E.	Behrenfeld, M. J.	10:30 AM
10:45 AM					BREAK				10:45 AM
Session	CS13 (con't.)	SS04 (con't.)	SS07 (con't.)	CS17 (con't.)		SS12 (con't.)	CS21 (con't.)	SS37 (con't.)	Session
Title	Invasive Species	Dissolved Organic Matter Quality	Carbon Cycling at the Land-Ocean Interface	Molecular Techniques and Perspectives		ASLO Multicultural Student Symposium	Physical-biological Interactions	The Influence of Global Climate Change on Biological Processes in Surface Waters	Title
11:00 AM	Thabes, M. C.	Cressman, K.	Salisbury, J.	Fortenberry, G.		Davis, J.	Brzezinski, M. A.	Hutchins, D. A.	11:00 AM
11:15 AM	Strecker, A. L.	Ingall, E. D.	Sauer, M. J.	Rocha, A. M.		Buschur, J. M.	Anderson, C. R.	Feng, Y.	11:15 AM
11:30 AM	Manca/Marina, M. M.	Orellana, M. V.	Lohrenz, S. E.	Penton, C. R.		Miles, S. G.	Rines, J.	Fu, F.	11:30 AM
11:45 AM	-	Maie, N.	Miller, W. D.	Comte, J.		Hill, R. T.	Donaghay, P. L.	Michelou, V. K.	11:45 AM
12:00 - 1:30 PM	LUNCH - ON YOUR OWN								12:00 - 1:30 PM
12:00 - 1:30 PM	ASLO Student Meeting - La Fonda Ballroom								12:00 - 1:30 PM
12:00 - 5:00 PM	Exhibitor Set-up - La Fonda Mezzanine								12:00 - 5:00 PM
Session	SS24	SS21	SS07 (con't.)	Mystery	SS26	SS12 (con't.)	CS21 (con't.)	SS37 (con't.)	Session
Title	The Aquatic Gel Phase, Its Role in Biogeochemical Cycles	Production and Cycling of Dissolved Organic Matter in Aquatic Systems	Carbon Cycling at the Land-Ocean Interface	Mystery Session	Understanding and Modeling Aquatic Ecosystems Using Fundamental Laws	ASLO Multicultural Student Symposium	Physical-biological Interactions	The Influence of Global Climate Change on Biological Processes in Surface Waters	Title
1:30 PM	Verdugo, P.	Aluwihare, L. I.	Friedrichs, M.	?????	Vallino, J. J.	Caceres, R. I.	Berx, B.	Rose, J. M.	1:30 PM
1:45 PM	Verdugo, P.	Aluwihare, L. I.	Druon, J. N.	?????	Harris, L. A.	Andresen, C. G.	Ohman, M. D.	Gessner, M. O.	1:45 PM
2:00 PM	Harris, J.	Keller, D. P.	Mannino, A.	?????	Irwin, A. J.	Lie, A.	Adornato, L. R.	Kumagai, M.	2:00 PM
2:15 PM	Liu, Z.	Goldberg, S. J.	DeAlteris, J. A.	?????	Finkel, Z. V.	-	Zeeman, S. I.	Gooseff, M. N.	2:15 PM
2:30 PM	Schwehr, K. A.	Ogawa, H.	Bauer, J. E.	?????	Meysman, F.	Martinez, C. A.	-	Rose, K. C.	2:30 PM
2:45 PM					BREAK				2:45 PM
Session	SS24 (con't.)	SS21 (con't.)	SS07 (con't.)	SS43	SS19	SS12 (con't.)	CS23	SS37 (con't.)	Session
Title	The Aquatic Gel Phase, Its Role in Biogeochemical Cycles	Production and Cycling of Dissolved Organic Matter in Aquatic Systems	Carbon Cycling at the Land-Ocean Interface	Aquatic Viruses: Friends or Foes?	Supply-side Ecology: What Have We Learned Since (Lewin) 1986?	ASLO Multicultural Student Symposium	Remote Sensing and Emerging Technologies	The Influence of Global Climate Change on Biological Processes in Surface Waters	Title
3:00 PM	Ploug, H.	Carlson, C. A.	Louchouarn, P.	Allen, M. J.	Menge, B. A.	Campbell-Malone, R.	Hendee, J. C.	Sobrino, C.	3:00 PM
3:15 PM	Slezak, D.	Hansell, D. A.	Hunt, C. W.	Vega Thurber, R. L.	Menge, B. A.	Brito, M.	Armstrong, R. A.	Eakin, C. M.	3:15 PM
3:30 PM	Hung, C. C.	Knapp, A. N.	Cossarini, G.	Sawstrom, C.	Pineda, J.	Singleton, M. C.	Morrison, J. R.	Hylander, S.	3:30 PM
3:45 PM	Riedel, A.	Meador, T. B.	Huang, W.	Bouvier, T.	Rilov, G.	Thompson, W. E.	Volkmer, M. M.	Cottrell, M. T.	3:45 PM
4:00 PM	Ortega-Ruettura, E.	Hara, Seiko, S.	Gardner, G. B.	Ortmann, A. C.	Dudas, S. E.	Williams, B. D.	Drzewianowski, A. F.	Panzeca, C.	4:00 PM
4:15 PM					Dibacco, C.		BREAK		4:15 PM
4:00 - 6:00 PM	Poster Set-up - La Fonda Ballroom & New Mexico Room								4:00 - 6:00 PM
Session	SS24 (con't.)	SS21 (con't.)	SS07 (con't.)	SS43 (con't.)	SS19 (con't.)	SS12 (con't.)	CS23 (con't.)		Session
Title	The Aquatic Gel Phase, Its Role in Biogeochemical Cycles	Production and Cycling of Dissolved Organic Matter in Aquatic Systems	Carbon Cycling at the Land-Ocean Interface	Aquatic Viruses: Friends or Foes?	Supply-side Ecology: What Have We Learned Since (Lewin) 1986?	ASLO Multicultural Student Symposium	Remote Sensing and Emerging Technologies		Title
4:30 PM	Szlosek, J. E.	Dittmar, T.	Perkey, D. W.	Angly, F. E.	Woodson, C. B.	Sturdvant, S. K.	Greenfield, D. I.		4:30 PM
4:45 PM	Mohar, B.	Michel, C.	Raymond, P. A.	McDaniel, L. D.	Fuchs, H. L.	Nance, A. N.	Spear, A. H.		4:45 PM
5:00 PM	Boehme, J. R.	McCarthy, M. D.	Moyer, R. P.	Paul, J. H.	Shima, J. S.	Cowart, D. A.	Becker, R. H.		5:00 PM
5:15 PM	-	Maie, N.	Lansard, B.	Pagano, M. B.	Zacherl, D. C.	-	Nelson, J. R.		5:15 PM
5:30 PM	-	Floge, S. A.	Weston, N. B.	-	Paris, C. B.	-	Kostadinov, T. S.		5:30 PM
5:45 PM	-	Duan, S.	Edmonds, J. W.	-	Abelson, A.	-	Sieracki, M. E.		5:45 PM
6:00 - 7:00 PM	ASLO Business Meeting - Eldorado Anasazi South								6:00 - 7:00 PM
8:30 - 10:30 PM	Kegs & A Band - Eldorado Pavilion								8:30 - 10:30 PM

