

**SATURDAY MARCH 18 – SESSION I****Platform Presentation Schedule****Session Title: Conservation & Restoration I****Room: C104****Saturday March 18: 1:30 – 2:30**

Time	Last Name	First Name	Institution	Category	Title
1:30-1:45	Johnson	John	Windsor	Conservation	Artificial light and its effect on bird migration: insights from acoustic monitoring
1:45-2:00	Price	Trevor	Western	Conservation	Quantification of avian mortality from bird-window strikes at the University of Western Ontario's main campus
2:00-2:15	Trowbridge	Cory	Laurentian	Conservation	The effects of wind turbines on reptile and amphibian population ecology
2:15-2:30	Archibald	Emily	Brock	Conservation	Examining the responses of cover crops chicory ( <i>Cichorium intybus</i> ) and red clover ( <i>Trifolium pretense</i> ) to intercropping and agromineral amendment

**Session Title: Biochemistry I****Room: C114****Saturday March 18: 1:30 – 2:30**

Time	Last Name	First Name	Institution	Category	Title
1:30-1:45	Ali	Zubair	Ryerson	Biochemistry	Alterations in the cell surface $\beta$ 1-integrin in response to metabolic stress induced activation of AMP-activated protein kinase
1:45-2:00	Sutradhar	Tunuja	Ryerson	Biochemistry	Phop-regulated omptin protease activity in pathogenic enterobacteriaceae
2:00-2:15	Rahmani	Sadia	Ryerson	Biochemistry	O-linked $\beta$ -N-acetylglucosamine modification impacts clathrin-mediated endocytosis of epidermal growth factor receptor
2:15-2:30	Boras	Ivan	Ryerson	Biochemistry	Characterizing the properties of regulation of glycogen synthase kinase 3B subcellular localization

**SATURDAY MARCH 18 – SESSION I****Platform Presentation Schedule****Session Title: Genetics & Molecular Biology II****Room: C203****Saturday March 18: 1:30 – 2:30**

Time	Last Name	First Name	Institution	Category	Title
1:30-1:45	Boehler	Nicholas	Western	Genetics	Elevated mutation rate associated with heterozygosity in mice: do opposites attract mutations?
1:45-2:00	Canaj	Hera	Western	Genetics	Comparative genomics across rodent species: assessment of mutation pattern differences at single nucleotide polymorphic loci
2:00-2:15	Casavecchia	Marina	Western	Genetics	Riches in their genetic diversity: two outbred mouse populations
2:15-2:30	Kelly	Rachel	Western	Genetics	Assessing diversity cross-species using the mouse diversity genotyping array: can I use rhino DNA?

**Session Title: Microbiology III****Room: C204****Saturday March 18: 1:30 – 2:30**

Time	Last Name	First Name	Institution	Category	Title
1:30-1:45	Tiller	Lauren	McMaster	Microbiology	Heterologous expression of <i>PAP-PIT</i> in <i>Escherichia coli</i> phosphate uptake mutants
1:45-2:00	Anderson	Alex	Laurier	Microbiology	Characterizing BCSC, an essential cellulose secretin
2:00-2:15	Kiflen	Michel	Ryerson	Microbiology	Determining microbial population diversity and investigating ammonia-oxidizing microorganisms in secondary municipal wastewater treatment systems
2:15-2:30	Syed	Moiz	Ryerson	Microbiology	Evidence of kill by surface-attached quaternary ammonium cations discouraging biofilm formation

**Session Title: Physiology I****Room: C206****Saturday March 18: 1:30 – 2:30**

Time	Last Name	First Name	Institution	Category	Title
1:30-1:45	Reagan	Rebecca	Windsor	Physiology	The effects of acoustic structure on auditory responses in <i>Carassius auratus</i>
1:45-2:00	Tajik	Tania	McMaster	Physiology	PRMT regulation in skeletal muscle following exercise in mouse models
2:00-2:15	Coulson	Soren	McMaster	Physiology	Brown adipose tissue mitochondrial modification as an adaptation to high altitude environments in deer mice
2:15-2:30	Lai	Vicky	McMaster	Physiology	Ontogeny of brown adipose tissue in high altitude and low-altitude deer mice ( <i>Peromyscus maniculatus</i> )

