

Monday, November 16, 2009

Session 1: Ecophysiology – Chair: Julia Kubanek

Time	Presenter	Page #	Title
8:30	Dan Ayres, Joe Schumacker, Kathi Lefebvre & Vera Trainer		Welcome and Opening Remarks
8:50	William Cochlan		Differential toxin response of large and small cell-sized <i>Pseudo-nitzschia</i> species as a function of nitrogen status and source: A comparative study of <i>P. multiseriata</i> and <i>P. cuspidata</i>
9:10	Patricia Glibert		Eutrophication and coastal bay blooms: Teasing apart climate variability from anthropogenic impacts
9:30	Christopher Gobler		The nutrition ecology of the harmful dinoflagellate blooms caused by <i>Cochlodinium polykrikoides</i> in New York estuaries
9:50	Kathryn Coyne		Comparison of nitrate reductase sequence and expression patterns for the harmful raphidophytes, <i>Heterosigma akashiwo</i> and <i>Chattonella subsalsa</i>

Break 10:10 – 10:40 AM

Session 2: Modeling & Mitigation – Chair: Vera Trainer

10:40	Clarissa Anderson		Application of regional downscaling to the forecasting of <i>Pseudo-nitzschia</i> and domoic acid events
11:00	Michael Brosnahan		Reproductive barriers in <i>Alexandrium tamarense</i> species and their implications for global biogeography and toxic bloom mitigation
11:20	Ken Hudnell		Freshwater harmful algal bloom suppression through solar-powered circulation
11:40	Jack Rensel		GIS-based modeling: Nutrients, phytoplankton and aquaculture

Lunch 12:00 – 1:30 PM (on your own)

Session 3: Mechanisms of Toxicity – Chair: John Berry

1:30	Reagan Errera		A new look at <i>Karenia brevis</i> brevetoxin and brevenal production: the influence of environmental factors
1:50	Allen Place		Behavioral correlates of karlotoxin production - Stun your prey before you eat!
2:10	Ying Zhong Tang		Allelopathic effect of <i>Cochlodinium polykrikoides</i> isolates from North America on competing phytoplankton

Break 2:30 – 3:00 PM

Session 4: Mechanisms of Toxicity – Chair: Kathi Lefebvre

3:00	John Ramsdell		Acute domoic acid poisoning in rats leads to a chronic syndrome of aggressive behavior and epilepsy
3:20	Eric Montie		MRI and volumetric neuroimaging: Novel approaches to determine the effects of domoic acid on the central nervous system in live California sea lions (<i>Zalophus californianus</i>)
3:40	Lihua Chen		Residual sodium channel currents account for positive effects of PSP toxins in a marine copepod
4:00	Ritchie Shoemaker		Using markers of chronic systemic inflammatory disturbances in innate immunity to define chronic ciguatera as a biotoxin illness: a case/control study

4:20 – 6:00 PM ***Poster session 1: Exposure Risks & Human Health, Public Health & Community Outreach***

6:30 – 11:30 PM ***Special Event: Traditional Tribal salmon bake and ceremonial dance at the Quinault Beach Resort & Casino (meet shuttle at 6:30 PM in Shilo lobby).***

Tuesday, November 17, 2009

Session 5: Exposure Risks & Human Health – Chair: Frank Cox

Time	Presenter	Page #	Title
8:30	Barbara Kirkpatrick		Aerosolized red tide toxins (brevetoxins) and asthma: Continued health effects after 1 hour acute beach exposure
8:50	Mindy Richlen		The taxonomy and biodiversity of the diatom <i>Pseudo-nitzschia</i> H. Peragallo in the Gulf of Maine: Characterizing an emerging threat in the region
9:10	Lynn Grattan		Human health impacts of low level domoic acid exposure in the Pacific Northwest: An update of the CoASTAL cohort studies.
9:30	Christina Senft		Accumulation and depuration of PSP toxins within populations of the marine copepod <i>Acartia tonsa</i>
9:50	Lorraine Backer		Recreational exposure to microcystins during algal blooms in two California lakes

Break 10:10 – 10:40 AM

Session 6: Fisheries & Foodwebs – Chair: Dan Ayres

10:40	Peggy Lehman		Initial impacts of <i>Microcystis</i> on the aquatic food web in San Francisco Estuary
11:00	Kari Galvan		Basal food web support of blue crab fisheries in the upper Barataria Estuary, Louisiana with a focus on toxic cyanobacteria: a combined approach of natural abundance stable isotopes (¹³ C and ¹⁵ N) and toxin analysis (ELISA)
11:20	Kevin Sellner		<i>Karlodinium</i> impacts on rotifers and crab larvae: Further indication of a cosmopolitan foodweb manipulator
11:40	Xiaodong Jiang		Deleterious consequences and density-dependent nutritional quality of the red tide dinoflagellate <i>Cochlodinium polykrikoides</i> to the copepod <i>Acartia tonsa</i>

Lunch 12:00 – 1:30 PM

Box lunch Discussion – ACT (Jason Smith)

Session 7: Fisheries & Foodwebs – Chair: Sibel Bargu

1:30	Michael Twiner		Florida panhandle bottlenose dolphin mortality events between 1999 and 2006: One common toxin – three distinct events
1:50	Spencer Fire		Domoic acid exposure in pygmy and dwarf sperm whales (<i>Kogia</i> spp.) from southeastern and mid-Atlantic U.S. waters

2:10	Monica Bricelj		Effects of <i>Alexandrium</i> blooms on the gene frequency of resistance to PSP toxins in NW Atlantic softshell clam populations: Integration of lab and field studies
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Break 2:30 – 3:00 PM

Session 8: Public Health & Community Outreach – Chair: Judy Kleindinst

3:00	Andrew Reich		Public health surveillance of illness related to harmful algal blooms: Florida's experience
3:20	Carol Boushey		Application of nutritional epidemiology to the field of harmful algal blooms
3:40	Sparkle Roberts		Development, implementation and evaluation of community education for the CoASTAL cohort

4:00 – 6:00 PM ***Poster session 2: Modeling & Mitigation, Emerging Technologies, Mechanisms of Toxicity***

6:00 – 7:30 PM ***Community Meeting:*** 1) NOAA HAB program & HABHRCA update
2) Venue proposals and vote for 6th HAB symposium.

