

# September 2025

# Congratulations to Dr. Derek McKay on his reappointment as Director of Snyder Institute for Chronic Diseases



Congratulations to <u>Dr. Derek McKay</u> on his reappointment as Director of Snyder Institute for Chronic Diseases. Speaking about the reappointment, he expressed gratitude for the support of Snyder members and emphasized the Institute's commitment to advancing research and patient care. Reflecting on this, he said, "It is an honour and a privilege to be reappointed as Director of the Snyder Institute. Over the next five years, I look forward to advancing the Institute's discovery and translational research in the areas of Living Medicines, Microbial Therapeutics,

ImmunoTherapeutics, Fibrosis and more, and supporting and developing the Institute's outstanding research platforms. I look forward to serving the membership and welcome your input and feedback on all activities and initiatives as we drive to sustain and enhance the Institute's reputation as a world-class research and training environment."

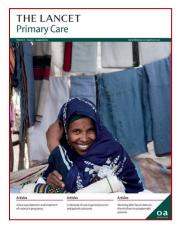
# Snyder member Dr. Bryan Yipp leads breakthrough research on lung scarring



Snyder member Dr. Bryan Yipp led research has uncovered a new role for nerve cells in protecting against pulmonary fibrosis, a deadly lung disease also known as lung scarring. Dr. Yipp's team discovered that specific nerve cells, usually known for detecting pain, also help regulate harmful inflammation in the lungs. Their findings were published in Immunity in August in the article Nociceptor neurons suppress alveolar macrophage-induced Siglec-F+ neutrophil-mediated inflammation to protect against

<u>pulmonary fibrosis</u>. Other researchers involved in this study include Nargis Khan, Christophe Altier, Margaret M. Kelly, Luke Brown, Grace Yoon, Idaira M. Guerrero-Fonseca, Angela P. Nguyen, Carlos H. Hiroki, Mortaza F. Hassanabad, Manon Defaye, Nicole Sarden, Alexandria Bartlett and Raquel Farias. Read more.

#### Dr. Dylan Pillai's malaria research featured in The Lancet Primary Care



Snyder member Dr. Dylan Pillai and his UCalgary-led research was featured as the cover story in *The Lancet Primary Care*. The team conducted one of the largest clinical trials of its kind, enrolling more than 2,400 women across eight health facilities in Ethiopia to study the effectiveness of DNA technology in detecting malaria during pregnancy. Their findings show DNA testing outperforms conventional diagnostic tools detecting up to 27% more cases depending on transmission setting. This work represents over three years of effort, employing more than 80 people in Ethiopia and involving trainees in both

Calgary and Ethiopia. Beyond advancing diagnostics, the study is exploring impacts on maternal and newborn health outcomes such as birth weight and anemia. Read here!

#### **Publications**

- Keely Shaw, K. A., Zello, G. A., & Crizzle, A. M. <u>Anthropometric Profiles, Adiposity, and Physical Fitness in Long-Haul Truck Drivers: Implications for Chronic Disease</u>
   Risk. Applied Physiology, Nutrition, and Metabolism, 2025
- Silva de Oliveira, R., Amy Shupe, A., Krause, T., Richardo, T., Ohland, C., Sabachvili, M., Bucher, K., Hetzer, J., Hörner, S., Dauch, D., Heikenwälder, M., Trautwein, C., Weber, A. N. R., Klepsch, V., Kathy McCoy, D., & Mager, L. F. Bifidobacteria-derived exopolysaccharide promotes anti-tumor immunity. Cell Reports, 2025
- Andrew Thorne. J., Gao, A., Necker-Brown, A., Bansal, A., Kalyanaraman, K.,
  Chandramohan, P., Sasse, S. K., Gerber, A. N., Mostafa, M. M., & Robert Newton.

  <u>Differential RELA and GR recruitment to the BIRC3/BIRC2 locus: Molecular insight as to combinatorial regulation by proinflammatory cytokines and glucocorticoid</u>.

  Molecular Pharmacology, 2025

#### **Education News**

#### **Grad Seminar Series Schedule (October)**



All lectures begin at noon. Pizza (2 pcs. per person please) provided first come first served; best to arrive by 11:50 am.

#### October 6 Theater One

- Sasha Shcherbakova, MDBC MSc Graduate
   Student, Dr. Chaconas' Laboratory, Department of
   Biochemistry and Molecular Biology
- Kevin Muirhead, MDBC PhD Graduate Student, Dr. Laura Sycuro Lab, Department of Biochemistry and Molecular Biology

October 13 Thanksgiving Holiday – No seminar scheduled

October 20 Gardiner Symposium – No seminar scheduled

October 27 Theater One

 Rachita Panda, MDIM PhD Graduate Student, Dr. Kubes' Laboratory, Department of Microbiology, Immunology & Infectious Diseases

# **Striking Image Competition 2025**



The Advanced Imaging and Microscopy (AIM)
Network invites submissions for the Striking
Image Competition 2025, celebrating microscopy
excellence and promoting colour blind-friendly
images. This competition provides an
opportunity to showcase your research by
submitting biology-related images captured on
any optical microscope across the University of

Calgary. To submit an entry, you must be a member of the University of Calgary with a valid @ucalgary.ca email address. The submission form is open from September 15th to November 7th. Register here.

