

Program Schedule

Saturday Schedule, March 19th, 2016

9:00 am to 12:00 PM Registration

LOCATION: ENGINEERING BUILDING (ENG) 1st floor

10:00 am to 10:15 pm Welcome and Opening Remarks,

LOCATION: Main Auditorium – ENG103

10:20 AM to 11:00 AM Guest Lecture: Biology and our Environment by Dr. Lynda McCarthy,
Dept. of Chemistry and Biology, Ryerson University.

LOCATION: Main Auditorium – ENG103 (30 min talk, 10 min discussion;)

11:00-11:25 – Coffee Break – ENG 1st floor and basement.

11:30 to 12:30 PM Concurrent Session I: Student Talks

Location: ENG Rooms

12:45-3:15 Lunch and Poster Sessions (alternating even and odd numbers)

LOCATION: Mattamy Coca-Cola Lounge

1 hour 15 min each for odd-numbered and even-numbered posters

3:30-4:15: Guest Lecture: Biology and our Health – Dr. Hendrik Poinar, McMaster University

LOCATION: ENG103 (30 min talk, 10 min discussion)

4:15-5:00: Guest Lecture: Keynote – Innovation and Entrepreneurship in Biology –Dr. Zayna Khayat,
MaRS

LOCATION: ENG103 (30 min talk, 10 min discussion)

5:00-5:25 – coffee break

5:30 pm to 6:30 pm Concurrent Session II: Student Talks

Location: ENG Rooms

7:00 – 11 PM Social Night at the “Three Brewers on Adelaide”
(Complementary dinner and two drinks)

Sunday Schedule, MARCH 20TH, 2016

9:00 am to 10:00 am Concurrent Session III: Student Talks
Location: ENG Rooms

10:00 am to 10:20 am Coffee Break
Venue Atrium – ENG

10:20 to 11:20 Concurrent Session IV: Student Talks
Location: ENG Rooms

11:30 pm to 12:10 pm Keynote Address – **Careers in Biology** – Dr. Burton Lim, Royal Ontario
Museum
ENG103

12:20 pm to 1:00 pm Presentation of Awards and Closing Remarks
ENG103

Student Talk Session Abstracts

A few notes about Oral Presentations:

- Oral presentations are to be 10-12 min with 3-5 min for questions. Total of 15 min.
- Time must be strictly adhered to avoid delays
- Please bring your presentation on a USB key for ease of loading into the podium computer
- Bringing your own computer will not be permitted to avoid delays
- There will be two judges per session: one will be a Chair of the session, who will introduce the speaker and ensure adherence to time restrictions.
- Talks are open to anyone who is registered
- Talks are numbered according to sessions:
 - Saturday AM: 100s
 - Saturday PM: 200s
 - Sunday First session: 300s
 - Sunday Second session: 400s

Detailed Student Talk Schedule:

Saturday AM Session (100s)

1. Cells: going around the cycle

Room ENG101

Last Name	First Name	Institution	Title
Mehdi	Susan	Ryerson University	The role of ADP-ribosylation factor 6 regulators in the control of integrin membrane traffic by AMP-activated Protein Kinase
Peragine	Stephanie	Western University	The effects of ER stress on the galectin expression profiles in MCF7 cells.
Aloran	Bayan	University of Windsor	Evaluation of the Anticancer Activity of Alcoholic Long Pepper Extract in Human Glioblastoma Cells
Armitage	Sarah	University of Toronto	Prickle1, a core component of Planar Cell Polarity complex, regulates cancer cell migration through two distinct mechanisms.

