



COLBY COLLEGE

Gordon Research Conference on Mycotoxins & Phycotoxins Colby College Waterville, ME

June 12-17, 2011

Chairs: James J. Pestka & Vera L. Trainer

Vice Chairs: Stacey L. Degrasse & Gary A. Payne

Website: grc.org

Applications for this meeting must be submitted by **May 15, 2011**. Please apply early, as some meetings become full before this deadline. For more information contact: Jim Pestka (pestka@msu.edu) Vera Trainer (Vera.L.Trainer@noaa.gov)

The GRC will be held in conjunction with the **Mycotoxins & Phycotoxins Gordon-Kenan Research Seminar**. This 2-day seminar is geared towards early-career scientists (eg. graduate students and post docs) and applications must be submitted by **May 14, 2011**. Those interested in attending both meetings must submit an application for the GKRS in addition to an application for the GRC. Student funding is available. Please see GKRS web page for more information or contact: Dozie Amuzie (amuziec@dcpah.msu.edu) or Juliette L. Smith (jlsmith@whoi.edu).

PROGRAM

SUNDAY

4:00 pm - 8:00 pm	Arrival and check-in
6:00 pm	Dinner
7:30 pm - 7:40 pm	Welcome / Introductory Comments by GRC Site Staff
7:40 pm - 9:30 pm	<u>"A Common Roadmap for Biotoxin Research"</u> Discussion Leader: Vera Trainer (NOAA Seattle)/Jim Pestka (Michigan State) Gary Payne (North Carolina State University) "Genetic processes regulating secondary metabolite biosynthesis"
7:40 pm - 8:20 pm	Discussion Charles Trick (University of Western Ontario, Canada) "But they said it was a toxin!"
8:20 pm - 8:35 pm	Discussion
8:35 pm - 9:15 pm	Discussion
9:15 pm - 9:30 pm	Discussion

MONDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	<u>"Exposure Assessment"</u> Discussion Leader: Lora Fleming (European Center for Environmental Health)/Dr. Sara Henry (USFDA-CFSAN, U.S.) Ian Stewart (Queensland Health Forensic and Scientific Services, Brisbane, Australia) "Overview of the cyanotoxins from the human health/exposure perspective"
9:00 am - 9:30 am	Discussion
9:30 am - 9:45 am	Photo Session/Coffee Break
9:45 am - 10:15 am	Paul Turner (U. Leeds.) "Human exposure to the mycotoxin deoxynivalenol and the effect of interventions"
10:15 am - 10:45 am	Discussion
10:45 am - 11:00 am	Kate Sullivan (University of Alaska Southeast, Ketchikan) "Epidemiology of paralytic shellfish poisoning in Alaska"
11:00 am - 11:30 am	Discussion
11:30 am - 11:45 am	Liana van der Westhuizen (PROMEC-MRC, South Africa) "Biomarkers of fumonisin exposure and the impact of intervention among South African subsistence farmers"
11:45 am - 12:15 pm	Discussion
12:15 pm - 12:30 pm	Lunch
12:30 pm	Free Time
1:30 pm - 4:00 pm	"Poster Session I"
4:00 pm - 6:00 pm	Dinner
6:00 pm	<u>"New Insights from Taxonomic and Ecological Studies"</u> Discussion Leader: Mark Wells (University of Maine)/Donald Wicklow (USDA-ARS, Peoria) John Pitt (CSIRO, Australia) "Toxigenesis by fungi that exceed established taxonomic paradigms"
7:30 pm - 7:50 pm	Discussion
7:50 pm - 8:00 pm	Gustaaf Hallegraef (University of Tasmania, Australia) "Harmful algal blooms: ship ballast water translocations and climate driven range extensions"
8:00 pm - 8:20 pm	Discussion
8:20 pm - 8:30 pm	Ignacio Carbone (North Carolina State U.) "Toxigenesis in the aspergilli"
8:30 pm - 8:50 pm	Discussion
8:50 pm - 9:00 pm	Ted Smayda (University of Rhode Island) "Impact of terrestrial and marine organism ecology on biotoxin prevalence"
9:00 pm - 9:20 pm	Discussion
9:20 pm - 9:30 pm	Discussion

TUESDAY

7:30 am - 8:30 am Breakfast
 9:00 am - 12:30 pm "Mechanisms of Action"
 Kathleen Rein (Florida International University), Isabelle Oswald (INRA, France)
 Cathy Walsh (Mote Marine Lab)
 9:00 am - 9:30 am "Effects of brevetoxins on cellular pathways in immune cells"
 9:30 am - 9:45 am Discussion
 9:45 am - 10:15 am Marc Maresca (U. Aix Marseille)
 "Mycotoxins and neurological and neurodegenerative diseases"
 10:15 am - 10:30 am Discussion
 10:30 am - 11:00 am Coffee Break
 11:00 am - 11:30 am James Ryan (NOAA Charleston)
 "Transcriptional profiling of mammalian model organisms upon exposure to marine toxins"
 11:30 am - 11:45 am Discussion
 11:45 am - 12:15 pm Genevieve Bondy (Health Canada)
 "Effects of chronic dietary mycotoxin exposure on the p53+/- mouse"
 12:15 pm - 12:30 pm Discussion
 12:30 pm Lunch
 1:30 pm - 4:00 pm Free Time
 4:00 pm - 6:00 pm "Poster Session I"
 6:00 pm Dinner
 7:30 pm - 9:30 pm "Analytical Advances"
 Chris Elliott (Queen's University Belfast)/Rudi Krska (BOKU, Austria)
 Craig Woolsey (Virginia Tech)
 7:30 pm - 7:55 pm "Environmental sampling with autonomous UAVs and underwater gliders"
 7:55 pm - 8:10 pm Discussion
 8:10 pm - 8:35 pm Chris Miles (National Veterinary Institute, Norway)
 "Novel techniques to the discovery, structural identification, and detection of biotoxins"
 8:35 pm - 8:50 pm Discussion
 8:50 pm - 9:15 pm Katrina Campbell (Queen's University)
 "Evolving to the optoelectronic mouse for multi-toxin analysis"