# TUESDAY AT-A-GLANCE

7 AM - 5 PM	Registration - Eldorado Pavilion Email Room - La Fonda Hotel, Stiha							7 AM - 5 PM			
7 AM - 5 PM	Presentation Room - Hilton Hotel, Ortiz							7 AM - 5 PM			
7 AM - 7 PM	Speaker Ready Room - Hilton Hotel, Aspen							7 AM - 7 PM			
Location	Eldorado				Hilton			La Fonda			
Room	Anasazi North	Anasazi South	Sunset	Zia	Mesa A	Mesa B	Mesa C	La Terraza			
Session	SS22	SS04 (con't.)	CS10	SS18	SS08	SS06	SS14	Room			
Title	Evolutionary Responses of Plankton Communities to Natural and Human-induced Stress	Dissolved Organic Matter Quality	Eutrophication and Nutrient Cycling	Predicting the Effect of Changes in the Terrestrial Environment on Aquatic DOC	Recruitment of Marine Larvae: Experimental and Modeling Studies	Biofilms in Aquatic Food Webs	New Technologies for the Study of Continental Margin Benthic Ecosystems	Mystery Session			
8:30 AM	Hairston, N. G.	Cotner, J. B.	Barnes, R. T.	Dillon, P. J.	Mullineaux, L. S.	Battin , T. J.	Williams, M. F.	?????			
8:45 AM	Hairston, N. G.	Tzortziou, M.	Altabet, M. A.	Dillon, P. J.	Mullineaux, L. S.	Battin , T. J.	Williams, M. F.	?????			
9:00 AM	Yoshida, T.	Neale, P. J.	Oczkowski, A. J.	Erlandsson, M.	Koebl, M.	Neu, T. R.	Shimmiel, G.	?????			
9:15 AM	DeMott, W. R.	Mead, R.	Crusius, J.	Clair, T. A.	Maldonado, E. M.	Lyon, D. R.	Parker, E. R.	?????			
9:30 AM	BREAK				Devlin, S. P.			Tengberg, A.			
9:30AM-6:00PM	Exhibits Open - La Fonda Mezzanine							9:30AM-6:00PM			
9:30AM-7:30PM	Plankton In Art Exhibition (Open to public) - La Fonda, New Mexico & Santa Fe Rooms							9:30AM-7:30PM			
Session	SS22 (con't.)	SS04 (con't.)	CS10 (con't.)	SS18 (con't.)	SS08 (con't.)	SS06 (con't.)	SS14 (con't.)	SS27			
Title	Evolutionary Responses of Plankton Communities to Natural and Human-induced Stress	Dissolved Organic Matter Quality	Eutrophication and Nutrient Cycling	Predicting the Effect of Changes in the Terrestrial Environment on Aquatic DOC	Recruitment of Marine Larvae: Experimental and Modeling Studies	Biofilms in Aquatic Food Webs	New Technologies for the Study of Continental Margin Benthic Ecosystems	Trace Metals, Microbial Processes, and Biogeochemical Cycles Through Space and Time			
9:45 AM	Dawson, M. N.	Swan, C. M.	Nydict, K. R.	Rosén, P.	Toonen, R. J.	Hill, W. R.	Breuer, E. R.	Morel, F. M.			
10:00 AM	Nagai, S.	Russ, M. E.	Smith, S. M.	Rusak, J. A.	Hedgecock, D.	Bellinger, B. J.	Hasemann, C.	Morel, F. M.			
10:15 AM	Pantel, J. H.	Reche, I.	Marcarelli, A. M.	Giesler, R.	Rock, J.	Muschiol, D.	Almroth, E. M.	Woo, E. S.			
10:30 AM	Kerfoot, W. C.	Hood, E.	Hill, B. H.	Bergamaschi, B. A.	Manahan, D. T.	Peters, L.	Marvaldi, J. H.	Xu, Y.			
10:45 AM	BREAK							10:45 AM			
Session	SS22 (con't.)	SS04 (con't.)	CS10 (con't.)	SS18 (con't.)	SS08 (con't.)	SS06 (con't.)	SS14 (con't.)	SS27 (con't.)			
Title	Evolutionary Responses of Plankton Communities to Natural and Human-induced Stress	Dissolved Organic Matter Quality	Eutrophication and Nutrient Cycling	Predicting the Effect of Changes in the Terrestrial Environment on Aquatic DOC	Recruitment of Marine Larvae: Experimental and Modeling Studies	Biofilms in Aquatic Food Webs	New Technologies for the Study of Continental Margin Benthic Ecosystems	Trace Metals, Microbial Processes, and Biogeochemical Cycles Through Space and Time			
11:00 AM	Thum, R. A.	McKnight, D. M.	Koop-Jakobsen, K.	Pellerin, B. A.	Powell, E. N.	Admiraal, W.	Crawford, M. M.	Park, H.			
11:15 AM	Avery, D. E.	Aiken, G. R.	Fairchild, G. W.	Morris, D. P.	Hofmann, G. E.	Goedkoop, W.	Delaune, L.	Dupont, C. L.			
11:30 AM	Fox, J. A.	Blodau, C.	Conde-Costas, C.	Sobczak, W. V.	Hirst, A. G.	Waizer, M. J.	Sweetman, A. K.	Mann, E. L.			
11:45 AM	Derry, A. M.	Westerhoff, P.	Hamilton, S. K.	Karlsson, J.	Rasmussen, L. L.	Hmelo, L. R.	Koster, M.	Kim, H. S.			
12:00 - 1:30 PM	LUNCH - ON YOUR OWN							12:00 - 1:30 PM			
12:00 - 1:30 PM	Student Forums - Various Locations							12:00 - 1:30 PM			