2. Neurons, brains and behave I

Room ENG102

Last Name	First Name	Institution	Title
Milidrag	Nikolina	University of Windsor	Drivers of Brain Lateralization and Increased Neurogenesis in Juvenile Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)
Privorozky	Tal	Western University	Using the 10-90% Rise Time of the Electroretinogram a-wave to Assess Photoreceptor Degeneration in Harlequin Mice
Summers	Cara	Western University	Investigating how different strategies of mitigating sleep affect arousal, daytime sleepiness, and vigilance: A comparison between stimulants, sedatives, and napping in habitual and non-habitual nappers
Mann	Jasvinder	University of Windsor	Contrasting Behavioural and Cognitive Characteristics of Round Gobies (<i>Neogobius melanostomus</i>) From Established Versus Invasion Fronts

3. Water... water everywhere

Room ENG105

Last Name	First Name	Institution	Title
Rilett	Amanda	University of Windsor	Interaction between maternal stress and rearing environment on the morphology and physiology of juvenile Chinook salmon
Warriner	Theresa	McMaster University	Living in wastewater: effects on fish behaviour
Arambulo	Joseph	Ryerson University	Using invertebrate bioassays for determining the efficiency of constructed wetlands for purifying artificial wastewater.
Fendler	Tanya	University of Windsor	Changes in Lake Sturgeon Trophic Position since the Introduction of Zebra Mussels in the Huron-Erie Corridor (HEC)

4. Developing Life I

Room ENG106

Last Name	First Name	Institution	Title
Fajardo	Felipe	University of Toronto	The preterm infant delayed gastric emptying is likely caused by a weaker stomach muscle contraction
Wat	Lianna	McMaster University	Effects of nutritional geometry and doublesex on sexual dimorphism in <i>Drosophila melanogaster</i> wings
Anjum	Zoha	University of Toronto	Reactivation of maternal Sfbmt2 in +/-gt murine extraembryonic tissues
Bisschops	Anna-Maria	Laurentian University	Sperm motility in Bluegill from Columbus, Ohio

5. Genes: from one to a population I

Room ENG LG12

Last Name	First Name	Institution	Title
Shah	Fasih	Western University	Mouse diversity genotyping array measures genetic diversity in a <i>Mus Musculus</i> family
Conti	Alexia	University of Windsor	CORRELATION BETWEEN SHY-BOLD BEHAVIOURAL RESPONSES AND MHC GENOTYPE IN CHINOOK SALMON (<i>ONCORHYNCHUS TSHAWYTSCHA</i>)
Gogna	Priyanka	McMaster University	A biomolecular search for ancient treponemal DNA in the Chinchorro mummies of South America
Gannavarapu	Srinitya	Western University	Identifying the disease causing gene in an unclassified white matter disease; bridging clinical phenotypes with biochemical and molecular defects

6. Microbes anywhere and anytime

Room ENG LG14

Last Name	First Name	Institution	Title
Lech	Richard	Wilfrid Laurier University	Characterization of gene products related to periodontitis in <i>Treponema denticola</i>
Prescod	Janice	Wilfrid Laurier University	Structural and Functional Characteristic of Wssl in <i>Achromobacter insuavis</i> and <i>Pseudomonas fluorescens</i> : Role in cellulose acetylation
Cojocari	Veronica	Ryerson University	Comparison of OmpTin Protease Activity Against Human Antimicrobial Peptides
Suwal	Tannu	University of Toronto Mississauga	The Functional Role of Cyanobacterial Specific Motifs in CcmM, a β^2 -Carboxysomal Protein

7. Chemistry and Biology Challenge: Synthetic Biology at 11 AM

Room ENG103

Saturday PM Session (200s)

1. You got no spine: invertebrates

Room ENG101

Last Name	First Name	Institution	Title
Finlayson	Emily	University of Windsor	Evaluating Minimum Movement of First Instar Larvae of Forensically Important Blow Fly Species
Tahir	Irtaza	McMaster University	Targeting Pest Insect Species: A Closer Look at the Physiology of the Brown Marmorated Stink Bug
Fontaine	Jesse	Laurentian University	Glycine-Proline-Glutamate and its Effect on Regeneration of Brown Planaria (<i>Dugesia tigrina</i>)
Misyura	Lidiya	York University	Expression and dsRNA knockdown of aquaporins AaAQP3a and AaAQP3b in the Malpighian tubules of the disease vector, <i>Aedes aegypti</i> .

