

## Graduate Studies Committee Chair' Report – September 24, 2024

Chair: Pejman Mirza-Babaei, PhD – Professor and Associate Dean, SGPS

### Land Acknowledgement

*Ontario Tech University acknowledges the lands and people of the Mississaugas of Scugog Island First Nation. We are thankful to be welcomed on these lands in friendship. The lands we are situated on are covered under the Williams Treaties and the traditional territory of the Mississaugas, a branch of the greater Anishinaabeg Nation, including Algonquin, Ojibway, Odawa and Pottawatomi. These lands remain home to a number of Indigenous nations and people. We acknowledge this land out of respect for the Indigenous nations who have cared for Turtle Island, also called North America, from before the arrival of settler peoples until this day. Most importantly, we remember the history of these lands has been tainted by poor treatment and a lack of friendship with the First Nations who call them home. This history is something we are all affected by as we are all treaty people in Canada. We all have a shared history to reflect on, and each of us is affected by this history in different ways. Our past defines our present, but if we move forward as friends and allies, then it does not have to define our future.*

### GSC Updates

Thank you all for being part of this committee. If you're returning from previous years, we appreciate your continued support. For those who are new, we're excited to have you on board and look forward to your contributions. Please take a moment to familiarize yourself with our Terms of Reference, which you can find here: <https://usgc.ontariotechu.ca/governance/academic-council/committees/terms-of-reference.php>

I would like to thank Dr. Christou for his commitment and contributions to SGPS and this committee during his tenure as Dean and GSC Chair.

While SGPS is going through a transition, GSC will be Chaired by SGPS Associate Deans (Drs. Carla Cesaroni and Pejman Mirza-Babaei) on a rotating basis.

I would also like to welcome our new University Secretary; Nicola Crow, new Deans; Amanda Cooper (FEEd); Ken Wilson (FSci), Joe Stokes (Acting SGPS), and new Graduate student representative – Krystina Clarke to GSC.

### SGPS Updates and Events

**Staff Updates:** We are pleased to welcome back **Beth Stewart**, Senior Graduate Admissions and Registration Officer and **Jennifer Pereira**, Graduate and Postdoctoral Affairs Coordinator. **Emily Laverty** has been seconded to SGPS as Graduate Admissions and Registration Coordinator from the Registrar's Office. Welcome Emily, Beth and Jennifer! **Michelle Cholak**, Senior Graduate Admissions and Registration Officer, completed her secondment with SGPS and returned back to FEAS. **Casiah Cagan**, Graduate Admissions and Registration Coordinator, has left the university to pursue her masters of education full-time. We are grateful for the contributions of Michelle and Casiah to SGPS.

**Student Updates:** For 2023-2024 we had a total of 997 graduate students (694 continuing and 303 new). We ran 12 pre-orientation onboarding sessions over the summer for new incoming students

and had attendance of over 100 at each session. We had the largest ever grad orientation in September with 250 students present.

**Event:** We are excited to present the **SGPS Research Poster Showcase**, Ontario Tech's annual graduate student and postdoc research poster session. It provides all graduate students and postdoctoral fellows with an exciting opportunity to present their research or academic work to a broad audience in an engaging and visually impactful format. The event will be held on **November 27, from 4:00-8:00 PM at Charles Hall**.

**Event:** SGPS invites you to join us for the Supervisor Series panel discussion — "*Mental Health and Wellness: Resources for Graduate Faculty*" hosted in collaboration with the **Student Mental Health Services** and **Wellness at Work** teams. This 90-minute virtual session on Thursday, October 10, 2024 at 11 a.m. hosted by **Bonnie Pedota**, Student Wellness Coordinator, Student Mental Health Services and **Elise Arbic**, Manager, Employee Health and Wellness. We'll explore ways to support graduate student mental health, faculty self-care and wellness strategies and offer time for Q&A and collective discussion. This session will offer practical strategies to recognize early signs of mental distress in students and learn how to approach sensitive conversations. Our panelists will also share tools to promote a healthy academic environment and highlight the resources available to both students and faculty. You'll leave with concrete takeaways for managing stress and building resilience, both in your work with students and in your own professional life. [Register here](#) to join the conversation.

