

U of T Biochemistry

[Biochemistry Website](#)

MESSAGE FROM THE CHAIR

We are now in October and from all accounts, the Fall return to campus occurred relatively smoothly.

So far there have been no reported outbreaks at U of T and of faculty, librarians and staff that declared their status via [UCheck](#) an impressive 99% are vaccinated. If you have not already done so, and even if you are working remotely, note that all members of the University community must provide proof of being fully vaccinated via [UCheck](#) by October 29th.

In September, we welcomed 22 new graduate students and many undergrad project students into our labs. The first two-day hybrid Biochemistry Retreat went off without a hitch, in no small part due to the enthusiastic and careful planning by the Organizing Committee (Kate Lee, Jonathon Ditlev, Elaine Thai, Jim Wu, and Kirsten Meyer). Be sure to check out some of the photos in this newsletter. A big thank you to the trainees and faculty that gave exciting talks. Congratulations to the trainees who were the recipients of Awards (see names and awards in the September newsletter) and Poster prizes (see sidebar). I would like to acknowledge the hard work of members of the grad committee and other faculty for taking the time to review and select the recipients of the awards.

Finally, have a wonderful Thanksgiving (whether you are having traditional turkey or not!).

For comments and feedback on the newsletter and to provide news to include in the next issue send an email to biochemistry.office@utoronto.ca. We are always happy to hear from you!

Liliana Attisano



UPCOMING EVENTS

PhD Oral Seminars/Exams

All PhD exams are held online. Interested persons wanting to attend the oral seminar should contact the Students Advisor for approval

Matthew Bourkas' PhD Remote Online Oral exam:

Wednesday November 10, 2021 @ 1:00 - 4:00PM

PhD Oral Seminar: 1:00 - 1:45PM

PhD Oral Exam: 2:00 - 4:00PM

Thesis Title: "Cultured Cell and Knock-In Mouse Models for Studying Transmitted and Spontaneous Prion Disease"

Supervisor: Joel Watts

Supervisory Members:

Gerold Schmitt-Ulms

Simon Sharpe

Retreat Poster Prize Winners:

Master's Winner(s):

- 1) Due Minh Nguyen
- 2) Alison Mao

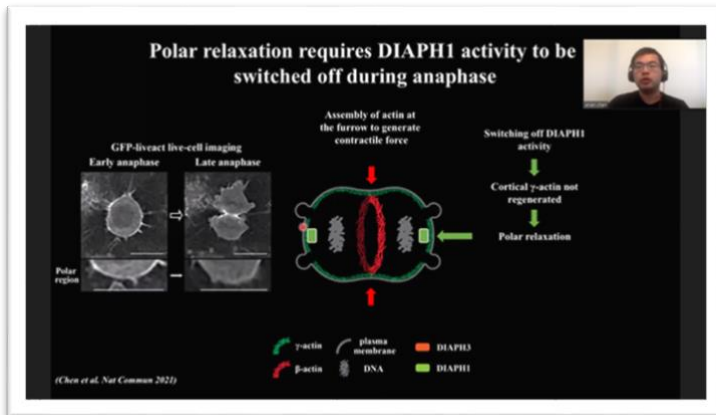
PhD Winners:

- 1) Tim Lee
- 2) Huazhu Peter Liang
- 3) Helen Yao and Emily Miraglia

Postdoc Winners: Kirsten Meyer

Graduate Updates

This year's departmental retreat was an excellent opportunity to gather again as a department and enjoy excellent science and rebuild community following 18 months of pandemic living. It featured talks from faculty, postdocs, and students, including this year's trainee award winners. Trainees and faculty alike also had the opportunity to showcase their research via online poster sessions, leading to many insightful scientific conversations.



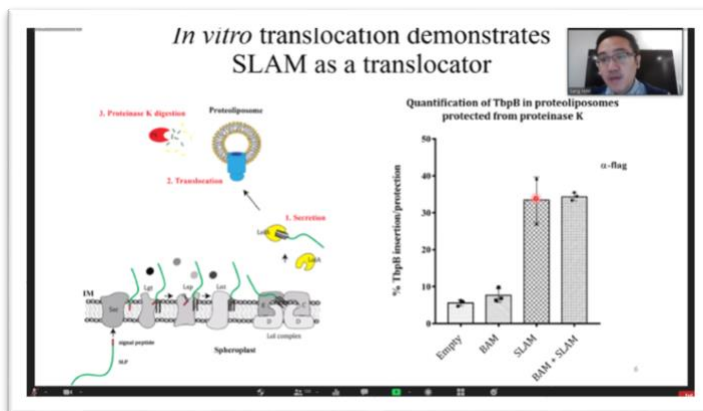
Anan Chen, winner of the PhD of the year award, speaking about his thesis work in the Wilde lab.

