

MAY-JULY 2024

ANATOMY & CELL BIOLOGY NEWSLETTER

IN THIS ISSUE

Welcome
Congratulations
Scholarships, Awards & Grants
Presentations & Conferences
New Publications
Departmental News
ACB In The News
ACB Events
Past ACB Events
ACB Gives Back!

SAVE THE DATES

Department Mixer
September 5th, 2024
Grad Student Elections
September 6th, 2024
Murray L. Barr Lecture
October 18th, 2024
ACB Research Day
October 18th, 2024

UPCOMING SEMINARS

Will resume in the Fall 2024

STAY IN THE LOOP

Tag us at #westernuACB





© <u>@acbgradcouncil</u>

f ACB Graduate Council



WELCOME

The Dumeaux Lab welcomed two MITACS Summer Interns, Karen Ribeiro a Medical Student from Brazil, and Rohan Sonthalia a Bachelor Student in Technology, Computer Science and Engineering from India.

CONGRATULATIONS



Congratulations to Sidney Wright (Clinical Anatomy) for being selected as one of the 26 graduate students <u>2024</u> <u>Inspiring Minds Competition</u>. Her work will be featured in the showcase later in the year.

https://ir.lib.uwo.ca/exhibit/inspiring-minds-showcase

Congratulations to Dr. Alison Allan who has been selected to serve as a member of the Canadian Cancer Society's National Advisory Council on Research (CCS ACOR)

Congratulations to Abdalla Albeely (Khokhar Lab) who has been chosen to participate in the prestigious Neural Systems and Behavior course at the Marine Biological Laboratory, University of Chicago, this summer from June 1st to July 29th. Only 20 participants were selected for this intensive eight-week program that delves into the neural foundations of behavior.

Congratulations to Richard Quansah Amissah (Khokhar Lab) who has also been selected to attend the prestigious Frontiers in Neurophotonic Summer School at the CERVO Brain Research Centre in Quebec from May 28th to June 7th. Where he will have the unique opportunity to learn how to use advanced optical methods for research.





CONGRATULATIONS CONT...

Congratulations to our Graduate Students who successfully defended their theses!

MSc in Anatomy & Cell Biology

Sairam Gajavelli (Whitehead/Pasternak Labs): "Interrogating the ability of ambroxol to increase lysosome function in microglia."

David Susman (Allan Lab): Understanding How Hypoxia Alters the Breast Cancer Proteome in the Context of Molecular Subtypes and Metastatic Organotropism.

Michael Zheng (Lala/Renaud Labs): "Human Trophoblast Differentiation In Vitro Within 3D Matrix-Free Cultures"

Carlijn Van Kessel (Penuela/Hebb Labs): "Investigating the Role of Pannexin 1 in Patient-Derived Glioblastoma Multiforme Cells"

Erica Kane (Whitehead/Cregan Lab): "The Integrated stress response, a novel mediator of proinflammatory microglia phenotypes"

Diba Chowdhury (Renaud/Lajoie Labs): "Unfolding the Role of Endoplasmic Reticulum Stress and IRE1 Signaling in Trophoblast Differentiation."

PhD in Anatomy & Cell Biology

Brooke O'Donnell (Penuela Lab): "The Characterization of Pannexin 1 and Pannexin 3 Channels and their Isoforms in Skin Health and Keratinocytic Cancers."

SCHOLARSHIPS, AWARDS & GRANTS

Congratulations to our faculty member who have been awarded NSERC Discovery Grants!

- Dr. Vanessa Dumeaux: "Computational and genomic approaches for the characterization of host-adapted microbial communities"
- Dr. Martin Duennwald: "The holdase functions of molecular chaperones in cellular protein quality control"
- Dr. Katherine Willmore: "Effects of transient cranial cartilages on intramembranous bone development: Investigating the role of molecular signaling and biomechanical support"

Congratulations to Dr. Andrew Deweyert on receiving a 2024 CPD Digital Research & Innovation Grant (CPD DIRG) Standard Grant for the project titled "Faculty Development on Multiple Choice Question Item Writing Quality."