Session	SS20	SS21 (con't.)	CS10 (con't.)	SS25	SS08 (con't.)	CS24	SS14 (con't.)	SS27 (con't.)			
Title	Advances in Biogeochemical Modeling: Bridging Physics, Chemistry, and Biology	Production and Cycling of Dissolved Organic Matter in Aquatic Systems	Eutrophication and Nutrient Cycling	In Search of Allochthyony	Recruitment of Marine Larvae: Experimental and Modeling Studies	Species Interactions: Competition, Disease, Mutualism	New Technologies for the Study of Continental Margin Benthic Ecosystems	Trace Metals, Microbial Processes, and Biogeochemical Cycles Through Space and Time			
1:30 PM	Hood, R. R.	Anderson, T. R.	Fox, L. R.	Cole, J. J.	Jones, W. J.	Dinsdale, E. A.	Wenzhoefer, F.	Anbar, A. D.			
1:45 PM	Hood, R. R.	Kujawinski, E. B.	Kinney, E. L.	Doucett, R. R.	Biermann, J. L.	-	Hebert, A. B.	Wolfe-Simon, F.			
2:00 PM	Moore, J. K.	Longnecker, K.	Olsen, Y. S.	Van den Meersche, K.	Flechter, J.	Prince, E. K.	Nickell, L. A.	Aguilar-Islas, A. M.			
2:15 PM	Stock, C. A.	Passow, U.	Teleshberg, M.	Bukaveckas, P. A.	Nadaoka, K.	Mayali, X.	RABOUILLE, C.	Wisniewski, R. J.			
2:30 PM	Jourabchi, P.	Grossart, H. P.	Caffrey, J. M.	Hill, J. M.	Fetzer, I.	Yanik, E. L.	Barry, J. P.	Ussher, S. J.			
2:45 PM	BREAK							BREAK			
Session	SS20 (con't.)	SS21 (con't.)	CS10 (con't.)	SS25 (con't.)	SS31	CS24 (con't.)	CS04	SS27 (con't.)			
Title	Advances in Biogeochemical Modeling: Bridging Physics, Chemistry, and Biology	Production and Cycling of Dissolved Organic Matter in Aquatic Systems	Eutrophication and Nutrient Cycling	In Search of Allochthyony	Mortality Among Microbes	Species Interactions: Competition, Disease, Mutualism	Benthic-pelagic Interactions	Trace Metals, Microbial Processes, and Biogeochemical Cycles Through Space and Time			
3:00 PM	Schmid, M.	Cabaniss, S. E.	McCarthy, M. J.	Alin, S. R.	Lawrence, J. E.	Vanschoenwinkel, B. J.	Ask, J.	Lomas, M. W.			
3:15 PM	Katsev, S.	Davis, J. L.	Atilla, N.	Rosi-Marshall, E. J.	Lawrence, J. E.	Arnott, S. E.	Viollier, E.	Butler, A.			
3:30 PM	Meile, C.	Karl Kaiser, D.	Nowlin, W. H.	Pace, M. L.	Rosenberg, G.	McShane, R. R.	Hannides, A. K.	Hopkinson, B. M.			
3:45 PM	Pallud, C.	Steen, A. D.	Graneli, W.	Solomon, C. T.	Vardi , A.	Raub, S. C.	Holyoke, R. R.	Saito, M. A.			
4:00 PM	Arndt, S.	Cai, Y.	-	Gutseit, K.	Bidle, K. D.	-	Huzarska, K.	Taylor, G. T.			
4:15 PM	BREAK							BREAK			
Session	SS20 (con't.)	SS21 (con't.)	SS36	SS25 (con't.)	SS31 (con't.)	SS45	CS04 (con't.)	SS27 (con't.)			
Title	Advances in Biogeochemical Modeling: Bridging Physics, Chemistry, and Biology	Production and Cycling of Dissolved Organic Matter in Aquatic Systems	Dynamics of Trace Metal Stoichiometry in Plankton: Causes, Effects, and Implications	In Search of Allochthyony	Mortality Among Microbes	The Paradox of Didymosphenia geminata	Benthic-pelagic Interactions	Trace Metals, Microbial Processes, and Biogeochemical Cycles Through Space and Time			
4:15 PM	BREAK							BREAK			
4:30 PM	Thullner, M.	Klauser, L.	Hutchins, D. A.	BREK	con't. previous	BREAK	con't. previous	BREAK			
4:45 PM	Tsandev, I.	Zierzogel, K.	Hutchins, D. A.	Tank, J. L.	Paesani, V. I.	Kilroy, C.	Bukterica, M.	Arvin, S. A.			
5:00 PM	Haefner, J. W.	Leenheer, J. A.	Quigg, A. S.	Hopkinson, C. S.	Berman , T.	Luecke, C.	Steigenberger, S. J.	4:30 PM			
5:15 PM	-	Griffith, D. R.	Twining, B. S.	Hoffman, J. C.	Brown, C. M.	Bothwell, M. L.	Johnson, C. R.	4:45 PM			
5:30 PM	-	Johnson, L. T.	Beck, A. J.	Preston, N. D.	Zepp, R. G.	Cary, S. C.	Cornwell, J. C.	5:00 PM			
5:45 PM	-	Kaplan, L. A.	Baines, S. B.	Duarte, C. M.	Kimmance, S. A.	Lindstrom, E. A.	Milbrandt, E. C.	5:15 PM			
7:30 - 8:30 PM	Plenary Address - Lencis Theater (Limited seating, open to public - pick up tickets in advance at Lencis Box Office)							7:30 - 8:30 PM			
	David Thomas, University of Wales, Bangor, United Kingdom										
	Plankton as an Inspiration in Art										