We also enjoyed seeing many fellow Biochemists in Queens Park for a socially distanced sports and discussions face to face!

Thank you to everyone who participated for making this year's Biochemistry Retreat the success that it was!

Student Seminar

We kicked off the academic year with great talks by Samar Ahmad and Minh Sang Huynh. As a reminder we are no longer having postmortem discussions of the talks, and the talk lengths have been increased to 20 minutes.



Minh Sang Huynh from the Moraes lab giving student seminar.

Upcoming Seminar Schedule

Date/Speaker(s)

October

Oct. 6: Robert Lu (S. Sharpe) – host: H. Wyatt

Oct. 13: George Connell
Speaker – Shana Elbaum-Garfinkle – host: James Otis

Oct. 20: Chetan Chana (F. Sicheri) / Jennifer Ho (G. Brown) – host: H. Wyatt

Oct. 27: Jaime Van Loon (L. Howell) / Maria Tereshchenko (K. Lee) – host: H. Wyatt

November 2021

Nov. 3: Shelley He (Charles Deber Lab) / Brandon Payliss (Haley Wyatt) – host: W. Houry

Nov. 10: George Connell
Speaker – Li-Huei Tsai – host: Raffaella So

Nov. 17: Wilson Zheng (Regis Pomes) / Giovanni (Johnny) Mastromarco (Kate Lee) – host: W. Houry

Nov. 24: Yi-Ting Tim Lee (Jason Maynes) / Jing Ze Wu (Spencer Freeman & Sergio

Graduate Courses

There are a few new courses being offered in the Winter 2022 session that we just posted, including two courses on Islet Biology, by Rob Screatton and Erin Mulvihill (University of Ottawa), covering diverse topics related to diabetes research.

Here is the current list of courses.

Fall 2021 Semester:

BCH2101 Scientific Skills for Biochemists
Course Coordinators: Alex Palazzo & Nana Lee
Required for all incoming BCH grad students

BCH2111 Post-transcriptional Control of Gene Expression
Course Coordinators: Craig Smibert & Julie Claycomb

BCH2114 Frontiers in Drug Discovery
Course Coordinator: Roman Melnyk

BCH2123 Protein Structure Prediction and Homology Modelling
Course Coordinator: Gil Prive

BCH2201 Graduate Professional Development
Course Coordinator: Nana Lee

Winter 2022 Semester:

BCH2125 Structure and Dynamics of Biomacromolecules Using Solid State NMR Spectroscopy
Course Coordinator: Simon Sharpe

BCH2135 Mitochondria and Metabolism in Human Health and Disease
Course Coordinator: Angus McQuibban

BCH2119 Advances in Epigenetics
Course Coordinator: Carol Schuurmans
BCH2120 Studies of Tissue Barriers: Regulation of Phenotype and Transport Across the Epithelium and Endothelium
Course Coordinators: Warren Lee & Andras Kapus

BCH2112 From Chaperones to CRISPR-Cas: the Incredible Genius of Phages
Course Coordinators: Karen Maxwell & Alan Davidson

BCH2203 Intro programming in Python
Course Coordinator: TBA

BCH2200 Design Thinking for Scientists
Course Coordinator: Nana Lee

U of T COVID Update

As of September 27th, 76,000 students, faculty, librarians, and staff have declared their vaccination status via [UCheck](#) with 99% indicating that they are vaccinated. **NOTE:** All members of the University community must provide proof of being fully vaccinated in [UCheck](#) by October 29 (two weeks following the October 15 deadline to receive a final shot) **even if they are working remotely.**

Check out the following links for the latest information regarding vaccinations, social distancing, masking and any other policy changes.