Congratulations to our faculty members who have been awarded CIHR Project Grants in the 2024 Spring Competition!

- Dr. Lauren Flynn: "Delivery of human monocytes and adipose-derived stromal cells within decellularized adipose tissue hydrogels for peripheral vascular regeneration"
- Dr. Marco Prado: "Role of the co-chaperone STIP1 in alpha-synuclein spreading, aggregation and toxicity"
- Dr. Jibran Khokhar: "Sex Differences in Cannabis Use as a Risk Factor for Schizophrenia: A Role for Microglia?"
- Dr. Krishna Singh: "Novel Mechanisms in Doxorubicin-induced Cardiomyopathy"





SCHOLARSHIPS, AWARDS & GRANTS

Congratulations to the 2024 External Scholarship Applicants:

<u>CIHR Canada Graduate Scholarships -</u> <u>Master's</u>

Rehanna Kanji (Penuela/Hebb Lab) Layya Al Malouf (Clinical Anatomy)

Layya Ar Maiour (Clinical Ariatorny)

Hannah Traynor (Clinical Anatomy)
David Wu (Whitehead/Monterro-Odasso Lab)
Marie Tsai (Clinical Anatomy)

<u>CIHR Canada Graduate Scholarships -</u> <u>Doctoral</u>

Nikita Ollen-Bittle (Whitehead Lab)

Queen Elizabeth II Graduate Scholarship in Science and Technology

Hannah Martin (Whitehead Lab) Amy Pietrantonio (Willmore Lab)

Samuel Stack-Couture (Lajoie Lab)

Emily Tomas (Shepherd Lab)

Jack Webb (Shepherd Lab)

Erica Kane (Whitehead/Cregan Lab)

NSERC Canada Graduate Scholarships - <u>Master's</u>

Joon Kim (Duennwald / Choy Lab)

NSERC Canada Graduate Scholarships -Doctoral

Stephanie Leighton (Laird/Penuela Lab)
Justin Tang (Penuela/Beier Lab)

<u>NSERC Post Graduate Scholarships</u> -Doctoral

Mohammed Al-Youzbaki (Allman Lab)

<u>SSHRC Canada Graduate Scholarships</u> -Masters

Carson Norkum (Clinical Anatomy)
Sidney Wright (Clinical Anatomy)

SSHRC Doctoral Fellowship

Kayla Vieno-Corbett (Rogers/Campbell Lab)

Ontario Graduate Scholarship

Kasha Mansour (Bérubé Lab) Urvi Patel (Allan Lab) Milica Pavlovic (Bérubé Lab) Emily Danciu (Clinical Anatomy)

Congratulations to Mohamed Meawad (Dumeaux Lab) on receiving a MSc Vector Scholarship in Artificial Intelligence

Congratulations to Jude Frie (Khokhar Lab) on receiving the 2023 Deb Comuzzi CHRI Trainee of the Year Award. Jude will be presented with the award at the Lawson Impact Awards celebration in the fall.

Congratulations to the 2023-2024 ACB Travel Award Recipients!

Clinical Anatomy Travel Awards

Bryn Bhalerao
Anastasios Catanzaro
Emily Dietrich
Meaghan Frank
Charlotte Jones-Whitehead
Meenaal Kaur
Jorge Mejia-Lopez
Supreet Singh
Brittany Zurkan

Research Travel Awards

Dr. Abdalla Albeely (Khokhar Lab)
Harjot Athwal (Allan/Parsyan)
Alireza Ghahramani (Bérubé Lab)
Erica Kane (Whitehead Lab)
Joon Kim (Duennwald/Choy Lab)
Nikita Ollen-Bittle (Whitehead/Finger Lab)
Justin Tang (Penuela Lab)
Dr. Charles Trelford (Shepherd Lab)
Kayla Vieno (Rogers/Campbell Lab)
Ray Wang (Dumeaux Lab)





SCHOLARSHIPS, AWARDS & GRANTS CONT...