## WEDNESDAY AT-A-GLANCE

7 AM - 12 PM	Registration - Eldorado Pavilion	7 AM - 12 PM
7 AM - 5 PM	Presentation Room - Hilton Hotel, Ortiz	7 AM - 5 PM
7 AM - 5 PM	Speaker Ready Room - Hilton Hotel, Aspen	7 AM - 5 PM
7 AM - 5 PM	Email Room - La Fonda Hotel, Stiha	7 AM - 5 PM
8:30 - 10:00 AM	Awards Talks - Lensic Theater	8:30 - 10:00 AM
	Introduction of Awardees - Sybil Seitzinger, ASLO President	
	Recipient of the Distinguished Service Award: C. Susan Weiler, Whitman College, Walla Walla, WA	
	Recipient of the John H. Martin Award	
	Recipient of the Alfred C. Redfield Lifetime Achievement Award: Jorg Imberger, University of Western Australia, Crawley, WA, Australia	
10:00 - 11:00 AM	GEOTRACES Town Hall Meeting - Hilton Hotel, Mesa A	10:00 - 11:00 AM
10 AM - 1:30 PM	Poster Sessions - La Fonda Ballroom & New Mexico Room	10 AM - 1:30 PM
10 AM - 6 PM	Plankton In Art Exhibition (Conference participants and guests only; closed to public) - La Fonda, New Mexico & Santa Fe Rooms	10 AM - 6 PM
10 AM - 6 PM	Exhibits Open - La Fonda Mezzanine	10 AM - 6 PM
11 AM - 12PM	NSF BOP Town Hall Meeting - Hilton Hotel, Mesa B	11 AM - 12PM
12:00 - 1:30 PM	LUNCH - ON YOUR OWN	12:00 - 1:30 PM
12:25 - 1:15 PM	From Ship to shore to the Newspaper: Workshop on Science Journalism - Hilton Hotel, Mesa B	12:25 - 1:15 PM
1:30 - 2:45 PM	Awards Talks - Lensic Theater	1:30 - 2:45 PM
	Introduction of Awardees - Sybil Seitzinger, ASLO President	
	Recipient of the Raymond Lindeman Award: Kelly M. Dorgan, Darling Marine Center, Walpole, ME	
	Recipient of the Ruth Patrick Award: George W. Kling, University of Michigan, Ann Arbor, MI	
	Recipient of the G. Evelyn Hutchinson Award: John P. Smol, Queen's University, Kingston, ON, Canada	
2:45 - 6:00 PM	Poster Sessions - La Fonda Ballroom & New Mexico Room	2:45 - 6:00 PM
3:00 - 5:00 PM	Town Hall Meeting: Ocean Carbon and Biogeochemistry (OCB) - Hilton Hotel, Mesa B	3:00 - 5:00 PM
3:00 - 6:00 PM	Advancements in Flux Measurement Techniques Workshop - Hilton Hotel, Mesa C	3:00 - 6:00 PM
6:00 - 8:00 PM	Student Mixer - Eldorado Pavilion	6:00 - 8:00 PM
8:00 - 9:00 PM	"Proteus" Film Showing - Lensic Theater (Open to public - pick up tickets in advance at Lensic Box Office)	8:00 - 9:00 PM
8:30 - 10:30 PM	Kegs & A Band - Eldorado Pavilion	8:30 - 10:30 PM