**Tuition deposit:** Due to immigration changes for international students imposed by IRCC over the past few months, the university had to increase our **tuition deposit** for international students to \$2000, a decision that was made by most universities in Ontario. While this works for undergraduate and professional graduate programs, we are aware that it does not make sense for students who are funded for graduate research degrees. We are currently using a work around for incoming graduate students as our student information systems are not set up to handle differential tuition deposits. While the IT department works on system fixes, we will be manually adjusting the deposit requirements for funded students. The **deposit would be waived** in its entirety for international research students whose funding covers tuition. The students will need to apply for the deposit waiver through a Machform.

**IRCC updates:** Last week the Federal government announced more immigration reforms that will affect graduate students. Importantly, we don't know how this will work in practice, as the technical document has not been released, but this will at the very least disrupt our graduate enrolment for next year. The main points are below, and we have already adjusted our web communication to show that our grad programs are 16 months.

- The International Student Program cap will decrease by 10% over 2025 and now graduate students will be included in this cap.
- Master's and PhD students will now require a Provincial Attestation Letter (PAL) (these have a province imposed cap, and are issued through the RO).
- A new 'Graduate PAL' will be issued, specifically for graduate-level students. Provincial allocations of Graduate PALS must account for 12% of overall allocations.

- Spouses of graduate students in programs shorter than 16 months will no longer be eligible for spousal work permits.
- Spousal work permits will still be available for Master's and PhD students in 2-year programs, as well as for international researchers and faculty with job offers longer than 16 months.

## **Grad Pro Skills and Graduate Engagement**

### **Grad Pro Skills**

#### **July:**

- Harnessing the power of body language and mindset with Nancy Mak
- Public Speaking with Laura Thursby
- Networking with Professionalism with Darren Grant

#### **August:**

- Upgrade your resume and cover letter with Darren Grant
- Conferences 101 with Laura Thursby

#### **October:**

- Networking with Professionalism with Sacha Thompson

### **Graduate Engagement**

#### **July:**

- Graduate Writing Boot Camp, July 16, 17, 18 with Student Learning Centre (20 students in person max capacity, 1 student online)

#### **Pre-Orientation Sessions July:** (over 100 students at each session)

- Plan your Journey with Shelly Windsor
- International with Ashley Wu
- Campus Tour
- Documents & Deferrals with Michelle Cholak
- Student Expectations with Shelly Windsor
- Finance with Gail Fuller

#### **Pre-Orientation Sessions August:**

- Campus Tour
- How to Make a Payment with Gail Fuller
- Preparing for Academic Success with Shelly Windsor & Michelle Cholak

#### **September:**

- In-person Fall Orientation - 250 students in attendance

#### **Graduate Student Success Series**

- Student Supports & Services

- Shelly Windsor - Academic Affairs Specialist
- Kelsey Ford - Manager, Student Accessibility Services/Supports
- Mark Neville - Student Learning Centre
- Jarek Baginski - Student Mental Health
- Scholarship Session
  - Carla Cesaroni - Associate Dean of Graduate Studies
- Building Relationships
  - Graduate Engagement
  - Graduate Student Society
  - Student Engagement and Equity

**October:**

- SGPS Joint Session with Mental Wellness and Mental Health Services to provide support, guidance and resources for Graduate Faculty in dealing with graduate student mental health. The virtual session will run on World Mental Health Day - October 10, 11:00 am
- Canadian Nuclear Laboratory Graduate Program in partnership with Brilliant Catalyst - TBD (October 7-9 OR 9-11)

**Graduate Student and Postdoc Celebrations!**

The following students submitted their final thesis packages and successfully completed their program during the Spring/Summer term:

Student: Marta Kocemba

Program: PhD in Nuclear Engineering

Thesis Title: An Investigation of Ultraviolet and Ionizing Radiation on the Eye-Lens of Rainbow Trout

Supervisor: Ed Waller & Anthony Waker

Faculty: Engineering & Applied Science

Completed: June 3, 2024

Student: Haniyeh Fathi

Program: MASc in Automotive Engineering

Thesis Title: Modeling and Analysis of All-Season Passenger Car Tire using Finite Element Analysis