General Information: [Fall Planning – Welcome Back Guide to Fall 2021: U'Together - Your guide to fall 2021 at U of T](#)
UCheck: [UCheck - Your guide to fall 2021 at U of T](#)

FAQs for International Students: [COVID-19 Information for University of Toronto Students](#)
[COVID-19 Information for University of Toronto Students \(Vaccines\)](#)

FAQs for Students: [COVID-19 – Undergraduate Student FAQs](#)

BCH2139 Islet Biology I: Gene to Cell to Organ to Disease

Course Coordinators: Robert Screatton & Erin Mulvihill

BCH2140 Islet Biology II: Beyond Glucose Control: Molecular Targets, Diagnostics and Cutting-edge Technologies

Course Coordinators: Robert Screatton & Erin Mulvihill

JBB2025 Protein Crystallography (1/2 Credit)

Course Coordinator: Jim Rini

Undergraduate Updates

Undergraduate Courses

Thanks to all our course coordinators, instructors, and teaching assistants for their efforts this term.

Our undergrad offerings this term are:

BCH210H - Biochemistry I: Proteins, Lipids and Metabolism
(Course coordinator: S. Patterson)

BCH242Y - Biochemistry (K. Maxwell)

BCH370H - Biochemical Techniques (A. Khan)

BCH374Y - Research Project in Biochemistry (H. Chen)

BCH377H - Biochemistry Lab (M. Zaman)

BCH422H - Membrane Proteins: Structure and Function (O. Ernst)

BCH425H - Structural Biology: Principles and Practice (S. Sharpe)

BCH428H - Genomics of microbial communities in human health and beyond (A. Ensminger)

BCH441H - Bioinformatics (B. Steipe)

BCH473Y - Advanced Research Project in Biochemistry (C. Smibert)

BCH478H - Advanced Biochemistry Lab (G. Brown; T. Moraes)

BCH299/399 - Research Opportunities Program

EDI Announcements

Dear Biochemistry,
Details on The *Wellness and Equity, Diversity and Inclusion (WIDE)* committee can be found [HERE](#)

Check out [Articles and Resources](#) by the Student Team

Any concerns or questions should be directed to nana.lee@utoronto.ca or any member of WIDE.

Post-doc Updates

Postdoc Appreciation Week: September 20th marked the beginning of the Postdoc Appreciation Week! We are thrilled that you are here and are grateful to have you in our community. We hope you were able to enjoy some of the online events we sent along by email. UofT is planning to organize an in-person event as soon as it is safer to do so. Also, check out resources at [National Postdoctoral Association - Postdoc Appreciation Week](#).

Biochem Retreat: We enjoyed seeing everyone at the Biochem retreat 2021! Thank you for joining the talks, socials and presenting posters and talks. Congratulations to Veronique Taylor for winning the All-Around PDF award and Kirsten Meyer for best PDF poster! We had a Pub night sponsored by the Biochem faculty on Sept 23, which was great fun, and we hope to do that again soon - keep a lookout for emails from Biochem Postdocs and join our listserv using the link below.

Postdoctoral Development Network (GPDN) 2nd annual Canadian Career Symposium: This event is aimed at professional development and career exploration for postdocs and will be held on October 18-21. The registration is already paid for UofT postdocs by SGS! Live registration for graduate students and post-doctoral fellows begin October 1. Check out event website: [Graduate and Postdoctoral Development Network - Events \(gpdn-rpesp.ca\)](#) and direct questions about registering to sgs.postdoc@utoronto.ca

Polanyi Prizes for postdocs: This annual award from the Ontario government will be granted to up to five early career researchers, each valued at \$20,000. Please learn more at [John Charles Polanyi Prizes](#)

Join the Biochem Postdoc Listserv: Join the listserv to get all the up-to-date information on professional development, mentoring, and networking opportunities. If you've already joined, let us know how we can improve using the same form. [U of T Postdoc Group Sign-up](#)

BGSU News

Hello Biochem!

We kicked off an exciting new school year with a very successful, well-organized retreat. Thank you all for coming and the hard work put in by the retreat organizers and volunteers! Hope everyone enjoyed the faculty and trainee award talks, the posters, and the social events. Dr. Palazzo was updating the title of each talk as they were going on via the retreat twitter hashtag #uoftbretreat2021. Please check it out if anyone missed it.