# POSTER SESSIONS AT-A-GLANCE

Biogeochemical Cycles (BGC)	Ecosystem Change (CHG)	Dissolved Organic Matter (DOM)	Ecology (ECOL)	Education (EDUC)	Lower Food Web (LOWER)	Metal and Chemistry (METAL)	Physical (PHYS)
Ballroom AM Session	New Mexico AM & PM Sessions	Ballroom AM Session	Ballroom PM Session	Ballroom PM Session	Ballroom PM Session	Ballroom AM Session	Ballroom PM Session
01. Alexander, K. B. 02. Lenes, J. M. 03. Jiang, L. Q. 04. Gregory, T. K. 05. WILLIAMS, S. Y. 06. Rich, J. J. 07. Royer, T. V. 08. Panetta, R. J. 09. Henderson, N. D. 10. Podlasca, A. 11. Kyle, M. 12. Figueiroa-Nieves,D. 13. Venn, C. 14. Steger, L. D. 15. Paez, C. I. 16. Cable, P. H. 17. Koszelnik, P. 18. Roberts, Q. N. 19. Whitenour, C. A. 20. Porubsky, W. P. 21. Canion, A. K. 22. Sims, S. E. 23. Yarbro, L. A. 24. JUNG, S. 25. Zaneveld, J. R. 26. Procise, L. A. 27. Toetz, D. W. 28. Hayes, K. C. 29. Thronson, A. M. 30. Velez, J. F. 31. Benitez Joubert, R. 32. Cherrier, J. 33. Spencer, R. G. 34. Mogollon, J. M. 35. Krishnamurthy, A. 36. Wilson, B. A. 37. Das, A. 38. McDonald, C. P. 39. Ossianander, L. A. 40. Koch, J. C. 41. Lyons, G. C. 42. Pilskaln, C. H. 43. Lopez, J. M. 44. Hammond, D. E. 45. Mohler, J. A. 46. Hidaka, K. 47. Dubois, S. L. 48. Williams, B. 49. Kish, J. L. 50. DING, Y. 51. Moon, A. 52. Chateauvert, C. A. 53. Heidenreich, M. J. 54. Bernhardt, P. W. 55. del Re, L. W. 56. Pennebaker, K. M. 57. Boneillo, G. E. 58. Daggett, C. T. 59. Czubakowski, J. L. 60. Benner, I. 61. Paerl, R. W. 62. Morse, R. E. 63. Salm, C. R. 64. Haddock, T. L. 65. Pritchard, L. B. 66. Mueller-Spitz, S. R. 67. Palacios, S. L.	01. Li, X. 02. Colón-Ortiz, L. 03. Kalanetra, K. M. 04. Swan, B. K. 05. Hall, J. R. 06. Ryan, G. T. 07. Zeglin, L. H. 08. Hemble, L. K. 09. Rivera, A. 10. García-Vázquez,S. 11. Thomson, F. K. 12. Weisz, E. J. 13. Brown, M. E. 14. Onodera, J. 15. Jessup, S. L. 16. Erickson, J. M. 17. Neubauer, S. C. 18. Moore, E. K. 19. Eddie, B. J. 20. Stanish, L. 21. Mitchell, K. R. 22. Meixner, T. 23. Tibbets, T. M. 24. Tanaka, Y. 25. von Dassow, P. 26. Yates, K. K. 27. Souder, H. L. 28. Maier, C. 29. Watanabe, A. 30. Suzuki, A. 31. Kokorite, I. 32. Riise, G. 33. Koester, Julie, A. 34. Lee, P. A. 35. Dupuis, A. 36. Brown, C. W. 37. Hunt, G. L. 38. Wong, C. S. 39. Tucker, A. J. 40. Bayha, K. M.	01. Lundqvist, A. M. 02. Visser, L. A. 03. Burgos-Caraballo,S. 04. Samo, T. J. 05. Magana, H. A. 06. Rusak, S. A. 07. Walker, B. D. 08. Eglete, L. 09. Eiler, A. 10. Larsen, L. G. 11. Gonsior, M. 12. Maie, N. 13. Wickland, K. P. 14. Chen, M. 15. Duhamel, S. 16. Yamashita, Y. 17. Prasill, O. 18. Lehman, J. C. 19. Gustafson, E. S. 20. Shank, G. C. 21. Porter, J. A. 22. Valentine, S. K. 23. Hammond, L. M. 24. Fielman, K. T. 25. Rodriguez, G. E. 26. Muhlin, J. F. 27. Gerrish, G. A. 28. Vardaro, M. F. 29. Edgington, D. R. 30. Norrbom, M. F. 31. Francis Rodriguez,V 32. Arneson, L. K. 33. Regula, C. 34. Feitl, K. E. 35. Williams, J. J. 36. Brown, C. W. 37. Hunt, G. L. 38. Wong, C. S. 39. Simmons, K. 40. Bayha, K. M.	01. Ocasio Torres,M.E. 02. Sierra, R. 03. Carrion, C. N. 04. Ortega, L. A. 05. Hassett, R. P. 06. Shimizu, Y. 07. Batta Lona, P. G. 08. Yasuda, N. 09. Gast, R. J. 10. Caceres, C. E. 11. Myers, T. L. 12. Falls, J. A. 13. Zavala Lopez , A. 14. Haggblom, M. M. 15. Wegley, L. 16. Acharya, K. 17. Massaut, L. 18. Smith Siuda, A. N. 19. Hodgson, J. R. 20. Harvey Michel, M. H 21. Chaffey, T. F. 22. Watson, J. R. 23. Hammond, L. M. 24. Fielman, K. T. 25. Rodriguez, G. E. 26. Muhlin, J. F. 27. Gerrish, G. A. 28. Vardaro, M. F. 29. Edgington, D. R. 30. Norrbom, M. F. 31. Francis Rodriguez,V 32. Arneson, L. K. 33. Regula, C. 34. Feitl, K. E. 35. Williams, J. J. 36. Wiggert, J. D. 37. Parrish, A. N. 38. Frashure, K. M. 39. Simmons, K. 40. Bayha, K. M.	01. Williams, N. B. 02. Frankic, A. 03. Ruperto , J. M. 04. Mayo, M. 05. Griffith, J. F. 06. Cline, A. H. 07. White, A. E. 08. Doyle, R. D. 09. Zayas-Santiago,C. 10. Badger, C. 11. Stoner, E. W. 12. Ocampo, L. M. 13. Griffith, J. J. 14. Swearman, J. W. 15. Bauska, T. K. 16. Morris, M. S. 17. Pierce, K. 18. Kormanyos, R. E. 19. Bodnar, E. 20. Yamato, M. 21. Matich, P. 22. Nosal, A. P. 23. Kniffin, M. L. 24. Knowlton, P. 25. Rossell, L. A. 26. Fan, X. 27. Knesting, K. 28. Friberg, S. E. 29. Harrold, S. A. 30. Blachly, C. R. 31. Jones, P. L. 32. Thurston, K. J. 33. Clayton, S. 34. Allen, L. 35. Johnson, T. L. 36. Martinez-Rivera, E. 37. Mitchelmore, C. L. 38. Kuenzel, N. A. 39. McCormick, J. M. 40. Dunning, K. A. 41. Leon, R. I. 42. Levas, S. J. 43. Kading, T. J. 44. Engstrom, M. E. 45. Tully, B. J. 46. Guajardo, M. B. 47. Martin, R. A.	01. Lockwood, R. S. 02. Nascimento, F. J. 03. Karlson, A. M. 04. Frazier, L. 05. LaGier, M. J. 06. Durbin, E. G. 07. Liu, Y. 08. Seda Miró, J. M. 09. Orcutt, K. M. 10. Ishikawa, K. 11. Stepanauskas, R. 12. Steele, J. A. 13. Acuña, V. 14. Gallegos, C. L. 15. Sanchez, B. I. 16. Coloso, J. J. 17. Doyle, R. D. 18. Frick, W. E. 19. Greene, A. 20. Gamble, C. A. 21. Vietti, K.	01. Wiegrand, M. D. 02. Ithier-Guzman, W. 03. Walsh, E. J. 04. Li, L. 05. Jeffrey, W. H. 06. Rogers, J. E. 07. Ortiz-Rosa, S. 08. Hayakawa, K. 09. Young, D. L. 10. Loadman, N. L. 11. Goodwin, D. S. 12. Hollweg, T. A. 13. Shiller, A. M. 14. Anderson, C. M. 15. Poulaein, A. J. 16. Glass, J. B. 17. Pretto, P. 18. Maire, O. 19. Novembre, N. J. 20. Smith, C. G. 21. Steinbuck, J. V. 22. Weitzman, J. S. 23. Briggs, R. A.	01. Hylton, T. R. 02. Lasternas, S. 03. Moellendorf, S. M. 04. Incze, L. S. 05. Gardner, W. S. 06. Tandon, A. 07. Hernández-Cruz,L. 08. Vega-Rodriguez,M. 09. Moore, C. 10. Cavanaugh, K. C. 11. Jannasch, H. W. 12. Poulton, N. J. 13. Spagnoli, F. 14. Stahl, H. 15. Burke, K. 16. Banahan, S. 17. Nunnally, C. C. 18. Maire, O. 19. Novembre, N. J. 20. Smith, C. G. 21. Steinbuck, J. V. 22. Weitzman, J. S. 23. Briggs, R. A.