Dinner (free night)

Visit the Galway Bay Irish Pub for live music

Wednesday, November 18, 2009

Session 9: Bloom Dynamics – Chair: Don Anderson

Time	Presenter	Page #	Title
8:30	David Caron		Characterizing subsurface blooms of <i>Pseudo-nitzschia</i> and outbreaks of domoic acid in coastal waters off southern California
8:50	Kirsten Feifel		A historical reconstruction of an <i>Alexandrium catenella</i> cyst record from Sequim Bay, WA, and its relation to climate variability
9:10	Steve Wilhelm		Developing a nutrient management strategy for controlling harmful cyanobacterial blooms in China's lake Taihu: A looking glass for other large eutrophying waters
9:30	Ted Smayda		Revisiting the turbulence – harmful bloom paradigm
9:50	Peter Strutton		MOCHA: Monitoring Oregon Coastal Harmful Algae

Break 10:10 – 10: 40 AM

Session 10: Bloom Dynamics – Chair: Deana Erdner

10:40	Juliette Smith		Starvation of <i>Dinophysis acuminata</i> : effects on toxin production and extracellular release
11:00	Bruce Keafer		Toxic <i>Alexandrium fundyense</i> blooms in the Nauset Marsh System on Cape Cod, Massachusetts
11:20	Cynthia Heil		Shifts in nutrient sources, utilization and processing in coastal <i>Karenia brevis</i> blooms
11:40	Theresa Hattenrath		The influence of anthropogenic nitrogen loading and meteorological conditions on the dynamics and toxicity of <i>Alexandrium fundyense</i> blooms in a New York (USA) estuary

Lunch 12:00 – 1:30 PM

Box lunch Discussion: Shellfish Harvesters (Dan Ayres)

Session 11: Population Genetics & Genomics – Chair: Micaela Parker

1:30	Darren Henrichs		Assessing the genetic diversity and population structure of <i>Karenia brevis</i> blooms in the Gulf of Mexico
1:50	Frances Van Dolah		Genomic response of nutrient limited <i>Karenia brevis</i> to nitrogen and phosphorus addition
2:10	Stephanie Brunelle		Post-transcriptional regulation of the DNA replication fork proteins in the Florida red tide dinoflagellate, <i>Karenia brevis</i>

Break 2:30 – 3:00 PM

Session 12: Toxin Identification & Detection – Chair: Jason Smith

3:00	Charlie Trick		Iron enrichment stimulates toxic diatom production in the high nitrate low chlorophyll Eastern subarctic Pacific
3:20	Alison Robertson		Occurrence and distribution of lipophilic shellfish toxins in the Pacific Northwest
3:40	Elie Fux		Overview of the application and performance of SPATT samplers for the detection of lipophilic marine toxins

4:00 – 6:00 PM ***Poster session 3: Bloom Ecology A***

6:00 PM – 12:00 AM ***Banquet and Party at the Shilo Inn:***
Buffet dinner (6:30 – 7:30 PM),
Host bar – Beer & Wine (6:30 – 11:00 PM),
Dancing with DJ (7:30PM – 12:00 AM)

Thursday, November 19, 2009

Session 13: Modeling & Mitigation – Chair: Chris Brown

Time	Presenter	Page #	Title
8:30	Raphael Kudela		Beyond Cal-PReEMPT: Lessons learned from a regional MERHAB project
8:50	Michelle Tomlinson		The development of a forecast system for cyanobacterial blooms in western Lake Erie
9:10	Kathleen Fisher		Operational harmful algal bloom forecasting: A Gulf of Mexico reality and the prospect for a national capability
9:30	Barbara Hickey		Seasonal differences in sources of toxic <i>Pseudo-nitzschia</i> cells on Washington's razor clam beaches
9:50	Michael Parsons		A refined model of <i>Gambierdiscus</i> growth and abundance in the coastal waters of Hawaii.

Break 10:10 – 10:40 AM

10:10 AM – 12:00 PM ***Poster Session 4: Bloom Ecology B, Fisheries & Foodwebs, Toxin ID***

Lunch 12:00 – 1:30 PM (on your own)

Session 14: Emerging Technologies – Chair: Jerome Naar

1:30	Juli Dyble Bressie		Assessing environmental controls on <i>Microcystis</i> growth and toxicity in the great lakes using molecular tools
1:50	Pia Moisander		Diversity and nutrient limitation of <i>Microcystis aeruginosa</i> in the Klamath River and San Francisco Bay Estuary, California
2:10	Vincent Lovko		Detection and characterization of <i>Karlodinium veneficum</i> in the northern Gulf of Mexico

Break 2:30 – 3:00 PM

Session 15: Emerging Technologies – Chair: Marc Suddleson

3:00	Katherine Hubbard		Potential links between hydrography, diversity, and distribution patterns of <i>Pseudo-nitzschia</i> communities in the Puget Sound estuary
3:20	Rose Ann Cattolico		<i>Heterosigma akashiwo</i> strain identity: Impact on cyst survival
3:40	Ahmed Moustafa		Deep transcriptomics of toxic red tide dinoflagellate <i>Alexandrium tamarense</i>
4:00	Closing remarks		