Chair’s Message
Welcome back to the 2022-23 Academic year! Please take the time to read about upcoming events and to read about the achievements of our faculty and trainees over the summer. See you all in person soon. Be sure to check out the details of the Biochemistry Research Day on page 5 & 6.

Research Image
Image generated by:
Mark Mabanglo from Dr. Walid Houry’s Lab
Caption: Human ClpP protease is important for mitochondrial protein homeostasis. Its main function is to degrade protein substrates involved in mitochondrial energetics and metabolism. In cancer cells, human ClpP is over-expressed to meet the cell’s special metabolic requirements to sustain oncogenesis and support metastasis. Small molecule agonists like TR-27 bind tightly to human ClpP and lead to its hyper-activation, resulting in non-specific degradation of cellular proteins, leading to apoptosis of cancer cells.
September Newsletter

Announcements

Congratulations to Dr. Trevor Moraes and Dr. Peter Kim who have been promoted to Professor.

Congratulations Professor Karen Maxwell, an Associate Professor in the Department of Biochemistry, has agreed to serve as the Research Director for Basic Sciences in Temerty Medicine.

Teamwork Makes the Dream Work for Research and Education

Temerty Faculty of Medicine Award 2022

Congratulations to Dr. Trevor Moraes for being this year’s recipient of the Excellence in Undergraduate Laboratory Teaching in Life Sciences: Undergraduate Teaching Awards in Life Sciences.

The Undergraduate Teaching Awards in Life Sciences are awarded for excellence in teaching, coordination, and/or development of undergraduate laboratory-based courses in Arts and Science offered by the Basic Science Departments in the Temerty Faculty of Medicine. Trevor’s award is for sustained excellence in the teaching, coordination and/or development of laboratory based instruction in formal Arts and Science Life Sciences laboratory courses.

Congratulations to Dr. Nana Lee for receiving the 2022 Temerty Award for Excellence in Professional Values.

Celebrating the Recipients of the Temerty Awards for Excellence in Professional Values

"Thank-you for this wonderful news! I stand with exemplary company with all those nominated and those who strive for professional values at work every day, without the recognition. It takes a village. It is only with such a rich village at Temerty with members committed to such excellence - that enable and inspire me with all that I do. I thank each and everyone. With this award, I will humbly think of myself as the spokesperson, if I may, for all those who serve our community with such values. What a delightful way to start my year-long sabbatical."
Graduate News

Thank you to our previous Peer Communications Team leaders Kyla Germain and Alexa Fitzpatrick as they pass the leadership for 2022. We welcome Neetu Gill, Rachel Shannon, and Emily Miraglia. The Department appreciates all of you for your vital work. We also thank all the mentors on PCT in strengthening our student presentations!

The courses for graduate professional development (GPD) and design thinking for scientists (DTS) will be offered next in the 2023-24 academic year. If students have questions regarding one-on-one GPD you can contact Dr. Nana Lee by email at nana.lee@utoronto.ca.

Graduate Awards

2022 Canadian Student Health Research Forum (CSHRF)

Three exceptionally talented PhD students in our department received poster awards at the 2022 Canadian Student Health Research Forum (CSHRF) (http://www.hsgsa.org/cshrf/). In brief, this is an annual 1-week event that provides a “venue for networking, research exposure and recognition of Canada’s most promising research trainees in the health sciences”. Each year, universities are invited to nominate their top PhD students in the health sciences to participate in the forum. This year we have the following awards to celebrate:

1. Elaine Thai received the Gold Poster Prize for her work "Rational design and characterization of a conformationally restricted immunogen against malaria". Elaine is a PhD student in the Julien lab.

2. Brandon Payliss received the Silver Poster Prize for his work “Phosphorylation of the DNA repair scaffold SLX4 drives folding of the SAP domain and activation of the MUS81-EME1 endonuclease”. Brandon is a PhD student in the Wyatt lab.

3. Raphaella So received an Honorable Mention for her work “Distinct conformational strains of α-synuclein aggregates can form in identical experimental conditions”. Raphaella is a PhD student in the Watts lab.

Let’s extend congratulations again to everyone!

WIDE Committee News

Dr. Ahlia Khan-Trottier will now be chairing the Biochemistry WIDE Committee until Dr. Lee’s return in July 2023. Thank-you, Dr. Khan-Trottier.
**Undergraduate News**

As we look forward to the new academic year, we would like to highlight some of the successes of our Undergraduate programs and our students. First, thank you to all the labs who hosted summer undergraduates this year. Research experience is a major part of our programs, and it is fantastic to see these opportunities returning. Also of note, this year represented a return to an in-person poster session by our students. What a return it was—with students and faculty gathering to discuss their research on the patio of the Faculty Club. Departmental support (from Biochemistry and Molecular Genetics) was critical in elevating this event and we hope that it serves as a model for years to come. Looking ahead, enrolment is also up in our year-long independent research courses that will be starting in a few short weeks. Best of luck to our students on their projects and thanks again to the labs that are hosting them.

Broadly speaking, interest in our undergraduate programs remains high. This year again will see our incoming Specialist cohort at over 25 students and our majors over 50. Welcome to each of these students. Thank you for placing your trust in us.