We also had our election in September with some changes to the executive team. We will have the updated member list on the department website soon. Meanwhile, please check out our social media on Facebook or Twitter (@yourbgsu). If you missed the election and would still like to get involved, please send us an email at yourbgsu@gmail.com. Our next team meeting will be October 6th at 5pm (zoom link will be sent out closer to the date).

We have also set up our discord server (Thank you, Nemo!) invite link: <https://discord.gg/DFh2fzCupH>. The BGSU will be planning some fun, online game nights through discord but feel free to chat and chill in the meantime.

The BGSU welcomes all the new students, and we look forward to seeing all of you in the upcoming year. Tune in for more exciting events coming up! Any inquiries related to the BGSU please email us at yourbgsu@gmail.com.



BUSS News

Hello everyone!

BUSS is excited to get the ball rolling on our events and initiatives for the school year, and we hope that you will find them useful, engaging, and fun! This fall semester, we will be holding a social event near the end of October, a Lunch and Learn event where you can hear about a faculty member's current research, review sessions for second year biochemistry courses, **and ongoing mentorship mingles for the BUSS Mentorship Program.**

We hope you have enjoyed the first month back to school and look forward to seeing many of you both in-person and virtually through our various events throughout the year! Stay tuned for details on time, place, and locations to be posted on our socials.

Sincerely,

BUSS

Contact Us at uoftbuss@gmail.com

Transcripts News

Hey Biochem!



We're gearing up for a great year here at Transcripts with some new members and lots of ideas. This month we'll highlight some articles we put out over the summer in case you missed them.

Keep up with our newsletter column each month and follow us on Twitter @transcriptsblog for more updates on our work!

["One Year in Isolation: The Mental Health Cost of COVID-19"](#)
by Raphaella So

Biochemistry Cartoon Series: ["Protecting Humans Can Come from Vaccinating Mosquitoes... Sort of"](#) by Chloe Mitchell and Brandon McLeod

["Equity Leads to More Impactful Science"](#) by Alison Mao and Mikaela Palandra

["Making Biochem More Accessible: The Virtual Biochemistry Day Outreach Event for High School Students"](#) by Kate Jiang

["So, You Want to Join a Biotech Start-up? Tips and Tricks to Nail Your Interview"](#) by Annoj Thavalingam

Tips for Undergraduates

Are you interested in information on Undergrad courses and applying to grad school?

Recently graduated Biochemistry student, Zhuqi (Flora) Wang has prepared some useful tip sheets available through the links below:

[Transitioning to third/fourth year](#)

[Graduate School Applications](#)

Job Posts

Position: Post-Doctoral Fellow Program in Molecular Medicine

The Howell lab is looking for a Research Postdoctoral Fellow with a strong background in structural biology. Located at The Hospital for Sick Children – Canada's largest hospital-based child health research institute – the Howell lab (<https://lab.research.sickkids.ca/howell/>) is interested in mechanisms involved in microbial infections. We study systems involved in biofilm formation from bacteria and fungi and determine how these systems contribute to biofilm formation and virulence. We utilize microbiology, molecular biology, biochemical and biophysical techniques to study proteins involved in exopolysaccharide production and Type IV pilus assembly. We're interested how these proteins function in isolation as well as in their relevant protein complexes both *in vitro* and *in vivo*. We are leveraging the insights gained to develop novel enzyme-based therapeutics. Email howell@sickkids.ca for complete position details. **Review of applications will begin October 25, 2021**, and position will remain open until filled.

Position: Research Associate, Applied Organoid Core (ApOC), Donnelly Centre

Liliana Attisano is immediately seeking a Research Associate that will be responsible for ensuring the smooth operation of the recently established Applied Organoid Core (ApOC). The primary role is to support the ApOC's mandate of providing human stem cell-derived organoids on a fee-for-service basis and serving as a centre for the development of new analysis tools and for training and dissemination of this knowledge to other researchers. Duties will include conducting experiments as well as supervising and guiding ApOC staff on the development of cerebral and other organoids. Duties also include providing advice on techniques relating to culturing stem cells and the generation of organoids to other researchers (including trainees, technicians, research associates, etc.) both in a hands-on one-on-one basis and in training sessions. Further details and application submissions are available through the U of T Career's website: [Research Associate - Limited Term \(1 year\)](#)