Supervisor: Zeinab El-Sayegh & Jing Ren

Faculty: Engineering & Applied Science

Completed: June 25, 2024

Student: Chen Xing

Program: MASc in Electrical and Computer Engineering

Thesis Title: Edge Embedding with Line Graph Enhancement

Supervisor: Masoud Makrehchi

Faculty: Engineering & Applied Science

Completed: July 4, 2024

Student: Sarah Pistritto

Program: Master of Health Sciences

Thesis Title: Exploring the Feasibility of Using ZUMBA and Cognitive Stimulation Exergame in Persons with Dementia and Late-Life Depressed Individuals: A Pilot Study

Supervisor: Winnie Sun

Faculty: Health Sciences  
Completed: July 4, 2024

Student: Latha Anekal  
Program: MASC in Electrical and Computer Engineering  
Thesis Title: In-depth Study and Analysis of Lithium-ion Battery States using Battery Degradation Data from Electrochemical Impedance Spectroscopy  
Supervisor: Sheldon Williamson  
Faculty: Engineering and Applied Science  
Completed: July 10, 2024

Student: Elena Villalobos Herra  
Program: MASC in Electrical and Computer Engineering  
Thesis Title: Energy Planning with Hydrogen Deployment Strategies within Interconnected Infrastructures Using Enhanced SWITCH Model  
Supervisor: Hossam Gaber  
Faculty: Engineering and Applied Science  
Completed: July 15, 2024

Student: Otavio Lopes Alves Esteves  
Program: PhD in Nuclear Engineering  
Thesis Title: Development and Evaluation of Nuclear-Renewable Hybrid Energy System Simulator with Load Following  
Supervisor: Hossam Gaber  
Faculty: Engineering and Applied Science  
Completed: July 29, 2024

Student: Sarah Kirkpatrick  
Program: MSc in Forensic Psychology  
Thesis Title: Consent and Sexual Assault in Heterosexual versus Same-Sex Sexual Encounters  
Supervisor: Karla Emeno & Shannon Vettor  
Faculty: Social Science and Humanities  
Completed: July 29, 2024

Student: Amna Hassan  
Program: PhD in Nuclear Engineering  
Thesis Title: Yeast-Based Impedance Biodosimetry for Retrospective Assessment of Radiation Exposures  
Supervisor: Kirk Atkinson  
Faculty: Engineering and Applied Science  
Completed: July 31, 2024

Student: Parisa Salmani  
Program: MSc in Computer Science  
Thesis Title: Bias and Fairness in Transfer Learning  
Supervisor: Peter Lewis  
Faculty: Science  
Completed: July 31, 2024

Student: Melissa Belchos  
Program: Master of Health Sciences  
Thesis Title: Exploring Varsity Athletes' Sleep Characteristics: Perspectives and Implications of Sleep on Training, Recovery, and Athletic Performance  
Supervisor: Efrosini Papaconstantinou  
Faculty: Health Sciences  
Completed: August 7, 2024

Student: Chandan Chetri  
Program: MASc in Electrical and Computer Engineering  
Thesis Title: A Multistage-constant-current, Temperature-controlled, Health-conscious Fast Charging Algorithm for Lithium-ion Batteries  
Supervisor: Sheldon Williamson  
Faculty: Engineering and Applied Science  
Completed: August 9, 2024

Student: Jeanne St-Laurent-Guerin  
Program: MSc in Applied Bioscience  
Thesis Title: Multi-omic analysis of contaminated sediments from Contrecoeur, QC on Planorbid snails  
Supervisor: Denina Simmons  
Faculty: Science  
Completed: August 12, 2024

Student: Andrew Bondoc  
Program: MASc in Mechanical Engineering  
Thesis Title: Developing a Calibrated Low Fidelity Model and an Optimized Sensor Network Using LIVE Digital Twin Vibration Monitoring for Pipelines in Oil and Gas Industries  
Supervisor: Ahmad Barari  
Faculty: Engineering and Applied Science  
Completed: August 14, 2024

Student: Eren Dincer  
Program: MASc in Mechanical Engineering  
Thesis Title: Experimental Investigation of Surface Geometries and Coatings of 3D-Printed Electrodes for Hydrogen Production  
Supervisor: Martin Agelin-Chaab  
Faculty: Engineering and Applied Science  
Completed: August 15, 2024

