Faculty members interested in accepting NSERC USRA and/or WSRI USRI students.

Note: Students can approach other Biology Faculty Members not listed below.

## A complete list of Biology faculty members is located at:

http://www.uwo.ca/biology/people/faculty.htm plus adjuncts at https://uwo.ca/biology/people/crossappointed-adjunct-and-sessional-faculty.html

Dr. Alice Boyle, Collip 107, aboyle7@uwo.ca

Website: www.aliceboyle.net

Project proposal: Avian ecology, including studies of Ontario's threatened grassland communities and experimental tests of responses to rainfall.

Dr. Robert Buchkowski, BGS 2074, Ext. 88969, <a href="mailto:rbuchkow@uwo.ca">rbuchkow@uwo.ca</a>

Website: <a href="https://nmuwo.wordpress.com/">https://nmuwo.wordpress.com/</a>

Project proposal: We work on terrestrial ecology and climate change. Ongoing projects include studying animal effects on carbon cycling, soil carbon storage, and soil biodiversity. USRA/USRI projects focused on field work (in Ontario or New Brunswick), laboratory experiments with soil and soil fauna, or computational modelling are all possible. Please reach out if you're interested or have a project in mind that we might be able to support.

Dr. T. DeFalco, NCB 465, Ext. 81475, tdefalc@uwo.ca

Website: <a href="https://scholar.google.ch/citations?hl=en&user=KlOgpxsAAAAJ">https://scholar.google.ch/citations?hl=en&user=KlOgpxsAAAAJ</a>

Project proposal: Receptor kinase signalling in plant stress

We use a variety of molecular, biochemical, and genetic approaches to decipher how plants respond to environmental perturbations at the cellular level. The project will involve identifying and characterizing protein kinases and their substrates that function in receptor kinase (RK) signalling pathways.

Dr. Vojislava Grbic, WSC 341, Ext. 86898, vgrbic@uwo.ca

Project Proposal: Are you fascinated by how tiny herbivores outsmart plants? Our lab unravels the molecular chess match between plants and the two-spotted spider mite, a globally important pest. We combine omics, molecular biology, and biochemistry to reveal how mites adapt, detoxify, and resist plant defences.

Dr. G. Kelly, WSC 359, Ext. 83121, gkelly@uwo.ca

Website: <a href="http://www.uwo.ca/biology/directory/faculty/kelly.html">http://www.uwo.ca/biology/directory/faculty/kelly.html</a>
Also, check out website: //thekellylab.weebly.com (Access via Wifi)

Project proposal: Wnt and Hedgehog signalling pathways in embryonic and cancer cells.

Dr. S. Kohalmi, WSC 319, Ext. 86485, skohalmi@uwo.ca

Website: <a href="http://www.uwo.ca/biology/Faculty/kohalmi/index.htm">http://www.uwo.ca/biology/Faculty/kohalmi/index.htm</a>

Project proposal: Sequence to Function: the ADT Gene Family

Then come and check out the world of Arabidopsis. Our lab is interested to understand how members of a gene family are regulated, respond to environmental stresses, differ or overlap in their function, are targeted to subcellular compartments and contribute to a functional plant. Intrigued? Ask for more information and stop by for a chat.

Dr. K. Hill, WSC 333, Ext. 81337, khill22@uwo.ca

See K Hill Google Scholar page for a list of our recent publications

Project proposal: NSERC-USRA/USRI researchers in the Hill lab this summer 2026 will be engaged and wet and dry bench work aimed at the discovery/detection of mutations and epimutations that arise with early development. We will be using techniques of whole genome sequencing and deep targeted DNA sequence and methylation profiling. The dry bench work is *in silico* bioinformatics for variant discovery and characterization. The variants are point mutations and large structural deletions, duplications and insertions. Our research aims to understanding mutagenesis occurring in the context of normal mouse development and in the context of primary tumors and secondary metastases. We also design data visualization tools, statistical tools and machine learning algorithms that we will be applying in our summer research.

**Dr. N. Mhatre**, B&GS 3023, Ext. 84505, nmhatre@uwo.ca

Website: www.natashamhatre.net

Project proposal: Studying vibrational communication in spiders, or acoustic communication in crickets.

Dr. Yolanda Morbey, Collip 209, Ext. 80116, <a href="mailto:ymorbey@uwo.ca">ymorbey@uwo.ca</a>

Website: <a href="https://www.uwo.ca/biology/faculty/morbey/">https://www.uwo.ca/biology/faculty/morbey/</a>

Project proposal: In the Morbey lab, we study the movement ecology of migratory birds and fishes. In 2026, Bio 4999E projects will focus on the ecology of small-bodied fishes in Medway Creek, on Western University's main campus. The main methods will include field work to sample fish from September through November, followed by ecological modelling.