## SATURDAY MARCH 18 – SESSION II

## Platform Presentation Schedule

### Session Title: Conservation & Restoration II

Room: C104

Saturday March 18: 4:00 – 5:30

Time	Last Name	First Name	Institution	Category	Title
4:00-4:15	Krane	Cassieanna	Laurentian	Conservation	Where there's a worm there's a way: vermistabilization of paper mill waste
4:15-4:30	Shaheen	Amber	Windsor	Conservation	The effect of pollution on gene-specific methylation in brown bullhead ( <i>Ameirus nebulosus</i> )
4:30-4:45	Mikhael	Brandon	Windsor	Conservation	Environmental effects on algal communities: implications for climate change response
4:45-5:00	Hicks	Kelsey	Laurentian	Conservation	The reclamation of mine tailings through the use of N-Viro soil and Gro-Bark
5:00-5:15	Tieu	Alyssa	Windsor	Conservation	The effects of low frequency sounds on behaviours of Great Lakes fish species
5:15-5:30	Dillon	Rachel	Laurentian	Conservation	Willingness to utilize mitigation tunnels by eastern garter snakes

### Session Title: Evolution I

Room: C112

Saturday March 18: 4:00 – 5:30

Time	Last Name	First Name	Institution	Category	Title
4:00-4:15	Zaib	Farwa	Windsor	Evolution	Selection and drift induced divergence of MHC among walleye ( <i>Sander vitreus</i> ) populations across Ontario
4:15-4:30	Vermey	Justine	Windsor	Evolution	Does the frequency of male vocalizations influence mate choice in female yellow toads, <i>Incilius luetkenii</i>
4:30-4:45	Patel	Keta	Windsor	Evolution	Impact of male quality on realized fitness assessed using extrapair paternity in snow buntings ( <i>Plectrophenax nivalis</i> )
4:45-5:00	Laroia	Puja	Windsor	Evolution	Early nutritional stress and iridescent structural colour production in adult European starlings, <i>Sturnus vulgaris</i> : does early stress adversely influence plumage colouration?
5:00-5:15	Bent	Garrett	Laurier	Evolution	Is preference for inbreeding in <i>Drosophila melanogaster</i> adaptive? A hemiclinal analysis
5:15-5:30	West	Caitlin	McMaster	Evolution	Behavioural plasticity of juvenile lake whitefish ( <i>Coregonus clupeaformis</i> ) and round whitefish ( <i>Prosopium cylindraceum</i> ) with exposure to environmental stressors

### Session Title: Biochemistry II

Room: C114

Saturday March 18: 4:00 – 5:30

Time	Last Name	First Name	Institution	Category	Title
4:00-4:15	St. Jean	Jesse	Laurentian	Biochemistry	Application of electric stimulation on the nicotinic acetylcholine receptor to replicate drug-induced behavioural effects
4:15-4:30	Vorobieva	Ioulia	Western	Biochemistry	Investigating the roles of uncoupling protein 2 and 4 in extraembryonic differentiation of F9 cells
4:30-4:45	He	Dennis	Western	Biochemistry	Subcellular localization of the turnip mosaic virus first protein (P1)
4:45-5:00	Jeyarajah	Mariyan	Western	Biochemistry	Understanding the role of syndecan-4 in extravillous cytotrophoblast invasion
5:00-5:15	Jones	Devon	McMaster	Biochemistry	Time-course of ER-mediated regulation of CYP3C1-4 gene expression in zebrafish ( <i>Danio rerio</i> ) by estradiol
5:15-5:30	Muddaluru and Anwar	Varun and Shiraz	McMaster	Biochemistry	<i>Hyrda littoralis</i> regeneration: the role of signal transduction pathways

