



26th ANNUAL
CAMERON
CONFERENCE
FOR BIOLOGY &
MARINE BIOLOGY
HONOURS STUDENTS

Saturday, February 11, 2012
9:30 A.M. - 3:45 P.M.

Sponsored by-
Department of Biology
Dalhousie Association of Biology Students (DABS)
Dalhousie Association of Marine Biology Students (DAMS)

26th ANNUAL CAMERON CONFERENCE

FOR

**BIOLOGY AND MARINE BIOLOGY
HONOURS STUDENTS**

-PROGRAMME-

Saturday, February 11, 2012

Department of Biology

Dalhousie University

**Third Floor Atrium,
Life Sciences Centre**

9:30 A.M. **Bill Pohajdak**, Acting Chair, Department of Biology: opening remarks.

9:40-10:55 A.M. **Poster Session I**

1. **Will Kietzman**. An investigation of the effects of abscisic acid mediated phosphorylation on KEG E3 ubiquitin ligase function.
2. **Alison Conley**. Detecting volatile organic compounds emitted by several local marine phytoplankton species using head space gas chromatography/mass spectrometry
3. **James Jabalee**. Transmission electron microscopy as a tool for studying cell dynamics in early osteogenic condensations: Trials and tribulations of a classic approach
4. **Daniel Bayard**. Regulation of chloride ion permeation through the CFTR ion channel based on the number and location of fixed positive charges in the intracellular channel entrance
5. **Paul George**. The effects of Biochar on naturally occurring soil micro-invertebrate communities in farm soils.
6. **Nathan Ryan**. Basal Forebrain and Tuberomammillary Nucleus Activation following Social Arousal Induced Sleep Deprivation in Rats
7. **Sarah McBoyle**. Characterization of the molecular and physiological properties of Natriuretic Peptide Receptor C mutant mice
8. **Kayla Logan**. Detection of amino acids by the olfactory system in larval zebrafish (*Danio rerio*)

9. **Shannon Hall.** FosB and Δ FosB as Neuronal Markers for an Allostatic Response to Chronic Sleep Restriction in Rats
10. **Samuel Andrews.** The Respiratory Metabolism of Atlantic Pollock (*Pollachius virens*)
11. **Laura Forrest.** Characterization the Protein GRASP
12. **Jade Atkins.** Development of the mandibular symphysis in zebrafish (*Danio rerio*): a descriptive study
13. **Will Kirby.** Microaerophilic amoebae and their role in the soil ecosystem
14. **Nathalie Vouilloz.** Zebrafish circadian rhythm and buoyancy control
15. **Alexandria Muise-Hennessey.** The role of CIPK-26 in the Abscisic Acid Signaling Pathway in *Arabidopsis thaliana*
16. **Zoe Kennedy.** Assessing How the Shape of Cartilage in the First and Second Pharyngeal Arches Changes over Development in Zebrafish, *Danio rerio*
17. **Taq Bhandal.** Interaction between *Arabidopsis thaliana* KEG (KEEP ON GOING) E3 ligase domain and stress-inducible ERD 1 (EARLY RESPONSE TO DEHYDRATION 1)
18. **Neil Merovitch.** The role of NMDA glutamate and acetylcholine receptors on learning and memory in larval zebrafish (*Danio rerio*)
19. **Peter Goddard.** Can α -synuclein be stabilized by marine-species derived extracts or by known chemical chaperones?
20. **Jenai Lowe.** Dynamic Properties of Carbon Dioxide Transduction by *Drosophila* Antennal Sensilla
21. **Patrick Boisvert.** Determination of domain-domain interactions in Cystic Fibrosis Transmembrane conductance Regulator (CFTR) channel
22. **Laura Little.** Curiosity killed the *Felis catus*
23. **Alex Taylor.** Why does the frequency of large soil microaggregates influence plant growth?
24. **Heather L. MacGillivray.** Seasonal Plasticity in the Vocal Control System and Hippocampus of the Black-capped Chickadee (*Poecile atricapillus*)
25. **Thomas Whelan.** Phylogenetic analysis of two aleveolate species: *Colpodella pugnax* and *Palustrimonas yorkensis*

LSC 242 (Lecture Theatre)
Life Sciences Centre

11:00 A.M.-Noon **Oral Presentations I**

- 11:00 A.M. **Joshua J. A. Lee.** The duplicated cellular retinoic acid-binding protein genes and tissue-specific distribution of their transcripts in adult medaka (*Oryzias latipes*)
- 11:15 A.M. **Judith Booth.** Ubiquitin-dependent degradation of two *Arabidopsis* ethylene biosynthetic enzymes
- 11:30 A.M. **Rebecca Parker .** Is it possible to reconstruct the original donor oyster genetic profile by microsatellite genotyping of recipient grafted oysters muscle and pearl sac tissue?
- 11:45 A.M. **Karissa Milbury.** Identification of Halophilic Protozoa via Environmental PCR

