



A NEWSLETTER FROM The Snyder Institute for Chronic Diseases



November 2025

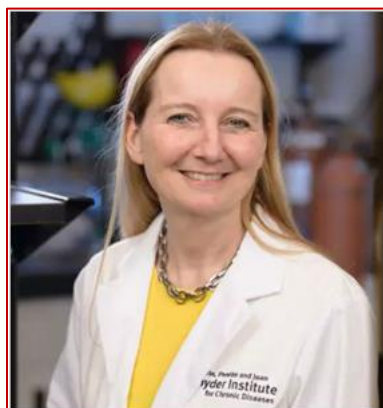
Snyder Trainee Parker Volk is the Winner of the National Three Minute Thesis (3MT) Competition



Snyder trainee Parker Volk is the winner of the National 2025 Three Minute Thesis competition. The Three Minute Thesis (3MT) is a competition where graduate students explain their research to a general audience in a single three-minute talk. The national showcase in Ottawa featured the first- and second-place winners from the three regional competitions, the Storytellers competition, and the French-language 3MT. The top two from this event advance to the North American finals, where they compete against eight contestants from the United States and two from Mexico. Volk's work is part of UCalgary's Host-Parasite

Interactions (HPI) program, the largest parasitology research group in Canada. He studies the rat tapeworm *Hymenolepis diminuta*, a parasite that has evolved remarkable strategies to survive inside its host, at the McKay Lab. Congratulations to Parker Volk for this outstanding accomplishment! We wish him luck and all the best as he heads to the international round. [Watch here](#). Photo credits: Mélanie

CBC Eyeopener Interview with Dr. Kathy McCoy on Living Medicine



Snyder member Dr. [Kathy McCoy](#) gave an insightful interview on CBC's Eyeopener, discussing the future of living medicine, a revolutionary approach that uses living cells or microbes as therapeutic agents to help the body combat diseases like cancer. A leading strategy engineers patients' immune cells (T-cells) in the lab. Equipped with tumor-targeting CARs, these modified cells are reinfused to seek out and eliminate cancer. A parallel and complementary area of focus is the human microbiome—the trillions of

microbes that live in and on our bodies. These microbes can send critical signals that help regulate the immune system. By identifying which microbial species are beneficial, researchers aim to harness or replicate their signals to boost the body's natural immune response against tumors. [Listen here](#).

Publications

- Chen, H.-M., Carlson, D. A., Haystead, T. A. J., & **Justin MacDonald**. [An Inhibitor of Death-Associated Protein Kinase 3 \(DAPK3\) Disrupts Hippo Signaling and Intestinal Epithelial Regeneration in Murine DSS-Induced Colitis](#). *Digestive Diseases and Sciences*, 2025
- Garnica, J., **Ju Yamanouchi**, **Shari Thiessen**, Moro, J., Canut, E., Palou, M., **Debajyoti Mondal**, Serra, P., & **Pere Santamaria**. [Contextual regulation of T follicular helper cell expansion and differentiation into T regulatory type 1 cells by multiple transcription factors](#). *Cell Reports*, 2025
- **Quinn Goddard**, **Gilaad Kaplan**, Coward, S., Williamson, T., Patten, S., Bruce, M., Godley, J., Henderson, R., Whitten, T. A., Chintoh, A., & King, J. A. [Increased use of psychiatric medication following incident celiac autoimmunity](#). *Journal of Psychosomatic Research*, 2025
- Kohio, H. P., Ajoge, H. O., Barua, E. A., Vajaria, N. R., Wu, I. K. F., Coleman, M. D., Tom, S. K., **Frank Van Der Meer**, **John Gill**, **Deirdre Church**, **Paul Beck**, Power, C., **Guido Van Marle**, & Barr, S. D. [Early pandemic HIV-1 integration site preferences differ across anatomical sites](#). *Communications Medicine*, 2025
- Lahiri, P., Young D, Penner, R., Lesack, K., Dias, A. P., Hannawayya, R., **Jeroen De Buck**, J., Orsel, K., **Morley Hollenberg**, M. D., Johnson, F., Golub, L., Scaduto, J., **Antoine Dufour** & **Eduardo Cobo**. [Proteolytic dysfunction in bovine digital dermatitis caused by *Treponema* spp. And the therapeutic use of non-antimicrobial matrix metalloproteinase inhibitors](#). *Communications Biology*, 2025

- Muts, R. M., Hendriks, A., **Josefien Hommes**, Grönloh, M. L. B., Dijkstra, D. J., De Haas, C. J. C., Aerts, P. C., Ebberink, E. H. T. M., Heck, A. J. R., Wang, Z., Zhuang, H., Codée, J. D. C., **Bas Surewaard**, Heesterbeek, D. A. C., Van Sorge, N. M., & Rooijackers, S. H. M. (2025). [Isotype conversion of Staphylococcal-specific IgG into IgM broadens the reactivity to other bacterial pathogens](#). *Cell Reports Medicine*, 2025
- Pimentel, E., Banoei, M. M., Lee, C. H., & **Brent Winston**. [Comparative plasma metabolomics of Delta and Omicron SARS-CoV-2 variants: Insights into variant-specific pathogenesis and therapeutic implications](#). *Frontiers in Cellular and Infection Microbiology*, 2025