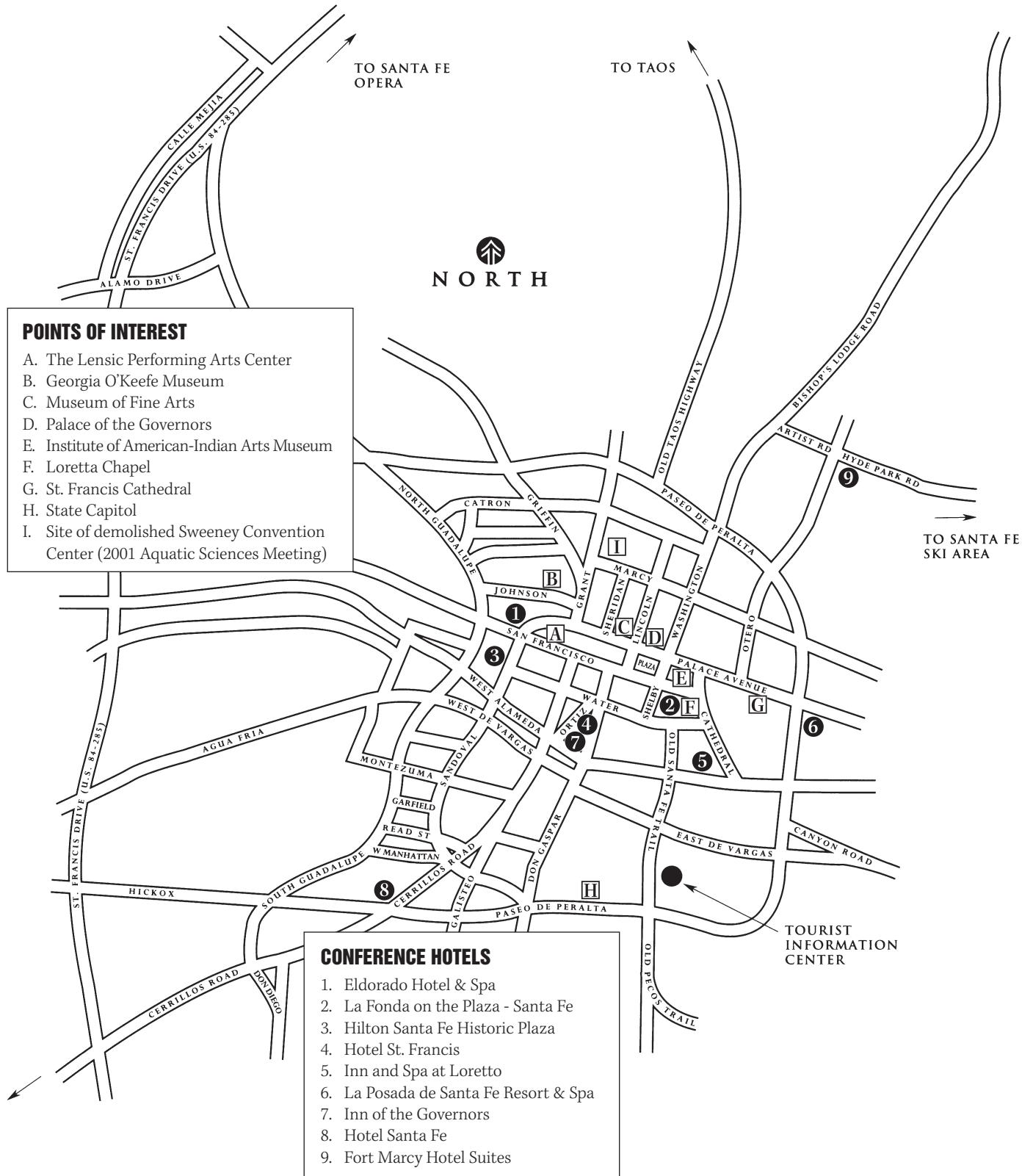


## FRIDAY AT-A-GLANCE

7 AM - 4 PM	Registration - Eldorado Pavilion							7 AM - 4 PM
7 AM - 4 PM	Presentation Room - Hilton Hotel, Ortiz							7 AM - 4 PM
7 AM - 4 PM	Speaker Ready Room - Hilton Hotel, Aspen							7 AM - 4 PM
7 AM - 5 PM	Email Room - La Fonda Hotel, Stihi							7 AM - 5 PM
8:30 - 9:30 AM	Opening and Plenary Address - Lencis Theater							8:30 - 9:30 AM
	Harindra Joseph Fernando, Arizona State University, Tempe, AZ							
	Tsunamis: A Journey through their Manifestation and Aftermath							
9:30 AM	BREAK							9:30 AM
Location	Eldorado				Hilton			La Fonda
Room	Anasazi North	Anasazi South	Sunset	Zia	Mesa A	Mesa B	Mesa C	Terraza Room
Session	SS09	SS23 (con't.)	SS13	CS06	SS01	CS08	SS42	CS25 Session
Title	Studying the Ecology, Biodiversity, and Abundance of Aquatic Animals	Conundrums and Controversies: What Contributes to the Vertical Flux of Carbon, Nitrogen, and Phosphorus in Aquatic Ecosystems?	Calification in Aquatic Ecosystems: Physiology, Biogeochemistry, and Response to Environmental Change	Biogeochemistry	Water on Earth: Analogues for Other Worlds	Ecosystem Management, Restoration, and Science Policy	Gelata On the Edge: Innovative Approaches to Understanding the Diversity and Ecology of Gelatinous Organisms	Trophic Interactions Title
9:45 AM	Priede, I. G.	DeGrandpre, M. D.	Ries, J. B.	Judd, K. E.	Cady, S. L.	Hansen, D. L.	Madin, L. P.	Boeing, W. J.
10:00 AM	Raymond, E. H.	Mourinho-Caballido, B.	Ries, J. B.	Beaulieu, J. J.	Cady, S. L.	Hersha, D. K.	Madin, L. P.	Sanders, R. W.
10:15 AM	Bailey, D. M.	Maliti, K.	Robbins, L. L.	Roberts, B. J.	Christner, B. C.	Malet, N.	Robison, B. H.	Sarnelle, O.
10:30 AM	Wei, C.	Rodriguez y Baena, A.M.	de Beer, D.	Harms, T. K.	Fritsen, C. H.	Volety, A. K.	Pages, F.	Wilson, A. E.
10:45 AM	Harvey, E. S.							
Session	SS09 (con't.)	SS23 (con't.)	SS13 (con't.)	CS06 (con't.)	SS01 (con't.)	CS08 (con't.)	SS42 (con't.)	CS25 (con't.) Session
Title	Studying the Ecology, Biodiversity, and Abundance of Aquatic Animals	Conundrums and Controversies: What Contributes to the Vertical Flux of Carbon, Nitrogen, and Phosphorus in Aquatic Ecosystems?	Calification in Aquatic Ecosystems: Physiology, Biogeochemistry, and Response to Environmental Change	Biogeochemistry	Water on Earth: Analogues for Other Worlds	Ecosystem Management, Restoration, and Science Policy	Gelata On the Edge: Innovative Approaches to Understanding the Diversity and Ecology of Gelatinous Organisms	Trophic Interactions Title
11:00 AM	Jones, E. G.	Dulaiova, H.	Bissett, A.	Kroeger, K. D.	Murray, A. E.	Fisher, T. R.	Choe, N.	Tisellus, P.
11:15 AM	Yeh, J.	Waples, J. T.	Dittrich, M.	Engstrom, P.	Jepsen, S. M.	Lehman, P. W.	Houghton, J. D.	Callari, D. L.
11:30 AM	King, N. J.	Klump, J. V.	Zipper, B.	Pantoja, S.	Hedlund, B. P.	Kim, H.	Reisenbichler, K. R.	Tonnesson, K.
11:45 AM	Kilgour, M. J.	Benitez-Nelson, C. R.	Schoon, R.	Holl, C. M.	Takacs-Vesbach, C.	Forbes, M. G.	Sherlock, R.	Nicolle, A.
12:00 - 1:30 PM	LUNCH - ON YOUR OWN							12:00 - 1:30 PM
Session	SS39	SS23 (con't.)	SS13 (con't.)	CS06 (con't.)	SS01 (con't.)	CS08 (con't.)	SS42 (con't.)	CS25 (con't.) Session