The Department of Anatomy & Cell Biology held its annual Awards Day on Friday, June 14th, at the Wave, University Community Centre. Students, staff, and faculty gathered to celebrate the achievements of the 2023-2024 academic year. During the event, the Graduate Affairs Committee recognized and presented awards to the following eight outstanding graduate students:

The Keith L. Moore Doctoral Award

Brent Wakefield (Penuela Lab)

The Robert C. Buck Master's of Science Award

Amy Pietrantonio (Willmore Lab)

The Suzanne M. Bernier Publication Award

Brooke O'Donnell (Penuela Lab)

The Coolen Postdoctoral Fellow Publication Award

Ashley Schormans (Allman Lab)

<u>The Alan W. Hrycyshyn Master's of Science Clinical Anatomy Award</u> Bryn Bhalerao

<u>The Wayne Davis Clinical Anatomy Graduate Student Prize for Excellence</u>

Marie Tsai

The Dr. Khadry Galil Translational Research in Clinical Anatomy Award

Cassidy Fu

The Francis Chan Humanitarian Prize

Meaghan Frank

























GRADUATING CLASS OF 2023-2024



Congratulations to the Class of 2023-2024! Your graduation marks a major milestone and reflects the dedication and excellence you've demonstrated throughout your studies. It has been a privilege to witness your personal and professional growth as part of the Anatomy & Cell Biology family. We wish you all the best as you move forward and can't wait to see where your journey takes you next!

PhD Anatomy & Cell Biology Research

Salonee Patel, PhD 2023

"Cognitive, neurophysiological, and molecular alterations following noise-induced hearing loss"

Brent Wakefield, PhD 2023

"Pannexin3 in exercise, obesity, and osteoarthritis"

Hien Nguyen, PhD 2024

"The Roles of FABP3 in Endothelial Dysfunction and the Transcriptomic Insights into Cardiovascular Disease"

MSc Anatomy & Cell Biology Research

Kaitlyn Flondra, MSc 2023

"Brain-derived Extracellular vesicles as biomarkers of Parkinson's disease"

Amy Pietrantonio, MSc 2023

"Offspring Susceptibility of Developing Depressive-like Phenotypes and Metabolic Dysfunction Following Prenatal Alcohol Exposure and Juvenile Stress in a Mouse Model"

Berk Rasheed, MSc 2023

"Investigating the Role of Endothelial BReast CAncer Susceptibility Gene 2 in Doxorubicin-induced Cardiotoxicity"

Michael Grynyshyn, MSc 2024

"Characterizing Hypoxia, Neutrophil Persistence and Revascularization in the Murine db/db Model of Type II Diabetic Impaired Skin Healing"

MSc Anatomy & Cell Biology Clinical Anatomy

Bryn Bhalerao, MSc 2024 Anastasios Catanzaro, MSc 2024 Emily Dietrich, MSc 2024 Meaghan Frank, MSc 2024 Cassidy Fu, MSc 2024 Charlotte Jones-Whitehead, MSc 2024 Meenal Kaur, MSc 2024 Jorge-Alberto Mejia-Lopez, MSc 2024 Supreet Singh, MSc 2024 Brittany Zurkan, MSc 2024







NEW PUBLICATIONS

Bhat, V., Piaseczny, M., Goodale, D., Patel, U., Sadri, A., and Allan, A.L. Lung-derived soluble factors support stemness/plasticity and metastatic behaviour of breast cancer cells via the FGF2-DACH1 axis. Clin Exp Metastasis 2024 EPub ahead of print:

doi: 10.1007/s10585-024-10284-4.

Athwal, H., Kochiyanil, A., Bhat, V., Allan, A.L., and Parsyan, A. Centrosomes and associated proteins in pathogenesis and treatment of breast cancer. Front Oncol. 2024 Mar 28;14:1370565.

Pellizzari, S., Bhat, V., Athwal, H., Cescon, D.W., Allan, A.L. and Parsyan, A. Polo-Like Kinase (PLK4) as a Potential Target to Enhance Radiosensitivity in Triple-Negative Breast Cancer. Radiation Oncology, 2024; 19(1):24.

