



June 2023 Edition

Special Message

We are very excited to share the second 2023 edition of the Pharmer's Almanac! This issue includes a section on student news, a section on faculty awards, as well as a section on student awards and recognition. The Department of Pharmacology and Toxicology is always proud of the hard work and high ethical standards that the faculty and staff hold. We want to take this opportunity to congratulate, and also recognize, each and every single faculty member and student awardee.

Student News



Congrats to the CIHR Canadian Graduate Scholarships – Master's (CGS-M) Recipients

The Department of Pharmacology and Toxicology is very proud of its students! Read on!



Xiaoyu Men appointed as a CANSSI Ontario STAGE Trainee

Congrats to Xiaoyu! We are very proud of you! To read more, click here!



Congratulations to UofT's Run Club on a successful fundraiser for SickKids Hospital

Read on for more details about this amazing initiative!



Alaa Alsaafin featured on Faces of Temerty Medicine

Read the <u>Q&A</u> for more information about Alaa's journey at Pharmtox!

Awards and Recognition



Congrats to Dr. Anita Hamadanizadeh!

We are extremely happy for Dr. Anita Hamadanizadeh for receiving the Excellence in Undergraduate Laboratory Teaching in Life Sciences Award 2023. This award is for excellence in teaching, coordination, and/or development of undergraduate laboratorybased courses in Arts and Science offered by the Basic Science Departments in the Temerty Faculty of Medicine. Congratulations to Dr. Hamadanizadeh for this very well-deserved recognition!

2022 - 2023 Awardee Profiles

Undergraduate Student Awards

Dr. Walter Roschlau Memorial Award in Pharmacology -Zhizhi (Jessica) Xia and Genevieve Ramnarine



Zhizhi, who also goes by Jessica, moved from Nanjing, China to Canada in Grade 10. She entered the University of Toronto still unsure of what she wanted to do. It was PSL190 that first exposed her to drug discovery research. From there, Zhizhi knew she wanted to study how drugs worked, in hopes of developing drugs for diseases yet to have a cure. Therefore, she pursued the Pharmacology Specialist program. The program was tough, but she greatly appreciates the department for all the opportunities it gave her, from aweinspiring lectures to hands-on research opportunities. Zhizhi believes the program has trained her critical thinking skills and fostered her curiosity in life science research. She is honoured to receive the Dr. Walter Roschlau Memorial Award in Pharmacology and feels greatly encouraged by it. Zhizhi will begin her graduate studies this fall in the Department of Molecular Genetics at the University of Toronto, where she hopes to better understand the mechanisms of disease to aid drug discovery. Before coming to U of T, Zhizhi never considered the possibility of becoming a research scientist. However, being surrounded by professors and TAs who are always pushing her to think deeper and motivating her to work harder, the path to becoming a research scientist has become increasingly tangible each day.



By pursuing a Pharmacology Specialist, as well as a Physiology major and Psychology minor, Genevieve gained enormous insight into the world of therapeutics and, more broadly, human health. Genevieve enjoyed pursuing second year and fourth year research projects in pharmacology. Specifically, she contributed to work with drug loaded microparticles and zebra fish models for pain medicine. Additionally, Genevieve enjoyed sharing her experiences with others through Pharm/Tox mentorship programs, advancing her interest in working with others to achieve their goals. Using the skills she has gained throughout her undergraduate career, Genevieve will be attending the Michael G. DeGroote School of Medicine at McMaster University. Genevieve is excited for a future career as a physician where she hopes to empower patients to achieve their goals in a way that is personalized and empathetic.

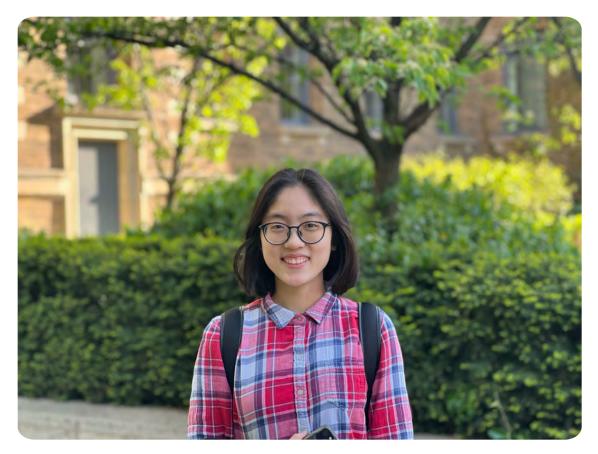
W. Mac Burnham Achievement Award - Kristen Schulz