2. Give me energy: from Metabolism to Food Webs I

Room ENG102

Last Name	First Name	Institution	Title
Seed	Marian	Laurentian University	FOOD WEB POSITIONS AND TROPHIC NICHES OF CO-HABITING WALLEYE AND SAUGER IN BOREAL LAKES
Jindal	Shagun	McMaster University	Is offspring cannibalism an adaptive strategy in <i>Neolamprologus pulcher</i> ?
Kell	Steven	University of Guelph	Nest-site fidelity, search time and nest predation in Painted Turtles (<i>Chrysemys picta</i>).
Nguyen	Danya	Western University	Stomatal Characteristics of Poplar Under Elevated Growth Temperature and CO ₂

3. The ABCs of Evolution I

Room ENG105

Last Name	First Name	Institution	Title
Munjaj	Shalok	University of Toronto	Changing Conceptions of Evolution in Culturally Diverse First Year Biology Students
Leung	Marcus	University of Windsor	Role of Selection in Major Histocompatibility Gene Diversity in Walleye (<i>Sander vitreus</i>)
O'Neill	Sarah	Western University	Mapping hybrid male sterility between <i>Drosophila pseudoobscura</i> and <i>Drosophila persimilis</i>
Lamoureux	Ryan	Trent University	Effects of pine tree harvesting on breeding songbird habitat selection

4. Plants: the original green I

Room ENG106

Last Name	First Name	Institution	Title
Porter	Jacob	Laurentian University	Temperature Responses of Wetland Monocots with Contrasting Root Strategies
Ostrander	Mike	Wilfrid Laurier University	Growth of corn (<i>Zea mays</i>) in soil supplemented with the agromineral Spanish River Carbonatite: effects of local environmental conditions on root-associated microbes.
Marchiori	Jocelyn	Western University	The effects of <i>Panax quinquefolius</i> (North American ginseng) on NADPH oxidase-dependent production of superoxide in cardiomyocytes during lipopolysaccharide stimulation
Iaboni	Robert	Wilfrid Laurier University	Structure and function of a predicted α -helix domain of the chloroplast protein import receptor Toc159

5. Immunity: biological warfare

Room ENG LG11

Last Name	First Name	Institution	Title
Abram	Quinn	University of Waterloo	Measuring IL-2 production in rainbow trout (<i>Oncorhynchus mykiss</i>) following in vivo and in vitro immunostimulation
Ammendolia	Dustin	Waterloo	Phenotypic profiling of a rainbow trout monocyte-macrophage cell line, RTS11, as a model for investigating Salmonid innate immunity
Durkin	Amanda	Laurentian University	A Study of the Inflammation Properties of a Novel Anticancer Compound with Proteasome Inhibition Activity
Fan	Jason	McMaster University	Identifying Novel Macrophage Receptor Ligands Present on the Pneumococcal Cell Wall

6. Molecular ecology: the tiny side of ecosystems I

Room ENG LG12

Last Name	First Name	Institution	Title
Ketchen	Dawson	Laurentian University	Using DNA-barcoding to model the population genetic structure of fleas from North American Red Squirrels (<i>Tamiasciurus hudsonicus</i>) and Northern Flying Squirrels (<i>Glaucomys sabrinus</i>) in Algonquin Park, Ontario
Morel	Phillippe	Laurentian University	Sperm morphometry variation in bluegill fish from two river systems in Columbus, Ohio
Nelson	Erich	Queen's University	DNA Barcoding Detects Dietary Dependence of Lake Ontario Bass (<i>Micropterus</i> spp.) on Invasive Round Goby (<i>Neogobius melanostomus</i>)
Anderson	Zach	Brock University	Alternative Splicing of the foraging gene in a primitively eusocial sweat bee, <i>Lasioglossum laevis</i>