Student: Masoud Kermani Poor  
Program: MSc in Computer Science  
Thesis Title: A Targeted Reverse Mapping Machine Learning Approach for Non-Dominated Solutions in Multi-Objective Optimization  
Supervisor: Mehran Ebrahimi & Shahryar Rahnamayan  
Faculty: Science  
Completed: August 15, 2024

Student: Chen Liang  
Program: MSc in Materials Science  
Thesis Title: Field-Mediated Ring-Expansion Isomerization of Cyclic Hydrocarbons in Ion-Pair Complexes: A Computational Study  
Supervisor: Fedor Naumkin  
Faculty: Science  
Completed: August 15, 2024

Student: Larissa Janssen  
Program: MA in Criminology  
Thesis Title: It Gets Better? Comparing the Experiences of LGB and Heterosexual Canadians.  
Supervisor: Carla Cesaroni  
Faculty: Social Science and Humanities  
Completed: August 19, 2024

Student: Zahra Ahmadi  
Program: MSc in Computer Science  
Thesis Title: Building Reliable AI Assistive Technologies: A Comprehensive Process for Inclusive and Transparent Co-Design  
Supervisor: Peter Lewis  
Faculty: Science  
Completed: August 20, 2024

Student: Ammar Elmoghazy  
Program: MASc in Electrical and Computer Engineering  
Thesis Title: A Hybrid Approach for Intersection Management in V2X-Enabled Connected Vehicles in V2X-Enabled Connected Vehicles  
Supervisor: Khalid Elgazzar & Sanaa Alwidian  
Faculty: Engineering and Applied Science  
Completed: August 20, 2024

Student: Adrianna Trifunovski  
Program: Master of Health Sciences  
Thesis Title: Examining Women's Knowledge, Health Risk Perceptions, Beliefs and Behaviours in Relation to Toxic Chemicals Commonly Found in Personal Care and Household Products: A Mixed-Methods Approach  
Supervisor: Caroline Barakat  
Faculty: Health Sciences  
Completed: August 21, 2024

Student: Alexandre Kalogerakis  
Program: Master of Health Sciences  
Thesis Title: Impact of Vibration and Recurrent Neck Pain on Sensorimotor Integration in Response to a Motor Tracing Task  
Supervisor: Paul Yelder  
Faculty: Health Sciences  
Completed: August 21, 2024

Student: Claire Culver  
Program: MSc in Computer Science  
Thesis Title: Comparison of Performance for Visual Feedback and Cursors in Mid-Air Grasping of 3D Objects  
Supervisor: Bill Kapralos  
Faculty: Science  
Completed: August 21, 2024

Student: Abraham Amini  
Program: MSc in Modelling and Computational Science  
Thesis Title: Staffing Queueing Systems with Cyclical Demand and Unreliable Servers  
Supervisor: Amir Rastpour  
Faculty: Science  
Completed: August 21, 2024

Student: Mckenzie Morton  
Program: MA in Criminology  
Thesis Title: Forced Sterilization in the 21st Century: A Qualitative Analysis of Women's Experiences in Canada  
Supervisor: Carla Cesaroni  
Faculty: Social Science and Humanities  
Completed: August 22, 2024

Student: Miray Dincer  
Program: MASc in Mechanical Engineering  
Thesis Title: Life Cycle Analysis of Green Hydrogen Production Pathways  
Supervisor: Martin Agelin-Chaab  
Faculty: Engineering and Applied Science  
Completed: August 23, 2024

Student: Mohammed Faiz Chauhan  
Program: MSc in Applied Bioscience  
Thesis Title: Using Non-targeted Mass Spectrometry to identify proteomic, metabolomic and lipidomic profiles in saliva to compare the impact of Prolonged vs. Interrupted Sitting  
Supervisor: Denina Simmons  
Faculty: Science  
Completed: August 23, 2024

Student: Ahmet Kilicaslan  
Program: MASc in Mechanical Engineering  
Thesis Title: Experimental Investigation of Integrated Systems for Biohydrogen and Biomethane Production  
Supervisor: Ibrahim Dincer  
Faculty: Engineering and Applied Science  
Completed: August 23, 2024

