

Image designed by Dr. Sanna Abbasi

## **Dept. of Biochemistry Newsletter**

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## PEOPLE AND OTHER STUFF

- Welcome back to Megan Luckovitch who has returned to her former role in the Dept. after a secondment at Western.
- The Dept. thanks Rima Kadri and Neiven Timothaws for their many contributions to the Dept. during Megan Luckovitch's secondment. We say goodbye to Rima and wish her all the best in her future endeavours. Neiven resumes the former role she had prior to Megan's secondment.
- The Biochemistry Dept. celebrated its 100<sup>th</sup> anniversary (1924-2024) with a gettogether in May at The Wave. Dean Yoo and Dr. Greg Gloor spoke at the event, and Dean Yoo presented gifts to the former Chairs of the Dept. Thanks to everyone who made this celebration possible. The Dept. and its anniversary have been featured in Schulich News.
- Dr. Boffa presented a State-of-the-Art session talk at the International Society on Thrombosis & Haemostasis Congress in Bangkok (Lp(a) in atherothrombotic disease and aortic valve stenosis). This research comes from a collaboration with Dr. Koschinsky and features the stellar work of PhD students Julia St. John (Biochemistry) and Justin Clark (Physiology & Pharmacology).
- Complete the WIDE (Western Inclusion, Diversity, and Equity) Survey to ensure your
  voice is heard and contributes to the development of a more equitable and inclusive
  Western. Information collected through this survey is voluntary and confidential. For
  more info about the survey and how to fill it out, see the WIDE Survey webpage.





## CONGRATS TO ...

- ★ Owen Hovey, Gabe Onea, Tarana Siddika, and Jenny Zhong for successful PhD defenses
- ★ Aruun Beharry, Shehan Perera, and Rasangi Tennakoon for successful MSc defenses
- ★ Biochemistry's Bachelor, MSc, and PhD graduates for 2024
- ★ Recipients of summer research awards: Ridhwan Busari (SSHRC USRA); Shani Eder, Emma Liu, Erin Lou (NSERC USRAs); and Sanaz Lordfard (Western USRI)
- ★ OGS recipients: Tyler Browne, Sylvia Cheng, Beth Connelly, Gary Foo, Karling Frankel, Blane Gebreyes, Yu Kang Huang, Zihuai (Matthew) Huang, Dan Menyhart, Viveka Pimenta, Peter Rozik, Cian Ward, Sarah Wilhelm, Alyssa Wu
- ★ Fatima Abdullatif and Ben Rutledge for best posters at the Biochemistry Spring Symposium
- ★ Niki Basilone for an NSERC CGSD award
- ★ Niki Basilone and Faiza Islam for organizing 3 community-engagement events through the BGSA: the Biochemistry Dept. booth at Science Rendezvous (nationwide science displays); a virtual event for CAGIS (Canadian Association for Girls in Science where girls receive hands-on experience in protein science); and an inperson event for CAGIS
- ★ Aruun Beharry and Thomas Qu for best talks at the Biochemistry Spring Symposium
- ★ Dr. Matt Berg (Biochemistry alumnus) for receiving a <u>CIHR Fellowship</u> for post-doctoral work in Dr. Villen's lab
- ★ Teija Bily for a CIHR CGSM award
- ★ Lianghong Chen (Hu lab) for being selected to present at the 2024 T-CAIREM Trainee Rounds seminars at the University of Toronto
- ★ Dr. James Duncan (Biochemistry Dept. alumnus) for an Alumni of Distinction Award for Excellence in Basic Science Research (Schulich News)
- ★ Jessica Jeong for an NSERC CGSM award
- ★ Dr. Matt Maitland, Xu Wang, Dr. Schild-Poulter, Dr. Lajoie, and colleagues for having their publication featured as a News and Views article in Nature Chemical Biology
- ★ Clara Schott for an oral-presentation win in the category of Aging and Chronic Disease at the London Health Research Day
- ★ Dr. Scott Roffey for a poster-presentation win at the Oncology Research Day
- ★ Drs. Edgell/Gloor for a Bone and Joint Institute Catalyst Grant
- ★ Dr. Heinemann for appointment as an Associate Scientist at the CHRI (Children's Health Research Institute)
- ★ Dr. Hu for Mitacs Globalink Research Internship Awards for Yuemin Yu (The University of Hong Kong) and Vedant Gawande (Indian Institute of Technology)