# **Congratulations**

# Congratulations to Snyder members on receiving New Frontiers in Research Fund (NFRF) awards



The New Frontiers in Research Fund supports Canadian-led projects that are interdisciplinary, international, high-risk/high-reward, transformative and rapid-response. We are proud to celebrate the outstanding achievements of our researchers, whose

innovative and high-impact work represents the Snyder Institute on both national and international stages.

- Dr. Cameron Semper Humanizing infant formula using precision fermentation.
- Dr. Ian Lewis, Dr. Laura Sycuro Characterization of small intestinal microbiome biomarkers of treatment response in Parkinson's disease.
- Dr. Xiaofan Jin Rationally designed microbial therapeutics to treat recurrent urinary tract infection.
- Dr. Eduardo Cobo, Dr. Antoine Dufour, Dr. Amir Sanati Nezhad Engineered encapsulated encrypted peptides as immune regulator treatment for infectious diarrhea in pigs.
- Dr. Matthias Amrein Highly dexterous robotic endoscope for improved access to minimally invasive surgery and diagnostics.
- Congratulations to Luke Brown from the Yipp Lab on successfully completing his PhD defense. We wish him continued success in his career ahead.
- Congratulations to Snyder members Dr. Luis Murguía-Favela, Dr. Nathan Peters,
   Dr. Markus Geuking and Dr. Nicola Wright, whose Immunology Translational

Group has been awarded the Jeffrey Modell Foundation Specific Defect Research Grant. Their study will investigate the mechanisms of immune deficiency and dysregulation, along with microbiome biomarkers, in patients with Sphingosine-1-Phosphate Lyase Insufficiency Syndrome (SPLIS), a rare condition with no established treatment.

- We congratulate Dr. Carla Coffin, Dr. Craig Jenne, and their team for being awarded the CIHR Hepatitis B Team Grant and for being selected as one of the Top 5 Research Projects in the 2025 Research Showcase. This recognition came through community vote at the Annual Community Forum during the International Hepatitis B Meeting in Berlin. Their project, PATHFINDER, focuses on advancing functional cures for chronic HBV using artificial intelligence to define new clinical endpoints.
- Congratulations to Dr. Mona Parizadeh of the Arrieta Lab on receiving the Innovation Fellowship! She is leading a Digital Research Computing Bootcamp designed around open-access and equity principles, aiding immigrant and international researchers, encouraging inclusive engagement in national research, and regularly evaluating participant outcomes to improve effectiveness. Read more.

#### Welcome to our New Members

Welcome to our new members: Dr. Ejaife Agbani, Dr. Mia Madel Alfajaro, Dr. Casey Hubert, Dr. Franz J. Zemp, Dr. Joëlle St-Pierre, Dr. Ann Zalucky and Dr. Suqing Li.

- **Dr. Ejaife Agbani** is an Assistant Professor of Thrombosis and Haemostasis Cell Biology. His research focuses on platelet biology to provide critical insights into thrombosis mechanisms and the haemostatic response, with the goal of advancing precision medicine.
- Dr. Mia Madel Alfajaro is an Assistant Professor in the Faculty of Veterinary Medicine, specializing in RNA virology. Her research program centers on virus—host interactions, viral entry mechanisms and the molecular determinants of cross-species transmission.

- **Dr. Casey Hubert** is a Professor of Geomicrobiology in the Department of Biological Sciences. His research explores the biogeography and ecophysiology of microorganisms in deep biosphere habitats, including marine sediments and petroleum reservoirs.
- **Dr. Franz J. Zemp** is Adjunct Assistant Professor in the Department of Biochemistry and Molecular Biology. He focuses on innovating in the field of cancer immunotherapies, particularly Chimeric Antigen Receptor (CAR) T cell therapies, for children, adolescents, and young adults.
- **Dr. Joëlle St-Pierre** is a Clinical Assistant Professor in the Inflammatory Bowel Disease Group. Her research focuses on the intersection of immunology, metabolism and chronic inflammation in inflammatory bowel disease.
- Dr. Ann Zalucky is an Assistant Professor in the Department of Critical Care Medicine. Her research focuses on acute kidney injury (AKI), aiming to uncover novel biomarkers and pathways to better characterize AKI syndromes, with the goal of identifying molecular targets for precision therapeutics.
- Dr. Suqing Li is a Clinical Assistant Professor specializing in Therapeutic Endoscopy. As a clinician-investigator with a subspecialization in pancreaticobiliary therapeutic endoscopy and an interest in translational medicine, their research focuses on translational approaches in the management of pancreaticobiliary disease.

We're excited to have you join the Snyder family!

# **Upcoming Events**

#### Mini Medical School | Oct 6



Join us on October 6th for an eye-opening hybrid public lecture that explores the medicinal power of your microbiome. Learn how living cells and microbes are being harnessed to treat disease, from developing microbial therapies to boosting immune function.