Title	River Plume Dynamics and Biogeochemistry	Conundrums and Controversies: What Contributes to the Vertical Flux of Carbon, Nitrogen, and Phosphorus in Aquatic Ecosystems?	Calification in Aquatic Ecosystems: Physiology, Biogeochemistry, and Response to Environmental Change	Biogeochemistry	Water on Earth: Analogues for Other Worlds	Ecosystem Management, Restoration, and Science Policy	Gelata On the Edge: Innovative Approaches to Understanding the Diversity and Ecology of Gelatinous Organisms	Trophic Interactions Title
1:30 PM	Chant, R. J.	Brandes, J. A.	Kayanne, H.	Johnson, K. S.	Moser, D. P.	Vrede, T.	Bamstedt, U.	Potthoff, A. J.
1:45 PM	Chen, R. F.	Burke, A.	Gattuso, J. P.	Charette, M. A.	Joye, S. B.	Solidoro, C.	Graham, W. M.	Rodriguez-Graña, L. M.
2:00 PM	Yost, J. M.	Sekula, E. N.	Grottoli, A. G.	Tank, S. E.	Paerl, H. W.	Katz, S. L.	Haddock, S. H.	Schielke, E. G.
2:15 PM	Reinfelder, J. R.	Young, E. B.	Taylor, A. R.	STRIEGL, R. G.	Potter, E. G.	Barnas, K. A.	Hoover, R. S.	McEwen, D. C.
2:30 PM	Filippino, K. C.	Albertin, A. R.	Balch, W. M.	Jonsson, A.	Taub, F. B.	Poikane, S.	Chiaverano, L. M.	Chrzanowski, T. H.
2:45 PM								
Session	SS39 (con't.)	SS23 (con't.)	SS13 (con't.)	CS06 (con't.)	SS16	SS05	SS42 (con't.)	CS25 (con't.) Session
Title	River Plume Dynamics and Biogeochemistry	Conundrums and Controversies: What Contributes to the Vertical Flux of Carbon, Nitrogen, and Phosphorus in Aquatic Ecosystems?	Calification in Aquatic Ecosystems: Physiology, Biogeochemistry, and Response to Environmental Change	Biogeochemistry	Quantifying Ecological Subsidy and Resource Sheds	Hypoxia Impacts on Aquatic Food Web Composition, Dynamics and Production	Gelata On the Edge: Innovative Approaches to Understanding the Diversity and Ecology of Gelatinous Organisms	Trophic Interactions Title
3:00 PM	Mulholland, M. R.	Aguilar, C.	Gledhill, D. K.	Paytan, A.	Raiikow, D. F.	Breitburg, D. L.	Ottensmeyer, A.	Jones, A. C.
3:15 PM	Conney, R. N.	Deibel, D. R.	Iglesias-Rodriguez, M.D.	Maerki, M.	Atkinson, J. F.	Breitburg, D. L.	Doyle, T. K.	Schulz, K. L.
3:30 PM	Robinson, K. L.	Schreiber, F.	Kurihara, H.	Reese, B. K.	Croley, T. E.	Craig, J. K.	Ford, M. D.	Richoux, N. B.
3:45 PM	Sylvan, J. B.	Fuchsman, C. A.	Martin, S.	Bushey, J. T.	Scott, J. T.	Ludsin, S. A.	Marshallon, D.	Chu, F. L.
4:00 PM	Corredor, J. E.	Lam, P.	Erez, J.	Dudel, E. G.	Francis, T. B.	Kolesar, S. E.	-	Lund, E. D.
4:15 PM						Hann, B. J.		Small, G. E.
Session	SS39 (con't.)	SS23 (con't.)	SS13 (con't.)	CS06 (con't.)	SS16 (con't.)	SS05 (con't.)		Mystery Session
Title	River Plume Dynamics and Biogeochemistry	Conundrums and Controversies: What Contributes to the Vertical Flux of Carbon, Nitrogen, and Phosphorus in Aquatic Ecosystems?	Calification in Aquatic Ecosystems: Physiology, Biogeochemistry, and Response to Environmental Change	Biogeochemistry	Quantifying Ecological Subsidy and Resource Sheds	Hypoxia Impacts on Aquatic Food Web Composition, Dynamics and Production		Mystery Session Title
4:30 PM	Williams, W. J.	Goebel, N. L.	Gazeau, F.	Boschker, H. T.	Rundio, D. E.	Roman, M.		?????
4:45 PM	Reifel, K. M.	Olson, N. D.	Matthews, K. A.	Newell-Bulow, S. E.	Kline, T. C.	Kimmel, D. G.		4:30 PM
5:00 PM	Twiss, M. R.	Yamamoto, A.	-	Grzymski, J. J.	Walters, A. W.	Lavrentyev, P. J.		4:45 PM
5:15 PM	Martinet, M. C.	Russell, M. J.	-	Lever, M. A.	Wurtbsaugh, W. A.	Carrick, H. J.		5:00 PM
5:30 PM	Spivey, A. J.	-	-	Fulweiler, R. W.	Walters, D. M.	Fox, S. E.		5:15 PM
5:45 PM	-	-	-	-	-	Ruhl, N. A.		5:30 PM
								5:45 PM