Kristen completed a double major in Pharmacology and Physiology and a minor in Immunology. Pharmacology and physiology courses have provided her with a solid knowledge base on normal physiology and pathophysiology and treatment of various diseases that she has been able to apply to her research projects throughout her undergraduate degree. Her research focus has been on investigating endothelial cell dysfunction underlying atherosclerosis pathogenesis.

She is appreciative of the support she received from the Department of Pharmacology and Toxicology during her degree. She would specifically like to thank Dr. Michelle Arnot, whose Systems Pharmacology course inspired her to pursue cardiovascular research. Kristen will utilize the knowledge gained from her pharmacology major program as she pursues a thesis-based Master's degree in Laboratory Medicine and Pathobiology at the University of Toronto in the laboratories of Drs. Fish and Howe.

Dezso Kadar Pharmacology Student Achievement Award - Simin Jin



Simin Jin moved from Beijing, China to Canada, to study at the University of Toronto. Since she has always had an interest in learning how drugs work, Simin was determined to enroll in the Pharmacology Specialist Program. In the program, she has not only learned to apply knowledge in pharmacology, but was also provided with extensive research opportunities. The undergraduate laboratory courses and research experiences in Dr. Burnham's Lab have helped her develop variable skills such as experimental design, critical thinking, and teamwork. These experiences also fostered her interest in neuropharmacology and motivated her to develop new drugs for incurable neurological diseases.

Simin is honoured to receive this award and appreciates all the professors and TAs who have guided and supported her. She is currently working on a fourth-year research project on schizophrenia under Dr. Margaret Hahn's supervision at CAMH. In the future, Simin hopes to become a clinician scientist by pursuing medicine and a master's or Ph.D. degree in neuropharmacology research.

Graduate Student Awards

Amar K. Sen Memorial Award - Ahmed El-Boraie



Ahmed defended his PhD under the supervision of Dr. Rachel Tyndale. Inspired by the goals of precision medicine, his research, which focused on the field of Pharmacogenomics, aimed at identifying genetic variation that can be used to better understand differences in smoking behaviours and improve smoking cessation outcomes. His primary research projects included developing CYP2A6 activity genetic risk scores and evaluating the intersection of racial ancestry and rare genetic variation on the performance of these scores. His research accomplishments as a PhD trainee included contributing eight publications, four as a primary author, along with several oral and poster presentations at international conferences, including ASHG, PGRN, SRNT, and MDO.

Beyond research, he was passionate to teach as exemplified by his teaching assistant posts for undergraduate and graduate courses. Ahmed was also an active member of multiple student organizations; he was a proud member of the Pharmacology's Graduate Student Association for several years, including a term as president. He has also been an executive member/team lead for the Life Sciences Career Development Society.

Since graduating, Ahmed has leveraged his scientific training to pursue a career in medical affairs within the pharmaceutical industry, where he has worked for Novartis and AbbVie within the lung cancer and psychiatry therapeutic areas.

Ahmed is grateful to receive the Amar K. Sen Memorial Award, and will forever be thankful for the mentorship, training, and opportunities that he received throughout his time at the department.

Fiona Smillie Memorial Award - Martino Gabra



Martino completed his PhD in 2022 from Dr. Leonardo Salmena's Lab. His thesis focused on identifying the roles of microRNAs in Acute Myeloid leukemia through high throughput screening methods. Throughout his PhD, he was an active participant and leader in a number of student-led initiatives that focused on improving student life. He lobbied for increased stipend pay with the Graduate Representation Committee, introduced the Elefant document with Sasha Marakhovskaia, and participated in several events to bring students together. Martino currently works as a Scientist at Deep Genomics where he continues to contribute to the field of small RNA therapeutics.

