

Potential Supervisors for Biology 4C12, MolBio4G12 and Bio4F06 in the Biology Department

Supervisor Name	Potential Research Areas	Number of Thesis Positions	Eligible for NSERC USRA?
André Bédard	Control of cell proliferation with particular emphasis on the role of hypoxia. We are particularly interested in a novel " <i>membrane stress response</i> " in this process.	2	yes
Ben Bolker			
Robin Cameron	Molecular plant disease resistance	2-3	Yes
Ana Campos ?	Hydra regeneration	3	yes
Pat Chow-Fraser	environmental monitoring, species-at-risk ecology and habitat mapping	2 - 3	yes
Juliet Daniel	colon cancer and breast cancer	2	Yes
Rosa DaSilva			
Susan Dudley			
Jonathan Dushoff	self-directed projects that have a useful and substantive theoretical, computational or statistical component	2	Yes
Ian Dworkin	Genetics of shape and size sexual dimorphism (using <i>Drosophila</i>); Conditional effects of mutations	2	Yes
Marie Elliot	microbiology/ <i>Streptomyces</i> genetics and biochemistry (RNA-based regulation; control of bacterial development; regulation of antibiotic production)	2	Yes
Ben Evans			
Turlough Finan	Molecular genetic analysis of genes in <i>Sinorhizobium meliloti</i>	2	Yes
Brian Golding	Molecular Evolution, Bioinformatics	2	Yes
Bhagwati Gupta ?	Not taking students	None	
Suleiman Igdoura			
Roger Jacobs	Analysis of remodeling of the extracellular matrix of the heart in a genetic model of cardiomyopathy	2	Yes
Lovaye Kajjura			
Karen Kidd			
Jurek Kolasa	Designer ecosystems (green aquaponics), microcosms and factors affecting biodiversity, theoretical ecology	2-3	maybe

Academic year: 2018 - 2019

Grant McClelland	Environmental physiology/ high altitude adaptation/ regulation of lipid metabolism	2	Yes
Carmel Mothersill	Mitochondrial metabolism in cells showing a radiation induced bystander effect. Calcium flux generation following irradiation of p53+/+ and P53-/- cells	2	Yes
Mike O'Donnell	Cell physiology (electrophysiology of epithelial ion transport)	2	Yes
James Quinn	Cooperative breeding of smooth-billed anis or Pukeko (including one project focused on the use of molecular markers to determine maternity from eggshell samples) 2) colonial waterbirds and Hamilton harbour (Interactions between cormorants and terns).	3	Yes
David Rollo			
Herb Schellhorn			
Graham Scott	Physiological adaptations to low oxygen environments	Up to 4	Yes
Colin Seymour	Image analysis and big data	1 - 2	Yes
Rama Singh	Sexual selection and sexual dimorphism: Detrimental effects of male mating behavior on female fitness	2-3	No
Jonathon Stone			
Elizabeth Weretilnyk	Plant studies in abiotic stress tolerance using biochemical and molecular genetic tools. I am particularly interested in low nutrient stress and drought tolerance mechanisms.	2	
Joanna Wilson	The effects of environmental stressors (temperature, contaminants, steroids, radiation) on physiology of vertebrate (fish, mice) or invertebrate (hydra, marine worms) species. We study a variety of environmental stressors and their effects on the whole organism (behaviour, survival, growth, reproduction, development), tissues, and genes expression.	3	Yes
Jianping Xu	Experimental evolution of fungal pathogens	2-3	Yes
Xu-Dong Zhu	DNA damage and repair	2	Yes

Potential Supervisors From Other Departments Who Have Supervised Biology Students in the Past

Supervisor Name	Department
Andrews, Paul	Psychology, Neuroscience & Behaviour
Balshine, Sigal	Psychology, Neuroscience & Behaviour
Burrows, Lori	Biochemistry and Biomedical Sciences
de Souza, Russell	Health research methods
Dej, Kim	School of Interdisciplinary Science
Faure, Paul	Psychology, Neuroscience & Behaviour
Fox-Robichaud, Alison	Medicine
Goldreich, Daniel	Psychology, Neuroscience & Behaviour
Holloway, Alison	Obstetrics and Gynecology
Humphreys, Karin	Psychology, Neuroscience & Behaviour
Jordana, Manel	Pathology and Molecular Medicine
Khan, Ayesha	Psychology, Neuroscience & Behaviour
McCready, Elizabeth	Pathology and Molecular Medicine
Meyre, David	Clinical Epidemiology and Biostatistics
Mishra, Ram	Psychology, Neuroscience & Behaviour
Murphy, Kathryn	Psychology, Neuroscience & Behaviour
Obeid, Joyce	Pediatrics
Samaan, Zainab	
Selvaganapathy, Ravi	Mechanical Engineering
Shore, David	Psychology, Neuroscience & Behaviour
Tang, Ada	School of Rehabilitation Science
Tang, Damu	Medicine
Trainor, Laurel	Psychology, Neuroscience & Behaviour
Verdu, Elena	medicine
Waddington, James Michael	School of Geography and Earth Sciences