7. You are your microbiota

Room ENG LG14

Last Name	First Name	Institution	Title
McConville	Rose	Laurentian University	Obesity-driven alterations in methanogenic microbes, and their regulation of GLP-1
Ziab	Mubarak	University of Windsor	Partitioning of Genetic and Environmental Effects on the Gut Microbiome of Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)
Phillips	Lauren	Ryerson University	Are changes in the pmrD locus of adherent-invasive <i>Escherichia coli</i> (AIEC) associated with antimicrobial peptide resistance?
Fleming	Suzanne	Laurentian University	Effect of Gut Microbiota Bacteria on Planarian (<i>Dugesia tigrina</i>) Regeneration Rates

SUNDAY FIRST SESSION (300s)

1. Molecular to population genetics

Room ENG 101

Last Name	First Name	Institution	Title
Qi	Freda	Western University	The effect of selective pressures on single nucleotide polymorphic loci in gene regulatory regions of wild-caught, wild-derived, and classical laboratory mice.
Fleming	Kate	University of Windsor	DNA Extraction From Formalin Fixed Samples: Tracing Genetic Change Over Historic Timelines
Wong	Melissa	Western University	Identifying a gene for a behavioural isolation between <i>Drosophila simulans</i> and <i>D. mauritiana</i> using CRISPR-Cas9 targeted genome editing
Atherton	Claire	Western University	Detection of Natural Selective Pressure and Diversity Using SNVs in Classical Laboratory Strains, Wild-Derived Strains, and Wild-Caught <i>Mus musculus</i>

2. Small molecules: the good, the bad and the ugly

Room ENG 102

Last Name	First Name	Institution	Title
Robinson	Bryce	Laurentian University	The Influence of Ni (2+) Additions on Methane Production in Sphagnum Dominated Northern Peatlands
Yearington	Billy	Laurentian University	Lithium as a Modulator of Stem Cell Proliferation in brown planaria (<i>Dugesia tigrina</i>)
Winnick	Daniel	University of Western Ontario	Lettuce and Lysol – The Effect of Benzalkonium Chlorides on Lettuce Health
Alyashae	Basma	Windsor	Sodium salicylate changes the level of GABAB receptors in the Rat Hippocampus

3. Neurons, brains and behave II

Room ENG 105

Last Name	First Name	Institution	Title
Ayyash	Ahmed	Ryerson	Examining the Association Between Insulin-like Growth Factor 1 (IGF-1) and Brain Activity during Performance on the Odd Ball Task in Older Adults
Cooke	Abrial	University of Windsor	Times of Stress: The Circadian Regenerative Response
Guilbeault	Nicholas	University of Windsor	Ubisol-Q10 Treatment Prevents Substantial Memory Loss and Neurodegeneration in a Double Transgenic Mouse Model of Alzheimer's Disease
Hafeez	Aneeka	University of Toronto Mississauga	INVESTIGATING THE DEVELOPMENTAL ORIGIN OF PM4 NEURONS IN THE DROSOPHILA OPTIC LOBE

4. The wild side of Animals I

Room ENG 106

Last Name	First Name	Institution	Title
Chan	Colleen	Laurentian University	Elk (<i>Cervus elaphus</i>) seasonal proximity to a railroad with high train collision risk.
Delungahawatta	Thilini	McMaster University	Effects of a lifetime probiotic supplement on life-history features and aging in the house cricket, <i>Acheta domesticus</i>
Haidar	Maya	University of Windsor	Examining behavioural syndromes across populations of Chinook salmon (<i>Oncorhynchus tshawytscha</i>) to screen for ideal aquaculture phenotypes
Ieraci	Christian	University of Windsor	The Affects of Anthropogenic Noise on Foraging behaviour of Zebrafish and Cichlids

