



GRADUATE RESEARCH DAY 2016/17

Registration & Breakfast; 8:00 to 8:50 am in LSB Lounge (LSB 213)

Opening Remarks & Keynote Speaker; 9:00 to 10:00 am in HSC 1A6

9:00 to 9:10 Dr. Brian Milliken, Acting Dean of Science

9:10 to 10:00 Dr. Patricia Wright, Professor & Acting Associate Dean Academic, College of Biological Sciences, University of Guelph "Out of the swamp – linking traits to performance in amphibious fishes out of water"

Oral Presentations; 10:00 to 11:00 am in HSC 1A6 (Chair: Natalie D'Silva)

10:00 to 10:15 Eta Ashu (Xu Lab) "Does the use of fungicides lead to triazole-resistant *A. fumigatus* in Hamilton's hospitals?"

10:15 to 10:30 Caroline Cauret (Evans Lab) "Sex chromosome evolution in Pipid frogs"

10:30 to 10:45 Morgan Kain (Bolker Lab) "The evolution of virulence in myxoma virus in European rabbits (*Oryctolagus cuniculus*) under co-infection with intestinal worm parasites"

10:45 to 11:00 Paul Knoops (Dworkin Lab) "*Drosophila melanogaster* response and behavioural changes under predation threat"

Coffee Break; 11:00 to 11:15 am in Ewart Angus Centre

Oral Presentations; 11:15 am to 12:15 pm in HSC 1A6 (Chair: Adrian Forsythe)

11:15 to 11:30 Shaiya Robinson (Daniel Lab) "Kaiso gets gutsy – elucidating the role of Kaiso in intestinal homeostasis"

11:30 to 11:45 Daniel Hsieh (Finan Lab) "Exploring the function of the inorganic phosphate transporter (PIT)-associated protein in *Sinorhizobium meliloti*"

11:45 to 12:00 Nicole Batenburg (Zhu Lab) "Function of Cockayne syndrome group B protein (CSB) in DNA double-strand break (DSB) repair and recruitment to DSBs"

12:00 to 12:15 Christine Kempthorne (Cameron Lab) "Investigating the role of specialized metabolites during age-related resistance against the bacterial pathogen, *Pseudomonas syringae*, in *Arabidopsis*"

Lunch; 12:15 to 2:30 pm in Ewart Angus Centre

Poster Sessions; 12:30 to 2:30 pm in Ewart Angus Centre*

01 Renad Aljohani (Xu Lab) "Yeast diversity from Cameroon soils"

09 Michael Li (Bolker & Dushoff Labs) "Fitting mechanistic epidemic models to data: a comparison of simple Markov chain Monte Carlo approaches"

16 Josh Robertson (Quinn Lab) "Social group size predicts stress physiology in a co-operatively breeding bird"

02 Savannah Colameco (Elliot Lab) "Investigating the roles of G-quadruplex structures in gene regulation in *Streptomyces*"

10 Avjiit Mallick (Gupta Lab) "Wnt pathway regulating seam cell development in *C. elegans* through miRNAs"

17 Alex Shephard (Rollo Lab) "Dose and trait dependent effects of early-life ionizing radiation exposure on female reproductive allocation strategies"

03 Adrian Forsythe (Xu Lab) "Identification of copy number variation in *Pseudogymnoascus destructans*"

11 Michael MacLeod (Finan Lab) "Development of a bacterial surrogate host-system to enable genome-scale engineering"

18 Shayen Sreetharan (Wilson Lab) "In utero low dose irradiation effects on post-natal growth and blood pressure in C57Bl mice"

04 Ben Furman (Evans Lab) "Increasing rates of gene loss and biased sub-genome evolution post whole genome duplication"

12 Mahi Mohuiddin (Schellhorn Lab) "Shotgun metagenomic sequencing reveals freshwater beach sands as reservoir of bacterial pathogens"

19 Jonathan Tran (Rollo Lab) "Evidence for hormesis with low dose ionizing radiation in the cricket (*Acheta domestica*) immune system"

05 Shawn Hercules (Daniel Lab) "Kaiso expression and triple negative breast cancer - is there a link?"

13 Nicole Prankevicius (Scott & Nurse Labs) "Adrenal chromaffin cell function in high-altitude deer mice (*Peromyscus maniculatus*)"

20 Taru Vasanthan (Stone Lab) "Tardy embryonic development in tardigrades exposed to cold temperature"

06 Wenjing Hua (Xu Lab) "Genotypic and phenotypic analyses of two model 'isogenic' strains of *Cryptococcus denorformans*"

14 Nicholas Pun (Xu Lab) "Adaptive evolution of *Cryptococcus neoformans* AD hybrids"

21 Oliver Wearing (Scott Lab) "Autonomic control of thermogenic capacity in deer mice"

07 Chris Hughes (Jacobs Lab) "Matrix metalloprotease-2 (MMP2) is required for remodelling of the *Drosophila* dorsal vessel"

15 Cayleigh Robertson (McClelland Lab) "Development of thermogenesis at high altitude"

22 Man You (Xu Lab) "Environmental and genetic influences on the germination of basidiospores in the *Cryptococcus gattii* species complex"

08 Adomas Kulesza (Wilson Lab) "The thermal and radiological stress dichotomy: adaptive response in lake whitefish (*Coregonus clupeaformis*)"

* Even-numbered posters will be presented in Session I (12:30 to 1:30 pm), and odd-numbered posters will be presented in Session II (1:30 to 2:30 pm)

Oral Presentations; 2:45 to 3:45 pm in HSC 1A6 (Chair: Ben Furman)

2:45 to 3:00 Taylor Brooks (McClelland Lab) "Muscle lactate production and the HIF1- α pathway during hypoxia acclimation in C2C12 myotubes"

3:00 to 3:15 Sulayman Lyons (McClelland Lab) "The effects of cold exposure on lipid metabolism of high- and low-altitude deer mice (*Peromyscus maniculatus*)"

3:15 to 3:30 Himeshi Samarasinghe (Xu Lab) "Linking genetic variability to differential coloration in fungal pathogen *Cryptococcus neoformans*"

3:30 to 3:45 Caitlin Simopoulous (Weretilnyk & Golding Labs) "An improved method for long non-coding RNA prediction that includes small ORF coding probabilities"

Closing Remarks; 3:45 to 4:00 pm in HSC 1A6

3:45 to 4:00 Dr. Roger Jacobs, Professor & Chair of the Department of Biology

Awards Ceremony & Reception; 4:30 to 6:00 pm at The Phoenix