**Session Title: Genetics & Molecular Biology III****Room: C203****Saturday March 18: 4:00 – 5:30**

Time	Last Name	First Name	Institution	Category	Title
4:00-4:15	Lyn	Yannick	Western	Genetics	Utilization of RNAi to investigate the role of F-BOX gene, <i>SKP2</i> , in spider mite ( <i>Tetranychus urticae</i> ) fitness
4:15-4:30	Spera	Alec	Western	Genetics	Identifying the mating-type of non-mating <i>Metschnikowia</i> yeasts using PCR
4:30-4:45	Zotova	Darya	Western	Genetics	Genomic engineering of cancer cell lines for cell tracking using CRISPR-CAS9
4:45-5:00	Mueller	Matthew	Brock	Genetics	An optogenetic approach to study gamma-secretase function in notch signalling and in Alzheimer's disease
5:00-5:15	Qaiser	Farah	UTM	Genetics	Investigating the role of the heat shock factor in the regulation of <i>Drosophila</i> ecdysone-inducible genes using the CRISPR/CAS system
5:15-5:30	Mohamed	Fathiya	UTM	Genetics	The landscape of de novo transposable element insertions

**Session Title: Human Health I****Room: C204****Saturday March 18: 4:00 – 5:30**

Time	Last Name	First Name	Institution	Category	Title
4:00-4:15	Au-Yeung	Joe	Laurentian	Health	Investigation on the synergic effects of aminoglycosides and macrolides combinations against <i>Pseudomonas aeruginosa</i> isolated from cystic fibrosis patients
4:15-4:30	Bohemier	Julie	Laurentian	Health	An investigation of the effects of epilepsy and axonal growth patterns
4:30-4:45	Lizzi	Michayla	Laurentian	Health	Synergistic effects of electromagnetic field, light and chemotherapy on melanoma proliferation
4:45-5:00	Nguyen	Hai Phong-Victor	Windsor	Health	The effects of salicylate on the level of GABA(B) receptor in the rat ( <i>Rattus norvegicus</i> ) medial geniculate nucleus
5:00-5:15	Kelly	John	Windsor	Health	Novel biomarkers for prostate cancer progression
5:15-5:30	Habashy	Philip	Windsor	Health	Targeting the novel cell cycle regulator, SPY1, for treatment of medulloblastoma

**Session Title: Physiology II****Room: C206****Saturday March 18: 4:00 – 5:30**

Time	Last Name	First Name	Institution	Category	Title
4:00-4:15	Hick	John	Laurentian	Physiology	Flies in a mine: understanding the physiology of deep underground mining
4:15-4:30	Janisse	Karly	Laurentian	Physiology	LED light exposure over the right rostral skull effects long term spatial memory
4:30-4:45	Reive	Brady	Laurentian	Physiology	Seized electrophysiology influenced by geomagnetic activity
4:45-5:00	Phung	Rosalyn	Western	Physiology	Studying two nutritional models for honeybee caste sensitivity to queen mandibular pheromone using <i>Drosophila melanogaster</i>
5:00-5:15	Rey Rincon	Alejandro	Western	Physiology	Can future climate conditions alter fatty acid composition to promote thermotolerance in boreal trees
5:15-5:30	Yost	Ryley	Western	Physiology	Conditions affecting the emission of the <i>Drosophila melanogaster</i> stress odorant

## SUNDAY MARCH 19 – SESSION III

## Platform Presentation Schedule

### Session Title: Ecology I

Room: C104

Sunday March 19: 8:30 – 10:00

Time	Last Name	First Name	Institution	Category	Title
8:30-8:45	Padilla	Reinnier	Windsor	Ecology	The effect of invasion structure on the gut microbiome of invasive round goby
8:45-9:00	Berberi	Albana	Windsor	Ecology	Nocturnal flight call clusters: using acoustic recordings to track avian group migration
9:00-9:15	Picard	Daniel	Windsor	Ecology	Variation in net ecosystem productivity along a distance gradient in a Great Lakes coastal wet meadow zone
9:15-9:30	Kuhn	Chantelle	Laurentian	Ecology	Morphological parameters associated with foraging strategies on Ontario wolves ( <i>Canis lupus</i> ) and coyotes ( <i>Canis latrans</i> )
9:30-9:45	Grosklag	Taylor	Laurentian	Ecology	Wolverine, <i>Gulo gulo</i> : specialist of generalist carnivore?
9:45-10:00	Sawyer	Arianne	Laurentian	Ecology	The effects of parasitic mites on small mammals in Algonquin Provincial Park