5. Diseases: What went wrong? I

Room ENG LG11

Last Name	First Name	Institution	Title
Jassar	Samer	University of Windsor	The Efficacy of Targeting Cell Cycle Regulators in the Treatment of Medulloblastoma
Lyons	Taylor	Western University	Functional analysis of rare disease genes in learning and memory, using <i>Drosophila melanogaster</i> as a model organism
Schwartz	Shira	Carleton	Therapeutic Effects of Sub-symptom Exercise Regimen on Progression of Post-Concussive Syndrome
Stoyanovich	Carlee	University of Windsor	Exploring a Link Between <i>Spy1</i> and Hepatocellular Carcinoma

6. Big molecules: they matter too

Room ENG LG12

Last Name	First Name	Institution	Title
Nowghani	Fargol	York University	Characterization of the ionomotive enzymes Na ⁺ /K ⁺ -ATPase and V-type H ⁺ -ATPase in the suspected ionoregulatory organs of larval mayfly <i>Hexagenia rigida</i>
Diaz	Camille	York University	DEPURINATION OF HIV-1 REV RNA BY POKEWEED ANTIVIRAL PROTEIN
Endaya	Justine Moreno	University of Toronto Mississauga	Characterizing the periplasmic α -helix carbonic anhydrase EcaA
Gawanmeh	Mousa	University of Windsor	Investigating the Antagonistic Role of Constitutively Activated and Stabilized TAFI(a) on Breast Cancer Cell Metastasis

7. Teaching and learning about teaching and learning I

Room ENG LG14

Last Name	First Name	Institution	Title
Bactol	Kyle	Ryerson University	A study on the effectiveness and value of virtual labs as an alternative teaching method.
Scepanovic	Gordana	University of Toronto	Student Perceptions and Performances in a University of Toronto Mississauga Course with Multiple Low Risk Summative Assessments
Wah	Deanne	McMaster University	What is the Impact of Community Engaged Education on the Development of an Undergraduate Student?
Javed	Fiza	University of Toronto	Assessing the impact of two-stage learning design and collaborative learning on student gains in an introductory genetics course

8. Dating games, mating games I

Room ENG 103

Last Name	First Name	Institution	Title
Sherghin	Joury	University of Windsor	EYEBROW STRIPE SIZE AND HONEST SIGNALLING IN MALE AND FEMALE SAVANNAH SPARROWS, <i>PASSERCULUS SANDWICHENSIS</i>
Raymond	Calla	Wilfrid Laurier University	Does female experience influence preferred mate choice? A test with <i>Drosophila melanogaster</i>
Cole	Bailey	Wilfrid Laurier University	Experimental test of the role of condition-dependency in female mate choice, and its impact on the operation of sexual selection
Lucas	Madison	University of Windsor	Potential genetic benefits of multiple mating in Chinook salmon

SUNDAY SECOND SESSION (400s)

1. Developing Life II

Room ENG 101

Last Name	First Name	Institution	Title
Garland	Katharina	University of Windsor	Neuroplastic changes in the young Chinook salmon during rapid changes in environment
Therrien	Christian	Western University	The effect of rearing temperature on juvenile survival and growth metrics in Atlantic salmon (<i>Salmo salar</i>)
Djame	Tecele	Laurentian University	Insights on sperm morphometry variation in Peacock bass, <i>Cichla monoculus</i>
Clancy	Eric	Laurentian University	Embryonic development of lake whitefish (<i>Coregonus clupeaformis</i>) eggs incubated within a cobble substrate experiencing both natural and induced temperature fluctuations.