This lecture features Dr. Kathy McCoy and Dr. Braedon McDonald, leading researchers from UCalgary's International Microbiome Centre and Snyder Institute, unpacking the cutting-edge science of how microbes and live cell platforms are reshaping human medicine. Learn more and register.

### **Snyder Invited Speaker Seminar Series | Oct 2**



Please join us for the next lecture of the Snyder Invited Speaker Seminar Series on October 2, 2025, from 11:00 am to 12:00 pm in HSC Theatre 4. The Snyder Invited Speaker Seminar Series is a biweekly lecture series featuring presentations from speakers who are invited to the Institute by Snyder endowed chairs, research groups and journal clubs. This lecture will feature invited speaker, and new UCalgary faculty recruit, Dr. Mia Madel Alfajaro, who will present on *Unlocking the* Host Range: Receptor Flexibility in Merbecoviruses. Snyder trainees and postdocs are also invited to a roundtable lunch with Dr. Alfajaro on October 2, 2025, from 12:00 to 1:00 pm in HRIC 4AC56. This roundtable session is especially recommended to postdocs interested

in learning more about the process of job searching from someone who recently completed the process. Register for the trainee/postdoc lunch here.

# McCaig International Research Conference: Advancements in Osteoarthritis – From Discovery to Treatment | March 11-13



Don't miss the McCaig International Research Conference: Advancements in Osteoarthritis — From Discovery to Treatment, taking place March 11–13, 2026, at the Pomeroy Kananaskis Mountain Lodge in Alberta's Canadian Rockies. This international meeting will bring together leading researchers, clinicians, trainees and industry partners to explore the latest advances in osteoarthritis research and care.

The conference will highlight emerging therapies, innovative imaging techniques, chemical and biochemical approaches and evolving clinical practices. Attendees will have the opportunity to engage in discussions, share insights and network

with experts from around the world, bridging the gap between discovery and patient care. Trainee abstract submissions open until Oct 31, 2025. <u>Learn more and register</u>.

#### In The News

The Scientist

Dr. Gil Kaplan: Why Smoking Surprisingly Soothes Ulcerative Colitis Symptoms

CTV

Dr. Craig Jenne: <u>Wastewater data suggests COVID-19 will return to Calgary this respiratory virus season</u>

Western Standard

Alberta influenza deaths reach 16-year high Dr. Daniel Gregson discusses the new strain of measles and its impact. Read more.

City News, Economic Times, CBC, EL Pais, CTV News, Calgary Herald
 Alberta influenza deaths reach 16-year high

Dr. Daniel Gregson discusses the new strain of measles and its impact. <u>City News, Economic Times, CBC, EL Pais, CTV News, Calgary Herald, CBC -2</u>

# **Work With Snyder**



Snyder is hiring a highly qualified Scientific Grant Writer. The Scientific Grant Writer will report to the Institute Director, providing specialized writing, editing and review support to strengthen research outputs and major funding applications for Snyder Institute for Chronic Diseases. This role leads the

coordination and development of large collaborative grant proposals, supports knowledge translation for diverse audiences and fosters partnerships to advance the Institute's research priorities and strategic growth. <u>Learn more and apply</u>.

#### **Other News**

## **Snyder Institute Funding Reminder**

- Snyder internal funding opportunities can be found on our website under Membership & Funding
- Snyder internal scholarship opportunities can be found on our website under <u>Education & Scholarships</u>

#### **Awareness Information**

#### Freezer Efficiency Matters: What You Need to Know



A new ultra-low temperature (ULT) freezer uses as much energy as an average household.

- Too many ULT freezers increase building heat load and strain HVAC systems.
- Freezer management helps cut costs, prevent failures, and improve performance.
- Try "Freezer Fridays" to clear out expired

or unusable samples.

- Label all samples and keep an inventory—less time searching means less time with the door open.
- ULTs take ~10 minutes to recover for every 1 minute the door is open.
- Test older freezers (10–15+ years); some use 2–4x more energy and pose a risk to stored samples.

### Would you like to contact someone at the Snyder Institute?

On our website, our **Contact Us page** has some useful contacts.

### We want to hear from you! Send us your news

We invite all Snyder members, trainees and staff to send us your news about successes, lectures, workshops... anything that you would like to share with the membership. We will make every effort to post it, and the best ways for us to share your news are through our:

- Snyder Newsletter
- <u>Snyder Website</u> (as long as your news fits the site's guidelines)
- X, LinkedIn, Instagram and Facebook channels

Do you want help publicizing your event/lecture/workshop? Send us the details **at least one month before the event date.** Please contact Anurag if you have any questions (<a href="mailto:anurag1@ucalgary.ca">anurag1@ucalgary.ca</a>). Thank you.

For the latest news and information, visit us at snyder.ucalgary.ca, and at



If you have news to share, please send it to Anurag: <a href="mailto:anurag1@ucalgary.ca">anurag1@ucalgary.ca</a>