Education News

Grad Seminar Series Schedule (December)



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

December 1 Theater Four

- Afshin Derakhshani, MDIM PhD Graduate Student, Dr. Dufour's Laboratory, Department of Microbiology, Immunology & Infectious Diseases
- Carmina Isidoro, MDIM PhD Graduate Student, Dr. Deniset's Laboratory, Department of Physiology and Pharmacology

December 8 Theater One

- Salman Mirza, MDMI MSc Graduate Student, Dr. Zhang's Laboratory, Department of Microbiology and Infectious Diseases
- Josefien Hommes, MDIM PhD Graduate Student, Dr. Surewaard's Laboratory, Department of Physiology and Pharmacology

December 15 Theater One

- Ken Yu Khaw, MDMI PhD Graduate Student, Dr. Schryvers' Laboratory, Department of Microbiology, Immunology & Infectious Diseases
- Senya Wickramasinghe, MDMI MSc Graduate Student, Dr. Cobo's Laboratory, Department of Microbiology, Immunology & Infectious Diseases

December 22 and December 29

Winter Holidays – No seminar scheduled

Join the Bioinformatics Working Group

A poster for the Bioinformatics Working Group at the University of Calgary. The poster features a large, colorful circular graphic on the right side with the letters 'BWG' in the center. To the left of the graphic, there is text describing the group's purpose, a list of activities, and a meeting schedule. At the bottom right, there is a QR code and contact information for the organizers.

BIOINFORMATICS WORKING GROUP

The UCalgary Bioinformatics Working Group brings together researchers, students, and staff across the Faculty of Science, Cumming School of Medicine, and Faculty of Veterinary Medicine who use or develop computational tools for life sciences.

MEETINGS

- Monthly meetings featuring lightning talks, tool demos, and hands-on skill shares
- Guest speakers, posters, and Pin board showcases
- Share code, pipelines, and HPC best practices
- Build community through informal discussions and collaborations

Who should join?

Anyone interested in bioinformatics from beginners learning HPC systems, to Python to experts developing new algorithms. All are welcome!

MEETING SCHEDULE

FIRST MONDAY OF EACH MONTH	TIME: 3:00 PM - 4:00 PM	WHERE: BIOSCI BUILDING ROOM B1311
2025		
2026		

Join Now!

CONTACT:

Dr. Andrea Silven
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Dr. Amanda Andrade
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The Bioinformatics Working Group connects and builds the bioinformatics community at the University of Calgary. Since launching in February 2025, it has grown to over 90 members, hosting monthly meetups with lightning talks, demos and skill-shares for students, postdocs and PIs. The group shares code, pipelines and HPC best practices in a collaborative, in-person setting open to all skill levels. Join this growing initiative to learn, network and help strengthen UCalgary's bioinformatics community.

Quantitative Metabolic Profiling with NMR

Nuclear Magnetic Resonance (NMR) metabolomics provides a robust, quantitative and reproducible platform for clinical research. Key advantages include minimal sample preparation, non-destructive analysis and broad metabolite coverage, making it ideal for biomarker discovery, drug monitoring and precision diagnostics. Our facility supports investigators with a standardized workflow—from sample preparation to spectral acquisition on a 600 MHz Bruker and advanced data analysis—ensuring reliable, high-quality metabolic phenotyping for translational studies. For project consultation, contact [Dr. Rustem Shaykhutdinov](#).

Congratulations

- We extend our congratulations to the Dr. Altier, Dr. Nasser and Dr. McCoy labs on securing a Weston Family Foundation grant. Their collaborative research will explore the link between post-inflammatory dysbiosis and chronic symptoms like pain and fatigue in ulcerative colitis.
- Congratulations to Dr. Justin Chun for being recognized as an Outstanding Peer Reviewer in three or more consecutive Project Grant competitions between Fall 2022 and Spring 2024.
- Congratulations to Rehnuma Tabassum Sejuty on receiving the FEMS Microbiology Reviews Best Poster Award for excellence in early career research in Portland.

Upcoming Events

Snyder Institute Holiday Party & Trainee Research Day | December 10



Join us for Snyder Trainee Research Day and Holiday Party. The Snyder Trainee Research Day will feature oral presentations from our students, chalk talks from our postdocs and a trainee poster session. Complimentary coffee and lunch will be provided for all registered attendees. Following the research day, the Snyder Holiday Party will commence at 3 pm. The party will include refreshments, appetizers, music, a photo booth and a games table. [Register](#) and [RSVP](#) 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. [Learn more and Register](#).

In The News

- **City News**

Dr. Craig Jenne: [Alberta flu season: 'Perfect storm' could lead to spike in illnesses](#)

- **CBC**

Dr. Craig Jenne: [Think you're not eligible for a free COVID shot in Alberta? Double check, experts urge](#)

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 [Education & Scholarships](#)

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](#)
- [Snyder Website](#) (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 (anurag1@ucalgary.ca). 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: anurag1@ucalgary.ca



Calvin, Phoebe and Joan
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