## DOWNTOWN SANTA FE: CONFERENCE HOTELS AND POINTS OF INTEREST

Please visit <http://www.santafe.org/CultureMap/> for an interactive map of Santa Fe with many more details.



## ASLO 2007 AQUATIC SCIENCES MEETING REGISTRATION FORM

If you are unable to register electronically on the web at <http://www.aslo.org/santafe2007>, please mail completed registration form and payment to: ASLO, 5400 Bosque Boulevard, Suite 680, Waco, Texas 76710-4446, USA. Registrations complete with purchase order or credit card information that are not accompanying an abstract submission can be faxed to: 254-776-3767.

Please make checks payable in U.S. dollars and drawn on a U.S. bank to: ASLO

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### FEES (IN U.S. DOLLARS AND PER PERSON):

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| <input type="checkbox"/> ASLO Members (received on or before January 4, 2007).....  | \$350.00 USD | _____ |
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| Spouse/Guest Name: _____  |              |       |
| <input type="checkbox"/> One-Day Registrations (received on or before January 4, 2007).....   | \$200.00 USD | _____ |
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### CONFIRMATION:

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### SPECIAL NEEDS:

If you have a disability or limitation that may require special consideration in order to fully participate, please contact the meeting's planning organization to see how we can accommodate your needs. Call 1-800-929-2756 (USA, Canada & Caribbean) or 254-399-9635 (all other countries), or contact via email at [business@aslo.org](mailto:business@aslo.org).

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ADDRESS LINE 4		
CITY	STATE	ZIP/POST CODE
COUNTRY		

## Demographic Information:

Please complete and/or indicate any changes to the following in the space provided below.

Institution/Organization: \_\_\_\_\_  
Dept/School: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_  
Gender (M/F): \_\_\_\_\_ Birth Year: \_\_\_\_\_  
Highest Degree: \_\_\_\_\_ Year Completed: \_\_\_\_\_

Discipline: \_\_\_\_\_  
*Enter in order of priority*  
B - Biological    O - Optical    C - Chemical    P - Physical    G - Geological

Disciplinary Specialty (*Use no more than 30 characters.*):  
\_\_\_\_\_  
\_\_\_\_\_

Field: \_\_\_\_\_  
*LIM (Limnology) or OCE (Oceanography). Enter primary first if listing both.*

Environmental Specialty: \_\_\_\_\_  
*Enter no more than four in order of priority.*  
1 - Lakes/Reservoirs/Ponds    4 - Wetlands    7 - Open Ocean  
2 - Rivers/Streams    5 - Estuaries    8 - Most or all  
3 - Great Lakes    6 - Coastal Ocean

Please list recent awards and/or honorariums received:  
\_\_\_\_\_  
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