Lucaciu, S.A., Leighton, S.E., Laird, D.W. (2024). Spatial and Temporal Localization of Connexins in Cells Using Confocal Microscopy. In: Mammano, F., Retamal, M. (eds) Connexin Hemichannels. Methods in Molecular Biology, vol 2801. Humana, New York, NY.

https://doi.org/10.1007/978-1-0716-3842-2_5

Stephanie E. Leighton, Robert S. Wong, Sergiu A. Lucaciu, Alexandra Hauser, Danielle Johnston, Peter B. Stathopulos, Donglin Bai, Silvia Penuela, Dale W. Laird; Cx31.1 can selectively intermix with co-expressed connexins to facilitate its assembly into gap junctions. J Cell Sci 1 April 2024; 137 (7): jcs261631. doi: https://doi.org/10.1242/jcs.261631

PRESENTATIONS & CONFERENCES

Dr. Peeyush Lala, Professor Emeritus, gave a virtual talk entitled "Roles of Decorin in chorio-decidual cross talk" to an international audience for the Placenta Lab Presentations.

Benjamin Rutledge (Duennwald Lab) gave a talk entitled "Characterizing the interaction between α -synuclein and stress-inducible phosphoprotein 1 in Parkinson's Disease" at the 29th Annual Midwest Stress Response and Molecular Chaperone Meeting in January. Additionally, he attended the Cold Spring Harbor - Protein Homeostasis in Health and Disease in April, where he presented the poster "Stress-inducible phosphoprotein 1 modulates α -synuclein aggregation in Parkinson's disease."

Joon Kim (Duennwald Lab) attended the ALS Canada 2024 Research Forum conference in Toronto at the end of April, where he presented the poster "DNAJC7 as a cochaperone in ALS".

Several Anatomy & Cell Biology trainees attended the Southern Ontario Neuroscience Association (SONA) Conference on May 3rd at Wilfrid Laurier University, presenting posters on their research. Presenters included Layya Al Malouf (Clinical Anatomy), Julia Brott, Alireza Ghahramani, Milica Pavlovic, Miguel Peña-Ortiz, and Katherine Quesnel from the Bérubé Lab, as well as Rehanna Kanji from the Penuela/Hebb Lab."



Michael Zheng (Lala/Renaud Lab) recently presented at the Southern Ontario Reproductive Biology Conference (SORB) held at the Toronto Zoo, as well as at the Child Health Research Day held on May 29th, where he received the top poster award. Congratulations, Michael!





PRESENTATIONS & CONFERENCES CONT...

LONDON HEALTH RESEARCH DAY

London Health Research Day was held on campus this year in the Mustang Lounge, UCC, May 7th, where the following Trainee's presented posters

Poster Presentations

Baasil Afzal (Flynn Lab)

Layya Al Malouf (Lab)

Julia Brott (Bérubé Lab)

Esther Choi (Khokhar Lab)

Diba Chowdhury (Renaud/Lajoie Lab)

Paul Collie (Flynn Lab)

Elizabeth Fenton (Hebb/Schmid Lab)

Meaghan Frank (Clinical Anatomy)

Cassidy Fu (Clinical Anatomy)

Chloe Jang (Han/Renaud Lab)

Nikita Chugh (Duennwald Lab)

Tiffany Johnston (Shepherd Lab)

Jieun Jung (Lab)

Rehanna Kanji (Penuela/ Hebb Lab)

Meenal Kaur (Clinical Anatomy)

Joon Young Kim (Dueenwald/Choy Lab)

Megan Lave (Renaud Lab)

Kendra Loedige (KhokharLab)

Kasha Mansour (Bérubé Lab)

Mohamed Meawad (Dumeaux Lab)

Alyssa Moore (Willmore Lab)

Sarah Myers (Whitehead Lab)

Sepideh Nikfarjam (Singh Lab)

Nikita Ollen-Bittle (Whitehead Lab)

Milica Pavlovic (Bérubé Lab)

Amy Pietrantonio (Willmore Lab)

Hannah Pineda (Schmid Lab)

Sophia Robinson (Lab)

Dan Stefan (Penuela Lab)

Justin Tang (Penuela Lab)

Raluca Urian (Willmore Lab)

Ray Wang (Dumeaux Lab)