Dr. B. Neff, Collip 204, Ext. 82532, bneff@uwo.ca

Website: <a href="http://www.uwo.ca/biology/Faculty/neff/index.htm">http://www.uwo.ca/biology/Faculty/neff/index.htm</a>

Project proposal: Behavioural and Conservation of Fishes.

Dr. M. Pyne, B&GS 2030, Ext. TBA, mpyne3@uwo.ca

Website: https://scholar.google.ch/citations?user=i4LlrHYAAAAJ&hl=en

Potential project: Engineering yeast for production of dauricine, a potential plant

chemotherapeutic

Dr. A. Percival-Smith, WSC 305, Ext. 84015, aperciva@uwo.ca

Website: <a href="http://www.uwo.ca/biology/Faculty/percivalsmith/index.htm">http://www.uwo.ca/biology/Faculty/percivalsmith/index.htm</a>

Project proposal: Phenotypic non-specificity of Transcription Factor Function in Yeast.

Dr. V. Tai, B&GS 2028, Ext. 86209, vtai4@uwo.ca

Website: <a href="https://www.uwo.ca/biology/directory/faculty/tai.html">https://www.uwo.ca/biology/directory/faculty/tai.html</a>

Project Proposal: The research in my lab focuses on environmental microbiology and bioinformatics. Potential projects include developing molecular and bioinformatic tools to investigate phytoplankton diversity. Other projects investigate the role of horizontal gene transfer in the evolution and ecology of bacteria, and soil microbial diversity in relation to sustainable agricultural practices.

Dr. R. Thomas, <a href="mailto:rthoma2@uwo.ca">rthoma2@uwo.ca</a>

Website: https://raymondthomaslipidlab.com/

Research Interests:

- o Nootropic and Functional Foods Innovation,
- o Lipid Bioinformatics/Novel Lipidomics Workflow/Method Development
- o Foodomics/Food metabolomics/Food Metabolism/Food as Medicine/Food Informatics/Food Arts
- o Brain Health/Neurolipidomics/Short chain fatty acids induced brain stress
- o Lipid Metabolism in Environmental Stress Biology, Boreal Agriculture/Ecosystem/Climate
- o Green Food grade extraction systems
- o Lipid metabolism in Boreal Forest reclamation/restoration
- o Food circularity, adaptative, sustainable food systems
- o Bioresource full utilization/Circular economy
- o Nanotechnology in boreal forest reclamation/sustainable food systems

**Dr. G. Thorn**, B&GS 3047, Ext. 88647, <a href="mailto:rgthorn@uwo.ca">rgthorn@uwo.ca</a>

Website: <a href="https://publish.uwo.ca/~rgthorn/">https://publish.uwo.ca/~rgthorn/</a>

Project proposal: Projects on the systematics of mushroom fungi, using phylogenetic analyses

of rDNA (and possibly other) sequences.

**Dr. Timoshenko**, BGS 3032, Ext. 88900, <a href="mailto:atimoshenko/">atimoshe@uwo.ca</a>
Website: <a href="mailto:https://www.uwo.ca/biology/faculty/timoshenko/">https://www.uwo.ca/biology/faculty/timoshenko/</a>

Project proposal: Cell and molecular biology of tissue-specific galectins.

Dr. L. Zanette, CB 207, Ext. 88316, <a href="mailto:lzanette@uwo.ca">lzanette@uwo.ca</a>

Website: <a href="http://www.uwo.ca/biology/Faculty/zanette/index.htm">http://www.uwo.ca/biology/Faculty/zanette/index.htm</a>

Project proposal: How the fear of predators affects wildlife prey: from birds to African elephants.

## **Opportunities at Agriculture and Agri-Food Canada:**

**Dr. Sangeeta Dhaubhadel**, Agriculture and Agri-Food Canada, 519-953-6616 <a href="mailto:sangeeta.dhaubhadel@canada.ca">sangeeta.dhaubhadel@canada.ca</a>

Project proposal: Genomics of legume specialized metabolism.

Our research in focuses on understanding how plants produce specialized metabolites that shape important traits like seed quality and stress resistance.

The USRA2025 project will involve utilizing omics tools to study pulse crops such as pea, and lentil, with the goal of improving their resilience and value for growers and consumers.

**Dr. Rima Menassa,** Agriculture and Agri-Food Canada, 519-670-3519 rima.menassa@canada.ca

Project proposal: The project this summer will involve analyzing the immune response of chickens to a Salmonella vaccine candidate produced in plants.

Dr. Frédéric Marsolais, Agriculture and Agri-Food Canada, 226-234-3450

Frederic.Marsolais@agr.gc.ca

Website: <a href="https://profils-profiles.science.gc.ca/en/profile/frederic-marsolais">https://profils-profiles.science.gc.ca/en/profile/frederic-marsolais</a>

Project proposal: Biosynthesis of sulphur amino acids in seed of common bean.