### Session Title: Evolution II

Room: C112

Sunday March 19: 8:30 – 10:00

Time	Last Name	First Name	Institution	Category	Title
8:30-8:45	Duggal	Jaspreet	UTM	Evolution	Cryptic recombination and its consequences in the mating type locus
8:45-9:00	Wang	Lucian	U of T	Evolution	Effect of seasonality on the maternal size correlation in <i>Daphnia magna</i>
9:00-9:15	Desnoyers	Jennifer	Western	Evolution	Designing SHRNA for the allele-specific knockdown of a candidate gene for species-specific female mate preference
9:15-9:30	Hryniewicz	Julia	Western	Evolution	Long-term effects of predation risk on the brains and behaviour of prey
9:30-9:45	Redondo	Laura	Western	Evolution	Testing sensory modalities that influence <i>Drosophila</i> female receptivity
9:45-10:00	Walton	Jessie	Laurentian	Evolution	Do brighter males have better sperm performance?

### Session Title: Biochemistry III and Microbiology I

Room: C114

Sunday March 19: 8:30 – 10:00

Time	Last Name	First Name	Institution	Category	Title
8:30-8:45	Perry	Katie	Nipissing	Biochemistry	Metformin and French lilac ( <i>Galega officinalis</i> ) ameliorates neuromuscular dysfunction in glutathione-impaired <i>Drosophila</i>
8:45-9:00	Bender	Jacob	Windsor	Biochemistry	Ubiquitin-mediated degradation of patellin1 a sec14-like protein in <i>Arabidopsis thaliana</i>
9:00-9:15	Méthé	Alexandra	Laurentian	Microbiology	An untargeted metabolomics analysis of the acid mine drainage microbe, <i>Acidithiobacillus ferrooxidans</i>
9:15-9:30	Kacori	Michele	Ryerson	Microbiology	The role of DNA-building protein, DPS, in the survival of enterohemorrhagic <i>E. coli</i> exposed to antimicrobial peptide WRWYCR
9:30-9:45	Banaag	Alyssa	Ryerson	Microbiology	Enterohemorrhagic and enteropathogenic <i>Escherichia coli</i> resistance to human defensin 5 and human neutrophil peptide 1 induced by bile salt stress
9:45-10:00	Birstonas	Sarah	Ryerson	Microbiology	Enterohemorrhagic <i>E. coli</i> modulates expression of major flagellar subunit protein, FLIC, in response to culture conditions

**Session Title: Cell Biology I****Room: C203****Sunday March 19: 8:30 – 10:00**

Time	Last Name	First Name	Institution	Category	Title
8:30-8:45	Parrotta	Matthew	Laurentian	Cell Biology	Using a novel Java application to analyze structure and predict possible ligand-protein binding sites
8:45-9:00	Mezouari	Ania	Laurentian	Cell Biology	Investigation on the regulation of human gut GLP-1 secreting cells by methanogenic microbes
9:00-9:15	Mullin	Willow	Laurentian	Cell Biology	Investigating the effect of tumour necrosis factor-alpha on the regulation of cholecystokinin
9:15-9:30	Ray	Tirthankar	Western	Cell Biology	The role of proteoglycan decorin in the human decidua
9:30-9:45	Isaac	Rafi	Western	Cell Biology	Characterization of fatty acid metabolism of naïve and primed canine embryonic stem cells
9:45-10:00	Etedali-Zadeh	Parnian	Western	Cell Biology	A toolbox for live cell visualization and imaging of pannexin proteins <i>in vitro</i>