Dr. Malle Jurima-Romet Award - Sierra Codeluppi and Vivian Feng (Honourable Mention)



Sierra is a fourth year PhD student in the Department of Pharmacology and Toxicology under the supervision of Dr. Mounira Banasr in the Neurobiology of Depression and Aging Lab at CAMH. Sierra also holds a Bachelor of Arts and Science in Neuroscience and Philosophy. Currently, her research focuses on astroglial dysfunction in the behavioural and cellular changes associated with chronic stress. When she is not working in the lab, she spends much of her time reading, a long-time passion of hers. Sierra has read over 200 books in the last 3 years and writes reviews for each book on her <u>GoodReads account</u>. She also actively posts current reads and book recommendations on her Instagram: @freddieandoliveread. Sierra's ultimate goal has always been looking to write her own novel and she hopes that this award will help her start that process.



Vivian is a fourth year PhD student under the supervision of Dr. Krista Lanctot. Her work focuses on the interactions between gut barrier permeability and cognition in patients with mild cognitive impairment. Outside of school, she has a deep passion for the performing arts and has dedicated 14 years to training in classical ballet. She has completed all levels of the RAD (Royal Academy of Dance) and Beijing Dance Academy (BDA) examinations. Dance has engrained in her a multitude of principles, such as perseverance and discipline, that have shaped her identity. In her free time, she enjoys branching out and learning different genres of dance. She is currently specializing in Bachata and Latin ballroom.

Leadership and Exemplary Service Award - Sierra Codeluppi and Ella Bing Xin Song



Sierra is a fourth year PhD student in the Department of Pharmacology and Toxicology under the supervision of Dr. Mounira Banasr in the Neurobiology of Depression and Aging Lab at CAMH. Sierra also holds a Bachelor of Arts and Science in Neuroscience and Philosophy. Currently, her research focuses on astroglial dysfunction in the behavioural and cellular changes associated with chronic stress. Within the department, Sierra has actively taken on several leadership roles. She is an active member of the Pharmacology Graduate Students Association as the CAMH student representative and has co-led and organized several departmental events this year such as the summer retreat and CAMH board game night. She has also assisted others with events as needed, always available to provide a helping hand. Sierra is also an active member of her lab environment where she organizes weekly lab meetings and is the student representative on the Animal Care Committee. She is also co-leading the Temerty Faculty of Medicine Showcase team to organize the first ever faculty-wide conference for students, faculty, and staff to showcase their work. Finally, Sierra was previously the vice-president external and executive at large of the University of Toronto Graduate Student Union where she provided support to graduate students across the university.



Ella Bing Xin Song is a PhD student in the Department of Pharmacology and Toxicology at UofT under the supervision of Dr. Krista Lanctôt. Her research focuses on exploring potential biomarkers as novel therapeutic targets for cognitive-enhancing treatments in patients with mild cognitive impairment (MCI) or mild Alzheimer's disease (AD). She is passionate about fostering a sense of community and enhancing professional development programming for graduate students. She currently serves as the President of the Sunnybrook Research Institute Student Network (SSN), the Professional Development Director of the Pharmacology Graduate Students Association (PGSA), and the Life Sciences Career Expo Associate of the Life Sciences Career Development Syndicate (LSCDS). Additionally, to support the approval and implementation of academic policy and regulations for graduate studies at UofT, she serves as the Life Sciences Student Representative on the Graduate Education Council and the student representative on the Graduate Board.

M.Sc. Thesis Award - Grace Koo



Grace completed her M.Sc. in Pharmacology in 2022 under the supervision of Dr. Krista Lanctôt. Her thesis investigated changes in brain-derived neurotrophic factor in cognitively impaired older adults after receiving a form of neurostimulation called transcranial direct current stimulation (tDCS). With a particular interest in clinical research, Grace is eager to contribute towards helping deliver medical solutions to patients, and to be a part of the community to help advance medicine.

Visions in Pharmacology Travel Award - Ehab Bakbak

Pharmer's Almanac (June 2023 Edition)



Ehab is a fourth year PhD student working in the Verma Lab at St. Michael's Hospital on a variety of translational research projects attempting to identify novel strategies for cardiovascular risk reduction. He has a keen interest in knowledge translation and clinical trial design. Outside of research, he is a big-time Toronto Raptors fan, petrol head, and fitness enthusiast.