Student: Calvin Cressman



Program: MSc in Forensic Psychology  
Thesis Title: Exploring Perceptions of Barriers to Sex and Intimacy in an Inpatient Intimacy Recovery Service  
Supervisor: Leigh Harkins  
Faculty: Social Science and Humanities  
Completed: August 23, 2024

Student: Alia Stevenson  
Program: MSc in Forensic Psychology  
Thesis Title: In Pursuit of the Good Life: Masculinity and Reintegration  
Supervisor: Leigh Harkins & Carla Cesaroni  
Faculty: Social Science and Humanities  
Completed: August 23, 2024

Student: Janani Balasubramanian  
Program: MSc in Materials Science  
Thesis Title: Detection of Trace Concentrations of Small and Big Molecules Through Vibrational Spectroscopy  
Supervisor: Nisha Agarwal  
Faculty: Science  
Completed: August 23, 2024

Student: Benjamin Sainsbury  
Program: PhD in Computer Science  
Thesis Title: Development and Evaluation of a Percutaneous Nephrolithotomy (PCNL) Surgical Simulator  
Supervisor: Mark Green & Jing Ren  
Faculty: Science  
Completed: August 26, 2024

Student: Justin Cormier  
Program: Master of Health Sciences  
Thesis Title: Characterizing Aerobic and Anaerobic Performance in Alpine Skiing  
Supervisor: Heather Sprenger  
Faculty: Health Sciences  
Completed: August 26, 2024

Student: Naeim Karimi AhmadAbadi  
Program: MSc in Mechanical Engineering  
Thesis Title: Material and Process Development for Material Extrusion Metal Additive Manufacturing using Recycled Nickel  
Supervisor: Ramona Fayazfar  
Faculty: Engineering & Applied Science  
Completed: August 26, 2024

Student: Christine Misketis  
Program: Master of Health Sciences

Thesis Title: The Impact of Subclinical Neck Pain on Cerebellar Processing and Task Familiarization as Measured by the Vestibulo-Ocular Reflex and Cervical Proprioception

Supervisor: Bernadette Murphy

Faculty: Health Sciences

Completed: August 27, 2024

Student: Ayse Meke

Program: MAsc in Mechanical Engineering

Thesis Title: Development and Experimental Investigation of Direct Urea Fuel Cells

Supervisor: Ibrahim Dincer

Faculty: Engineering & Applied Science

Completed: August 28, 2024

Student: Michael Ouellet

Program: PhD in Criminology and Social Justice

Thesis Title: Police Perception of Danger

Supervisor: Tyler Frederick

Faculty: Social Science and Humanities

Completed: August 28, 2024

Student: Hossameldin Ouda

Program: MAsc in Electrical and Computer Engineering

Thesis Title: Unified Data Management in Collaborative IoT Systems

Supervisor: Khalid Elgazzar

Faculty: Engineering & Applied Science

Completed: August 28, 2024

Student: Ghadeer Abdelkader

Program: PhD in Electrical and Computer Engineering

Thesis Title: Context-Aware Pedestrian Intent Prediction for Connected and Automated Vehicles

Supervisor: Khalid Elgazzar & Alaa Khamis

Faculty: Engineering & Applied Science

Completed: August 29, 2024

Student: Abdalrahman Alsaka

Program: MAsc in Mechanical Engineering

Thesis Title: Performance Evaluation of Reactive Passive Acoustic Attenuation Devices in Water Pipeline System

Supervisor: Atef Mohany

Faculty: Engineering & Applied Science

Completed: September 4, 2024

Student: Amirhossein Jafarzadeh Ghazi

Program: PhD in Modelling and Computational Science

Thesis Title: Three Essays on Pricing, Quality, and Advertising Decisions While Anticipating a Product Recall

Supervisor: Salma Karray & Nader Azad

Faculty: Science

Completed: September 9, 2024

Student: Garon Mulyk

Program: MA in Criminology

Thesis Title: Understanding and Defining Threats to National Security and Public Safety: A Thematic Analysis and Grounded Theory Approach

Supervisor: Barbara Perry

Faculty: Social Science and Humanities

Completed: September 9, 2024