Lastly, a huge congratulation to this year’s student award recipients. This year we had 18 summer research awardees (of which, 16 are Biochem specialists or majors). The awards for outstanding 3rd and 4th year Biochemistry students went to Jessica Nash (Daniel Wilson Award in Science) and David Sapp (Amy Britton Award). Congratulations on your achievement!

**BUSS News**

**Hey Biochemists!**

We hope that you had a wonderful summer and are excited to be back on campus! We want to extend a warm welcome to the incoming biochemistry majors and specialists who are joining our community. To help students transition into second year, the BUSS Mentorship Program will start in September. This is a great opportunity for students to get involved and meet other people in the same program. For those interested in playing a more active role in planning BUSS events, we will run fall elections for a few outstanding executive team positions. More information about the mentorship program and fall elections will be communicated through our social media (@uoftbuss on Facebook and Instagram) and via email. Finally, we encourage students to attend the various academic and social events that we host throughout the school year. We look forward to meeting everyone and wish you all the best this upcoming semester!

Biochemically yours, BUSS

If you have any questions, suggestions, or concerns, please contact us at uoftbuss@gmail.com.
Transcripts News

Are you passionate about writing and science communication? Looking to join a group of fellow writers in the Biochem department?

Biochemistry’s student blog, Transcripts, is recruiting new members for the coming school year! The Transcripts blog features a collection of pieces written by past and present graduate students from the Department of Biochemistry. We are looking for writers, editors, illustrators, and designers, and we are also happy to take submissions from the community at any time.

If you are interested in joining us, or if you have a piece of creative work that you want to share with our readers, contact us at emily.miraglia@mail.utoronto.ca or kate.jiang@mail.utoronto.ca. Our first meeting of the 2022-2023 school year will be Wednesday September 28th at 5pm in the MaRS building lobby.

Follow us on Twitter @transcriptsblog for more updates on our work!

Biochemistry Departmental Retreat 2022

We are excited to announce that the annual Biochemistry Departmental Retreat will be taking place this year on Wednesday, September 21st and Thursday, September 22nd!

Day 1 will take place on campus at the David Naylor Student Commons/Stone Lobby at MSB, with posters from faculty and trainees followed by a pub night at Prenup (which is open to everyone!). Day 2 will take place on Toronto Centre Island at the Artscape Gibraltar Point with keynote speakers and fun social events in the afternoon.

Rotation students, current trainees, and postdocs should register at the following link before September 12th, 11:59PM: REGISTRATION. For trainees who want to present a poster, please indicate on the form and we will contact you with further details. Student groups who are interested in promoting their club at the retreat, please reach out to vimei.wan@mail.utoronto.ca!

We hope to see you there!

Sincerely,
Retreat organizers
Jon Ditlev, Kate Lee, Spencer Freeman, Shenique Baker, Dixon Ng, Cami Aprosoff, Nicholas Silver, Tim Yi-Ting Lee, Cindy Yimei Wan
2022 BIOCHEMISTRY DEPARTMENTAL RETREAT

21-22 SEPTEMBER, 2022

DAY 1
- 3 PM: REVERSE POSTER SESSION BY FACULTY
- 4-6 PM: POSTER SESSION BY TRAINEES
- 6 PM: PUB NIGHT AT PRENUP (OPEN TO ALL!)

DAY 2
- 8-9 AM: CATCH FERRY
- 9:30 AM: Awardee Talks
- 11 AM: COFFEE BREAK
- 11:30 AM: KEYNOTE TALKS
- 1 PM: LUNCH
- 2-6 PM: SOCIAL EVENTS

DAVID NAYLOR STUDENT COMMONS (STONE LOBBY), MSB

ARTSCAPE GIBRALTAR POINT, TORONTO CENTRE ISLAND

KEYNOTE SPEAKERS

Dr. Gira Bhabha
Assistant Professor
NYU School of Medicine

Dr. Damian C. Ekiert
Assistant Professor
NYU School of Medicine
Upcoming Events

Shayna Deecker’s PhD Oral exam
Wednesday September 7, 2022
10:00AM - 1:00PM
PhD Oral Seminar: 10:00AM - 10:45AM
PhD Oral Exam: 11:00AM - 1:00PM
**Thesis Title:** "Leveraging CRISPR-Cas to Examine the Interplay Between Legionella Pneumophila and Mobile Genetic Elements"
Alex Ensminger (supervisor)
Alan Davidson (supervisory member)
William Navarre (supervisory member)
ZOOM LINK: Please contact students’ supervisor for details

EunJee Park's PhD Remote Oral exam
Monday September 12, 2022
11:00AM - 2:00PM
PhD Oral Seminar: 11:00AM - 11:45AM
PhD Oral Exam: 12:00PM - 2:00PM
Carol Schuurmans (supervisor)
Isabelle Aubert (supervisory member)
Lilliana Attisano (supervisory member)
**ZOOM LINK** - 11:00AM - 11:45AM - Open Session
Meeting ID: 871 4064 1803 / Passcode: 219069

Tom Bateman PhD Defence
Friday September 23, 2022
1:00PM - 4:00PM
PhD Oral Seminar: 1:00PM - 1:45PM
PhD Oral Exam: 2:00PM - 4:00PM
Trevor Moraes (supervisor)
Lynne Howell (supervisory member)
Scott Gray-Owen (supervisory member)
ZOOM LINK: Please contact students’ supervisor for details