**Session Title: Plant Biology I****Room: C204****Sunday March 19: 8:30 – 10:00**

Time	Last Name	First Name	Institution	Category	Title
8:30-8:45	Proulx	Miguel	Laurentian	Plant Biology	Gene expression associated with copper resistance in red oak ( <i>Quercus rubra</i> )
8:45-9:00	Hoxha	Wendy	Laurentian	Plant Biology	Root phenology, production and senescence of <i>Carex oligosperma</i> and <i>Rhynchospora alba</i> (Cyperaceae), two northern Ontario wetland species
9:00-9:15	Barr	Samantha	Laurentian	Plant Biology	Root uptake of nitrogen during senescence
9:15-9:30	Kumar	Nikhil	McMaster	Plant Biology	Impact of nutrient availability on the plant kin recognition response of <i>Chenopodium album</i>
9:30-9:45	Christie	Jennifer	Western	Plant Biology	Influences of seed preparation on native tallgrass prairie species
9:45-10:00	Coatsworth	Cameron	Western	Plant Biology	The persistence of ginsenosides in agricultural soils after harvest of American ginseng ( <i>Panax quinquefolius</i> )

**Session Title: Conservation & Restoration III and Physiology III****Room: C206****Sunday March 19: 8:30 – 10:00**

Time	Last Name	First Name	Institution	Category	Title
8:30-8:45	Munro	Stephanie	Laurentian	Physiology	Hair, what is it good for? A validation of hair measuring cortisol concentration in American mink ( <i>Neovison vison</i> )
8:45-9:00	Binns	Alexandra	Laurentian	Physiology	The skinny on snake stress: does working in outreach programming negatively impact snakes?
9:00-9:15	Harris	Sierra	Laurentian	Physiology	Thermoregulatory behaviour in little brown bats ( <i>Myotis lucifugus</i> ) during hibernation
9:15-9:30	Kajtar	Alexander	Windsor	Conservation	Detection of environmental DNA (eDNA) over time from decaying chinook salmon
9:30-9:45	Mazal	Zvia	Laurentian	Conservation	Increased access to human garbage and its impact on glycemia and body mass in the raccoon ( <i>Procyon lotor</i> )
9:45-10:00	Laflamme	Jocelyne	Guelph	Conservation	Effect of timber harvesting on boreal forest fire severity

## SUNDAY MARCH 19 – SESSION IV

## Presentation Schedule

### Session Title: Ecology II

Room: C104

Sunday March 19: 10:30 – 12:00

Time	Last Name	First Name	Institution	Category	Title
10:30-10:45	Hughes	Margaret	Ryerson	Ecology	Comparison of essential fatty acid concentrations within three fish species found in the Great Lakes
10:45-11:00	Normandeau	Jaclyn	Laurier	Ecology	Spatial autocorrelation of song variation in white-throated sparrows ( <i>Zonotrichia albicollis</i> )
11:00-11:15	Edwards	Emily	Western	Ecology	A comparison of growth and toxicity expressed by the fish-killing flagellate, <i>Prynesium parvum</i>
11:15-11:30	Meszaros	Kathleen	Western	Ecology	<i>Heterosigma akashiwo</i> in the future ocean: effects on growth, fatty acid production and toxicity
11:30-11:45	Tah	Sunanda	UTM	Ecology	The effects of fear mediated immune response in dragonfly larvae ( <i>Leucorrhinia intacta</i> )
11:45-12:00	Nkansah	Kwasi	McMaster	Physiology	The ontogeny of shivering thermogenesis in deer mice ( <i>Peromyscus maniculatus</i> )

### Session Title: Microbiology II and Genetics & Molecular Biology I

Room: C114

Sunday March 19: 10:30 – 12:00

Time	Last Name	First Name	Institution	Category	Title
10:30-10:45	McGrath	Erin	Laurentian	Microbiology	Antimicrobial activity of frankincense extract
10:45-11:00	Kiviaho	Leah	Laurentian	Microbiology	Cytosolic calcium as a quantitative measure of <i>Escherichia coli</i> enterotoxin B (STb)
11:00-11:15	Zain	Mamaum	Ryerson	Microbiology	Interactions of biofilm and planktonic <i>Pseudomonas aeruginosa</i> with raw 264.7 macrophages <i>in vitro</i>
11:15-11:30	Phillips	Lauren	Ryerson	Microbiology	Are chanfes in the PmrD locus of adherent-invasive <i>Escherichia coli</i> (AIEC) associated with antimicrobial peptide resistance?
11:30-11:45	Bevan	Andrea	Western	Genetics	The effect of hyper-activatin and inhibiting DSX-expressing neuronal clusters on <i>Drosophila</i> female rejection within and between species
11:45-12:00	Behl	Supriya	Western	Genetics	Are soldiers a sources of genomic novelty in termites?