David Wu (Whitehead/Monterro-Odasso Lab)

Oral Talks

Khaleda Afrin Bari (Lajoie Lab)

Erica Kane (Whitehead Lab)

Dr. Enzo Perez Valenzuela (Laviolette Lab)

Katherine Quesnel (Bérubé Lab)

Ben Rutledge (Duennwald Lab)

Awardees

Julia Brott – Poster Award
Sepideh Nikfarjam – Poster Award
Nikita Ollen-Bittle – Poster Award
Justin Tang – Poster Award
Katherine Quesnel – Oral Presentation Award



Members of The Shepherd Lab attended and presented at the Canadian Conference on Ovarian Cancer Research in Halifax, NS, where they received several awards. Matthew Borrelli earned the Best Poster Award, Emily Tomas received a Travel Award, and Jack Webb was honored with both a Travel Award and the Best Oral Presentation Award.

Michael Zheng (Lala/Renaud Lab) recently presented at the Southern Ontario Reproductive Biology Conference (SORB) held at the Toronto Zoo, as well as at the Child Health Research Day held on May 29th, where he received the top poster award. Congratulations, Michael!





ACB IN THE NEWS







London North Centre MP, Peter Fragiskatos visited Schulich and toured professor Dr. Martin Duennwald's lab to learn more about his team's innovative ALS research prior to chairing the House of Commons all-party ALS caucus.



St. Joseph's Health Care London recently highlighted Jennifer Devlin and her dedication to giving back in their article, <u>Being There for Others</u>. Many of you know Jenn as the energetic and devoted Manager in Administration and Finance for both Anatomy & Cell Biology and Medical Biophysics. Her open-door policy and unwavering support have made her more than just a colleague—she's a friend and confidant, always ready to listen and lend a hand. Beyond her professional role, Jenn also gives back to the community, showing her commitment to making a positive impact everywhere she can.

https://www.sjhc.london.on.ca/news-and-media/our-stories/being-thereothers

<u>CBC Afternoon Drive</u> interviewed Dr. Michelle Mottola, about her research exploring exercise and nutrition during pregnancy, particularly for those from diverse backgrounds. Clips from this interview were also played during this morning's news run on <u>CBC London</u>.

https://www.cbc.ca/listen/live-radio/1-80-afternoon-drive/clip/16063616-western-study-looking-nutrition-pregnancy-carediverse-women







Steven Laviolette and post-doc Dr. Marta De Felice, have found that an over-the-counter antioxidant supplement may help alleviate depression, anxiety, and 'amotivation syndrome' from chronic cannabis use. Read more about this discovery in the newly published paper in <u>Biological Psychiatry</u> - Global Open Science.

https://www.schulich.uwo.ca/about/news/2024/july/s chulich medicine researchers find over thecounter ant ioxidant may help counteract mental health effects of cannabis.html





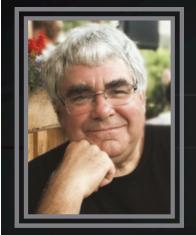
DEPARTMENTAL NEWS



DR. ALISON ALLAN APPOINTED ASSOCIATE VICE-PRESIDENT

We are proud to announce that Dr. Alison Allan has been appointed as Associate Vice-President (Research) at Western, effective October 1, 2024. Dr. Allan will support and expand research in medical and health sciences and seek ways to improve Western's collective research impact.

https://news.westernu.ca/2024/07/alison-allan-associate-vice-president-research/? _gl=1*p879hx*_gcl_au*MTE00TI30DA0NC4xNzlwMDM5NzQw



Dr. Peter Merrifield 1951 - 2024

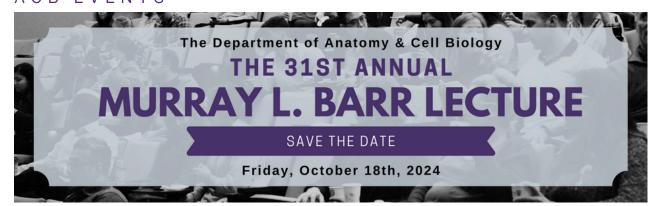
IN MEMORIAM: DR. PETER MERRIFIELD

It is with great sadness that we announce the passing of Dr. Peter Merrifield, Professor Emeritus in Anatomy & Cell Biology, who passed away on July 3, 2024. Peter will be remembered as a kind and generous colleague and friend. His significant contributions to the department included pioneering research on muscle development and disease, dedicated mentorship of graduate students, and extensive teaching in cell biology and histology.