- ★ Dr. Junop for receiving Western's Faculty Scholar Award for 2024 in recognition of outstanding scholarly achievements in research, teaching, and service. He also received an NSERC Discovery Grant.
- ★ Dr. Karas for a grant from the OMAFRA Ontario Agri-Food Research Initiative and for his marriage!
- ★ Dr. Koschinsky for a Dean's Award of Excellence (Research and Innovation)
- ★ Dr. Lu for an OICR Clinical Translation Pathway Pre-Clinical Acceleration Team Award
- ★ Dr. Shilton for Biochemistry's William H. Magee Award for outstanding contributions to teaching in the Dept.

## **PUBLICATIONS**

- Dr. Balci (<u>Bryant-Li-Bhoj syndrome</u>)
- Drs. Boffa, Koschinsky (<u>Plasminogen as ligand of ADAMTS13</u>) (<u>Use of lipoprotein(a)</u>
   <u>in clinical practice</u> Scientific statement from National Lipid Association)
- Dr. Brandl (tRNA-induced mistranslation in Drosophila)
- Drs. Brandl, O'Donoghue (<u>Mistranslating the genetic code with leucine in yeast and mammalian cells</u>)
- Dr. Connaughton (Reclassification of genetic testing results)
- Dr. Gebregiworgis (<u>Crystal structure of NRAS Q61K</u>) (<u>Extraction of bioactive compounds and antioxidants from algae</u>)
- Dr. Gloor (Scale uncertainty in microbiome and gene expression analysis)
- Dr. Hegele (<u>Lipoprotein(a) in atherosclerotic cardiovascular disease</u>) (<u>Pancreatitis risk in chylomicronemia syndrome</u>) (<u>Olezarsen, acute pancreatitis, familial chylomicronemia syndrome</u>) (<u>Carotid thickness in severe hypertriglyceridemia</u>) (<u>RNAi therapeutic targeting ANGPTL3 for mixed hyperlipidemia</u>) (<u>Etiology and emerging treatments for familial chylomicronemia syndrome</u>) (<u>Polygenic background and familial hypercholesterolemia</u>)
- Drs. Heinemann, O'Donoghue (<u>Delivery of AKT1 phospho-forms to cells</u>)
   (<u>Mechanisms and delivery of tRNA therapeutics</u>) (<u>Metabolic adaptation in epithelial ovarian cancer</u>)
- Dr. Hu (Neural network algorithm for expression deconvolution) (ST-CellSeg: Cell segmentation for imaging-based spatial transcriptomics)
- Dr. Junop (<u>GmhA inhibitors in gram-negative bacteria</u>) (<u>Mitigation of TDP-43 toxic phenotype in ALS</u>) (<u>MCU/MCUb N-terminal domains of mitochondrial calcium uniporter complex</u>)
- Dr. Karas (Multi-host shuttle plasmids in Mesorhizobium and Bradyrhizobium)
- Dr. Konermann (MD simulations of peptide-containing electrospray droplets)





- Dr. Koschinsky (Lp(a)-associated cardiovascular risk)
- Drs. Lajoie, Schild-Poulter (GID4 Pro/N-degron interactions)
- Dr. Li (Substrate specificity of tyrosine kinome)
- Drs. Lu, Shilton, Zhou (Pin1 in development and treatment of cancer)
- Drs. Lu, Zhou (<u>Pin1</u>, <u>protein ubiquitination</u>, <u>and protein degradation</u>) (<u>Pin1-cis P-tau axis in vascular contribution to cognitive impairment and dementia and preeclampsia</u>) (<u>Pin1-catalyzed conformational regulation after phosphorylation</u>) (<u>Reciprocal antagonism of PIN1-APC/CCDH1 in mitotic protein stability and cell cycle entry</u>)
- Dr. Possmayer (<u>Pulmonary surfactant</u>)
- Dr. Schild-Poulter (Modulating human GID4 Pro/N-degron interactions)
- Dr. Shaw (<u>Parkin ubiquitination of GTPase Miro1</u>) (<u>Using Fret to understand</u> ubiquitination)
- Dr. Siqueira (Bioinformatics-driven proteomics of progression to dental disease)
- Dr. Turley (CD44 and RHAMM: dual metastasis promoter and suppressor functions)