Teaching Assistant Awards

Departmental Teaching Assistant Excellence Award - Alec Langlois and Yalin Sun



Alec is a fourth year PhD student in the Tyndale Lab. His work focuses on genetic variation, particularly structural variation, in CYP2A6, the gene coding for the primary nicotine-metabolizing enzyme, and its associations with nicotine metabolism. Alec received the Departmental Teaching Assistant Excellence Award for his work as a laboratory demonstrator in PCL367 and PCL368, the third-year undergraduate lab courses in the Department of Pharmacology and Toxicology taught by Dr. Anita Hamadanizadeh.



Yalin is a fifth year PhD candidate in Dr. Susan R. George's Lab. She has been the teaching assistant coordinator for Introduction to Toxicology (PCL362) since 2020, working under Dr. Peter G. Wells, in addition to other lab courses. She is highly passionate about teaching, mentoring, and training undergraduate students, and hopes to continue these endeavors after her PhD. Outside of the lab and classroom, Yalin enjoys creating new dishes and baked goods in her spare time.

Departmental Teaching Assistant Achievement Award - Sierra Codeluppi and Ersi Zabzuni



Sierra is a fourth year PhD student in the Department of Pharmacology and Toxicology under the supervision of Dr. Mounira Banasr in the Neurobiology of Depression and Aging Lab at CAMH. Sierra also holds a Bachelor of Arts and Science in Neuroscience and Philosophy. This year, Sierra was the head teaching assistant for PCL201 - Introduction to Pharmacology and Pharmacokinetics course of over 250 students. Sierra played an active role in helping to formulate and mark assessments, answering discussion board questions, providing feedback to students, and assisting in marking the final exam.



Ersi completed her Honours BSc in the Department of Pharmacology and Toxicology and is now a second-year MSc student in the Applied Clinical Pharmacology Program in the same department. Her research interests are focused around pediatric drug dosing, specifically that of monoclonal antibody rituximab. She conducted her research project at the Hospital for Sick Children under the supervision of Dr. Ruud Verstegen.

Ersi was a teaching assistant for PCL389: Understanding the Role of Pharmacology and Toxicology in Society for two years; this is a hands-on course in which students get multifaceted knowledge on recreational drug use and substance abuse disorders. She played a role in matching students to placements, marking assessments, including regular reflections, oral debates, final exams, arranging regular check-ins with students to ensure their progress and excellent understanding of the course material, and answering discussion board and email questions.

Stay tuned for more award announcements in the next edition!

Other recent publications from PharmTox

Mental Health Resources

Please know that there are a wide variety of supports available to all U of T students, staff, and faculty. Here are a few helpful links and phone numbers:

Students

- <u>http://pharmtox.utoronto.ca/health-and-wellness</u>
- <u>My Student Support Program (MySSP)</u>: U of T MySSP provides students with immediate and/or ongoing confidential, 24-hour support for any school, health, or general life concern.

1-844-451-9700 (North America); 001-416-380-6579 (outside of North America)

- Good2Talk Student Helpline: 1-866-925-5454
- <u>Navi</u> An anonymous chat-based service that acts as a virtual assistant for students wanting to learn more about the mental health supports available to them at the University of Toronto.
- <u>School of Graduate Studies Embedded Counsellors</u>
 Free short-term counselling (~6 sessions). Phone: 416-978-8030, Ext. 5.
- Grad Studies Wellness Portal
- Student Mental Health Resources

Faculty and Staff:

• HR and Equity Support and Advice for Employees during COVID-19

Community Helplines:

- <u>Gerstein Center Mental Health Crisis Line</u>: **416-929-5200** Provides free, voluntary, and confidential crisis intervention service over the phone and in-person for adults living in the City of Toronto. Available 24 hours a day, 7 days a week.
- <u>Toronto Distress Centre Hotline</u>: 416-408-HELP (4357) or text 45645. Offers 24/7 emotional support, crisis intervention, suicide prevention and linkage to emergency help when necessary. Available 24 hours a day, 7 days a week.
- <u>Canada Suicide Prevention Service</u>: 1-833-456-4566 Available 24/7 for phone calls to help individuals thinking of suicide or worried about a potentially suicidal loved one. Also available from 4pm to 12am ET via text at 45645.

We'd love to hear from you!

Have an event, story, award, or publication you'd like to share? Let us know!



Copyright © 2023 Department of Pharmacology and Toxicology, All rights reserved.