WEDNESDAY

7:30 am - 8:30 am Breakfast
 9:00 am - 12:30 pm "Novel Bioactivities, Functional Genomics, and Pathologies"
 Micaela Parker (University of Washington)/Roger Coulombe (Utah State U.)
 William Gerwick (Scripps)
 9:00 am - 9:30 am "Novel toxins and therapeutic leads from the natural products of marine cyanobacteria"
 9:30 am - 9:45 am Discussion
 9:45 am - 10:15 am Debashish Bhattacharya (Rutgers University)
 "Genomics of red-tide causing dinoflagellates"
 10:15 am - 10:30 am Discussion
 10:30 am - 11:00 am Coffee Break
 11:00 am - 11:30 am David Miller (Carleton U)
 "Relationship of indoor air mold exposure to non-allergenic asthma"
 11:30 am - 11:45 am Discussion
 11:45 am - 12:15 pm Joan Bennett (Rutgers U)
 "Novel mechanisms for mold-associated post-Katrina damp-building illnesses"
 12:15 pm - 12:30 pm Discussion
 12:30 pm Lunch
 1:30 pm - 4:00 pm Free Time
 4:00 pm - 6:00 pm "Poster Session II"
 6:00 pm Dinner
 7:00 pm - 7:30 pm Business Meeting

7:30 pm - 9:30 pm "The Changing World: Outstanding GRS Presenters/ Impacts of Climate Change"
 Robert Dickey (USFDA, Dauphin Island)/Wayne Bryden (U. Queensland, Australia)
 Short talk- Best junior scientist GRS speaker- Mycotoxins- to be determined
 7:30 pm - 7:40 pm Discussion
 7:40 pm - 7:50 pm Short talk- Best junior scientist GRS speaker-Phycotoxins- to be determined
 7:50 pm - 8:00 pm Discussion
 8:00 pm - 8:10 pm Stephanie Moore (NOAA Seattle)
 8:10 pm - 8:35 pm "Impact of climate on harmful algal blooms and prediction of toxic marine events"
 8:35 pm - 8:50 pm Discussion
 8:50 pm - 9:15 pm Naresh Magan (Cranfield University)
 "Impact of climate change on mycotoxin incidence"
 9:15 pm - 9:30 pm Discussion

THURSDAY

7:30 am - 8:30 am Breakfast
 9:00 am - 12:30 pm "Strategies for Prevention and Control"
 Don Anderson (Woods Hole Oceanographic Institution)/Barbara Blackwell (Agriculture Canada)
 9:00 am - 9:30 am Julia Kubanek (Georgia Institute of Technology School of Biology)
 "Mitigation of red tide brevetoxins by competing phytoplankton"
 9:30 am - 9:45 am Discussion
 9:45 am - 10:15 am Christina Cowger (USDA/North Carolina State)
 "Integrative management approach being employed by USDA's Fusarium Head Scab Initiative"
 10:15 am - 10:30 am Discussion
 10:30 am - 11:00 am Coffee Break
 11:00 am - 11:30 am Ichiro Imai (Hokkaido University)
 "Biocontrol of harmful algae using competitors and killers"
 11:30 am - 11:45 am Discussion
 11:45 am - 12:15 pm Peter Cotty (USDA/U. Arizona)
 "Control of aflatoxin biosynthesis in the field using competing strains of non-toxigenic aspergilla"
 12:15 pm - 12:30 pm Discussion
 12:30 pm Lunch
 1:30 pm - 4:00 pm Free Time
 4:00 pm - 6:00 pm "Poster Session II"
 6:00 pm Dinner
 7:30 pm - 9:30 pm "Biototoxin Research-The Future"
 Julie Dyble-Bressie (NOAA Great Lakes Lab)/Kenneth Voss (USDA-Athens)
 7:30 pm - 8:10 pm Capstone Address, Daniel Baden (University of North Carolina at Wilmington)
 "The Future of Biototoxin Research: Vision or Hallucination."
 8:10 pm - 8:30 pm Discussion
 8:30 pm - 8:40 pm Speaker 1 Hot Topic
 8:45 pm - 8:50 pm Discussion
 8:55 pm - 9:05 pm Speaker 2 Hot Topic
 9:05 pm - 9:10 pm Discussion
 9:10 pm - 9:20 pm Speaker 3 Hot Topic
 9:20 pm - 9:25 pm Discussion

FRIDAY

7:30 am - 8:30 am Breakfast
 9:00 am Departure