### Session Title: Cell Biology II

Room: C203

Sunday March 19: 10:30 – 12:00

Time	Last Name	First Name	Institution	Category	Title
10:30-10:45	Cybulski	Amanda	Western	Cell Biology	Molecular mechanisms controlling galectin expression in human breast cancer cells
10:45-11:00	Jose	Shauna	Western	Cell Biology	Characterization of fibroblast-like cells isolated from human pancreatic islets
11:00-11:15	Qureshi	Hafsah	Windsor	Cell Biology	Effects of non-degradable cyclins in female <i>Drosophila</i> meiosis
11:15-11:30	Andrews	Rachel	Windsor	Cell Biology	The role of cortex (CORT) in sex determination of <i>Drosophila</i>
11:30-11:45	Khodabakhshian	Nairy	Ryerson	Cell Biology	The role of clathrin in AKT isoform phosphorylation
11:45-12:00	Nabavian	Helia	Ryerson	Cell Biology	Time dependence of infection for TFEB activation in macrophages exposed to <i>Salmonella typhimurium</i>

**SUNDAY MARCH 19 – SESSION IV****Presentation Schedule****Session Title: Plant Biology II****Room: C204****Sunday March 19: 10:30 – 12:00**

Time	Last Name	First Name	Institution	Category	Title
10:30-10:45	Millones	Michelle	Western	Plant Biology	Using BIFC to detect protein interactions between aroenate dehydratase 2 and chloroplast division proteins <i>in planta</i>
10:45-11:00	Murphy	Bridget	Western	Plant Biology	Future climate conditions alter leaf thermotolerance in Canadian boreal trees
11:00-11:15	Michkowski	Amanda	Brock	Plant Biology	Responses of alfalfa and oilseed radish in monoculture and intercrop to Spanish River carbonatite amendment
11:15-11:30	VanVolkenburg	Heather	Brock	Plant Biology	Changes in yield and invertebrate communities in lettuce ( <i>Lactuca sativa</i> ) and radish ( <i>Raphanus sativus</i> ) monocultures and intercrop
11:30-11:45	Patel	Bansari	UTM	Plant Biology	Use of FARO 3D scanning technology to assess seasonal change in aboveground structure, biomass and species composition in a temperate forest
11:45-12:00	Rabley	Jenna	Laurier	Plant Biology	Root nodulation of <i>Alnus viridis</i> across a topographic gradient at Trail Valley Creek, NT

**Session Title: Human Health II****Room: C206****Sunday March 19: 10:30 – 12:00**

Time	Last Name	First Name	Institution	Category	Title
10:30-10:45	Joshi	Vidhu	Western	Health	Classifying potential biomarkers of trastuzumab resistance in HER2-positive breast cancer using next-generation sequencing
10:45-11:00	Wiggans	Mallory	Western	Health	The application of whole-exome sequencing in identifying osteopetrosis-causing variants
11:00-11:15	Sarikaya	Ege	Western	Health	Altered hippocampal gene expression following prenatal alcohol exposure in mice: the delta-notch and hippo signaling pathways
11:15-11:30	Gunaratnam	Lakshman	Western	Health	KIM-1 polymorphisms and the risk of delayed graft function after deceased-donor kidney transplantation
11:30-11:45	Korfanty	Gregory	McMaster	Health	Phenotypic and genotypic diversities of <i>Aspergillus fumigatus</i> from Cameroon
11:45-12:00	Carangal, Forrester, Jammu and Saini	Martin, Kayla, Anish and Guneet	UTM	Health	Effects of assessment policies, parental involvement, and financial strains on evaluation anxiety among second year biology students