2. The wild side of Animals II

Room ENG 102

Last Name	First Name	Institution	Title
Kennedy	Matthew	Laurentian University	Can we save populations one turtle at a time?
Qaiser	Farah	University Of Toronto Mississauga	Birds versus Glass Windows: Monitoring Bird-Window Collisions at the University Of Toronto Mississauga Campus
Snyder	Jessica	University of Windsor	The Effects of Stimulus Parameters on the Auditory Brainstem Response of <i>Carassius auratus</i>
Young	Kevin	Trent University	Does camera presence affect Arctic-breeding shorebird nest survival: a validation study for camera monitoring

3. Biodiversity: more than just species

Room ENG 105

Last Name	First Name	Institution	Title
Millar	Zachary	University of Guelph	A Model of Coral Bleaching for the Order Corallimorpharia
Beauchamp	Andrew	Trent University	Is Bank Swallow (<i>Riparia riparia</i>) reproduction associated with peak insect abundance?
Eagleson	Ryan	University of Guelph	Impact of Marine Protected Areas on the Abundance and Distribution of the Mustard Hill Coral (<i>Porites Asteroides</i>) in Grenada

4. Cell signaling: The ecology of the cell

Room ENG 106

Last Name	First Name	Institution	Title
Malhotra	Maansi	York University	The effect of statins on the production of ATP via oxidative phosphorylation in pancreatic insulin secreting MIN6 clonal cells.
Spice	Danielle	Western University	The role of NADPH oxidases and reactive oxygen species in F9 cell differentiation to parietal endoderm
Aguilar	Jeff	University of Windsor	The effect of sodium salicylate on the level of GABA(B) receptor subunits in rat amygdala
Fynn-Sackey	Nancy	Laurentian University	Investigating the role of Hydrogen sulfide in the regulation of Glucagon-Like Peptide-1

5. Interdisciplinary biology - mix it up

Room ENG LG11

Last Name	First Name	Institution	Title
Bloskie	Quinn	Laurentian University	Exposure to low intensity, patterned magnetic fields increases survival and proliferation of <i>C. elegans</i>
Ford	Jonathan	Wilfrid Laurier University	Rare Earth Elements - How Toxic Are They?
Ireland	Eric	Laurentian	Effect of Eurasian Milfoil on Benthic Communities in Damaged Environments
Hossack	Victoria	Laurentian University	Interaction between chlorpromazine and temporally patterned electric shock in behavioural response of <i>Dugesia Tigrina</i>

6. it's all related: environment & effectors

Room ENG LG12

Last Name	First Name	Institution	Title
Balsdon	Mary	Laurentian University	How Long Do Frog and Toad Carcasses Remain on the Road?
Shaabana	Nadeen	University of Windsor	Effects of Bold and Shy Personalities on Shoaling Behaviours Using Agent-Based Modeling
Robin Samuel	Sweetha	University of Windsor	Cortisol response of the round goby (<i>Neogobius melanostomus</i>) when exposed to predator cues.

7. Cells: peaking inside

Room ENG LG14

Last Name	First Name	Institution	Title
Maier-Downing	Teagan	Western University	Investigating the galectin expression profile of human embryonic kidney (HEK293H) cells under varying doses of pharmacological endoplasmic reticulum stress inducers
Somerville	Alexander	Ryerson University	Investigating the Molecular Machinery Involved in Phagolysosome Resolution
Awadeh	Yasmin	Ryerson University	Generating a plasmid encoding GFP-fusion of LYCAT to study phosphoinositide dynamics and signalling
Akhtar	Sanila	Western University	Stressing the importance of IRe1 activity in chronological aging and polyQ toxicity in Fission yeast, <i>Schizosaccharomyces pombe</i>

8. Teaching and learning about teaching and learning II

Room ENG 103

Last Name	First Name	Institution	Title
D'Souza	Andrea	University of Toronto Mississauga	Development & Implementation of an Intervention in a Genetics Classroom to Overcome Antibiotic Misconceptions
Foster	Joshua	University of Toronto	Student Perspectives of Scientific Literacy
Hafeez	Ammar	University of Toronto Mississauga	INITIAL ANALYSIS OF UNDERGRADUATE STUDENT MISCONCEPTIONS REGARDING ANTIBIOTIC RESISTANCE
He	Susan	McMaster University	Laboratory Instruction Styles: The Effectiveness of Lab Intensive Courses in Biology