A Celebration of Life for Peter was held on August 8, 2024, at the Ivey Spencer Leadership Centre, where family and friends gathered to share memories of Peter.

https://lfpress.remembering.ca/obituary/peter-alan-merrifield-1090101565

ACB EVENTS



MURRAY L. BARR LECTURE & ACB RESEARCH DAY 2024

We're excited to share that our annual Murray L. Barr Lecture and Research Day is scheduled for Friday, October 18th, 2024. This year, we're honored to have Nobel Prize Laureate Dr. Jack Szostak as our guest lecturer, who will discuss "The Origin of Life: Not as Hard as it Looks?" Please mark your calendars for this highly anticipated event, and stay tuned for more information, including how to register for presentations at ACB Research Day.





PAST ACB EVENTS











ANNUAL BODY BEQUETHAL MEMORIAL SERVICE

The annual memorial service was held on Saturday, May 11th at the Student Life Building, King's University College, to honour the donors of our body bequeathal program. It was a beautiful ceremony, where faculty and students shared their talents and reflections. Thank you to all who attended, and contributed to this special event.





PAST ACB EVENTS CONT...



SCIENCE RENDEZVOUS WESTERN 2024

On Saturday, May 11th, 2024, from 2-9 p.m. at Alumni Stadium, ACB graduate students participated in and managed the booth titled "Molecular Marvels & Anatomical Wonders" at Western's seventh annual Science Rendezvous event. Despite the rain, our dedicated volunteers did an outstanding job representing our department. A big thank you to this year's volunteers: Jack Webb (Shepherd Lab), Meaghan Frank (Clinical Anatomy), Katherine Quesnel (Berube Lab) with her son Gavin, Bryn Bhalerao (Clinical Anatomy), Baasil Afzal (Flynn Lab), Kayla Vieno-Corbett (Rogers/Campbell Lab), Urvi Patel (Allan Lab), Marie Tsai (Clinical Anatomy), Sidney Wright (Clinical Anatomy), Hannah Traynor (Clinical Anatomy), Lina Nasirkadir (Clinical Anatomy), and Emily Danciu (Clinical Anatomy).

















ACB GIVES BACK

OWAGB GIVES BACK St. John's Hospitality Dinner

ST. JOHN'S HOSPITALITY DINNER

St. John's requires the ongoing support of Volunteers to help prepare and serve food at the community dinners. To register, please add your name to the volunteer sign up sheet by <u>clicking here</u>



SL10 FOR CAMPFIRE CIRCLE

Thank you to everyone who supported our ACB graduate students Kasha Mansour, Tiffany Johnston, and Stephanie Leighton in this year's sporting life 10K in support of Campfire Circle. With your help, they were able to raise \$1,400.35 which will help provide one-on-one hospital bedside programs, community and virtual programs, and summer overnight camp to kids and families affected by childhood cancer.

Even though race day has passed, you can still support our graduate students in this cause until Friday May 31 by clicking the link below:

https://raceroster.com/events/2024/79097/20 24-sporting-life-10k/pledge/team/618904







Dr. Charys Martin and her team are back with the annual backpack drive, aiming to collect 600 new backpacks this year. Last year, with your help, we gathered 525 backpacks, 400 lunch pails, and thousands of supplies.

We're collecting new backpacks, school supplies, notebooks, water bottles, pencil cases, lunch boxes, and binders for LDCSB, TVDSB, and local French-language school boards.

Monetary Donations are also welcome—we'll shop for you!

Deadline: Friday, August 23, 2024 **Drop-off:** ACB Main Office, MSB 443

Pick-up: Email Charys at charys.martin@uwo.ca for campus or hospital site pick-up.