Fifth Floor Lounge (Biology Tower)
Life Sciences Centre

Noon-12:55 P.M. **Lunch**

Third Floor Atrium
Life Sciences Centre

1:00-2:15 P.M. **Poster Session II**

1. **Cylia Civelek.** Effect of temperature on larval survival and swimming patterns for the sea star *Asterias rubens*
2. **Charlotte Underwood.** Comparative analysis of the food web structure of salt marshes.
3. **James Mumby.** The detailed classification of shorelines can be used to identify shoreline habitat diversity via GPS
4. **Jeremy Corbin.** Identifying inter-species variability in sharkskin morphology for application in shark conservation
5. **Karen Devitt.** Do diatom biofilms retain fine-grained sediment?
6. **Molly Whalen-Browne.** Relationship between species diversity and community and population stability along a gradient of increased temperature
7. **Renée Cossitt.** Habitat and the predation risk to Piping Plovers (*Charadrius melodus melodus*)

8. **Kuranda Slauenwhite.** The combined effects of temperature and light quality on crops
9. **Jessica Bryk.** A potential infection in the boring sponge [*Cliona celata*] inhabiting a specific area of the Bay of Fundy and possible causative agents.
10. **Rebecca Hoffer.** The effect of artificial edges on the distribution of the invasive plant species *Lantana camara* in an indigenous forest in Kitale, Kenya
11. **Christine Ryan.** Predicting Suitable Habitat for Canada Warblers (*Carellina canadensis*)
12. **Anne Benaroya.** Mapping out MAPs: a new method in sediment tracing
13. **Lisa Hoogenboom.** Comparing the abundance of predator markings on the flukes of sperm whales (*Physeter macrocephalus*) that live within the Atlantic and Pacific Oceans.
14. **Chloe Ready.** Temporal trends in individual scleractinian coral: monitoring differences in recruitment and resilience on reefs in Utila and Cayos Cochinos, Honduras.
15. **Jessica Hinch.** Patterns of extinction of salt marsh meiofaunal species and temperature tolerance of three salt marsh foraminifera species
16. **Alyssa Cirtwill.** Global Trends in Ecosystem Structure
17. **Anna Naylor.** An Analysis of the Ecosystem Approach and its Application Towards the Scotian Shelf
18. **Carrie-Ann Amber Creamer.** Coral Cover and Reef Health of Two Islands in the Mesoamerican Coral Reef System: A Comparison Between 2009 and 2011
19. **Christine Stortini.** Assessing key species vulnerability to trawling in a potential Marine Protected Area
20. **Sarah Coley.** Are forests encroaching on barrens in Cape Breton Highlands National Park?
21. **Ashley Lockyer.** Behavioural Responses to Normal and Altered Song Frequencies in Black-Capped Chickadees
22. **Deja Gibson.** A meta-analysis of community function using response predictability to determine effects of anthropogenic disturbances
23. **Nancy Roney.** Relationship between abundance and habitat size, and the importance of developing species independent recovery targets for endangered species.
24. **Jessica E. Ellis.** Current trends in hagfish, *Myxine glutinosa* fisheries in Atlantic Canada and worldwide

25. **Lauren Kay.** Cumulative effects of eutrophication and climate warming on growth and nutrient storage in the furoid seaweed *Ascophyllum nodosum*
26. **Melissa Wartman.** Investigating pH, aragonite and calcite saturation states in the Canadian Arctic using ArcGIS
27. **Meade Humble.** Changes in community composition in natural and artificial temperate reef ecosystems on decadal time scale.
28. **Andrew McCurdy.** The effect of nest exclosures on the frequency of predator visits to nests of *Charadrius melodus melodus*
29. **Sonia Jind.** How do diver-based surveys compare to stereo-video techniques on estimating reef fish densities?

LSC 242 (Lecture Theatre)
Life Sciences Centre

2:30-3:30 P.M. Oral Presentations II

- 2:30 P.M. **Stacey Henderson.** Are high concentrations of polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs) in the blubber of stranded beluga whales (*Delphinapterus leucas*) associated with mortality by infectious diseases or cancer?
- 2:45 P.M. **Taylor Stokes.** The geographic distribution of chloroplast haplotypes of *Avena barbata* in California
- 3:00 P.M. **Kirsten Busche.** How density affects reproduction in *Lobelia cardinalis*
- 3:15 P.M. **Hannah Calich.** Mating scars reveal mate size in blue sharks (*Prionace glauca*)

Fifth Floor Lounge (Biology Tower)
Life Sciences Centre

3:45 P.M. **Social Mixer**
