



A NEWSLETTER FROM  
**The Snyder Institute  
for Chronic Diseases**

Calvin, Phoebe and Joan  
**Snyder Institute**  
for Chronic Diseases

UNIVERSITY OF CALGARY  
CALVIN S. SNYDER SCHOOL OF MEDICINE

November 2023

## Research news

### **While Alberta's new COVID stats page can be confusing, Dr. Craig Jenne explains some key numbers and what they mean**

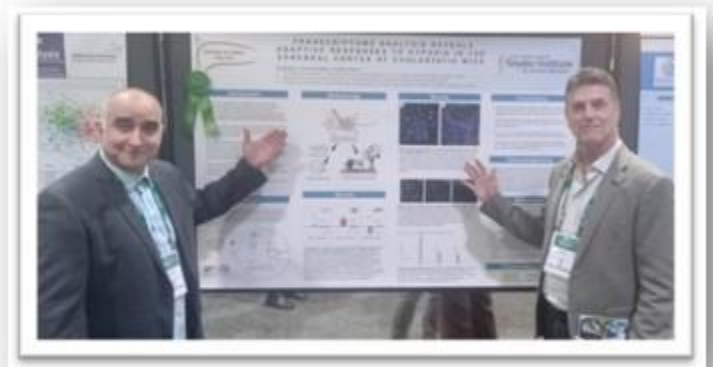
Alberta's new respiratory virus dashboard provides weekly updates on the spread of COVID-19 in the province, but making sense of the numbers can be a challenge — and it's particularly difficult to figure out how many people have died. For example, Albertans who visited the dashboard in mid-November were greeted by a front-page "highlights" package informing them there had been two deaths from COVID-19 during the past reporting week.



That was technically true. Equally true — but less obvious — was the fact that there were actually 18 more deaths in that week's report, compared with the report from the week before. How can both numbers be correct? Snyder member Dr. Craig Jenne [explains what's going on](#).

### **New research by Drs. Mark Swain and Wagdi Almishri bridges a critical gap in understanding how liver diseases can affect brain function**

Patients with chronic cholestatic liver diseases (CLDs) experience a range of severely debilitating behavioural symptoms, such as altered mood, fatigue, and cognitive dysfunction, collectively termed sickness behaviors. The communication mechanism between the liver and brain that causes sickness behaviours in CLD is poorly understood. This



represents a significant knowledge gap that hinders new therapeutic approaches. In a recent study by Snyder members Drs. [Mark Swain, MD](#), and Wagdi Almishri, DVM, PhD, there is a new understanding of how CLDs affect brain function and contribute to sickness behaviour.

This research is significant as it bridges a critical gap in understanding how liver diseases can affect brain function and cause adverse behavioural symptoms in patients with CLD. By identifying the roles of hypoxia and monocyte accumulation in the brain, it introduces new possibilities for therapies that target not just liver disease but also the associated neurological symptoms.

Drs. Swain and Almishri recently received the American Association for the Study of Liver Diseases' (AASLD) Presidential Distinction Poster Award for their research, recognizing research that is classified in the top 5% of scored poster abstracts among thousands from around the world.

**Dr. Susan Kutz wonders why muskoxen are travelling south of the Arctic tundra, and is concerned they may be contracting diseases and bringing them back to the North**

While sightings of muskoxen in Alberta are rare, they are not unheard of. One was spotted in Fort Chipewyan in October. Snyder Institute member [Dr. Susan Kutz, PhD](#), has been studying muskoxen and caribou for the past 30 years. She says the population on the Arctic mainland is expanding so it's natural for them to take up more space. But the exact reason for them to travel so far south remains unclear. And Dr. Kutz says it's concerning, because muskoxen travelling south are at risk of contracting diseases — like bovine brucellosis, tuberculosis and anthrax — and bringing them back North. [Read more.](#)



*This muskox was spotted at Andrew Lake Lodge at the N.W.T.-Alberta border in 2012. ( Dan Wettlaufer)*

## Congrats

**Six Snyder Institute members figure prominently in the prestigious list of 15 UCalgary researchers on Clarivate's Highly Cited Researchers – an outstanding achievement!**

Congratulations to Drs. Craig Jenne, Gilaad Kaplan, Paul Kubes, Remo Panaccione, Johann Pitout, and V. Wee Yong, named to Clarivate's Highly Cited Researchers 2023. [Read more.](#)

**Dr. May Choi, MD** was named a [Top 40 Under 40 awardee](#) for exceptional entrepreneurship, helping patients with complex autoimmune conditions get diagnosed and treated earlier.

**Dr. Ranjani Somayaji, MD** was awarded the Department of Medicine Early Career Award for Clinical Excellence.

UCalgary and Snyder Institute alumna **Dr. Rachel Kratofil, PhD** (Paul Kubes Lab) was awarded the [Science & SciLifeLab Essay Prize for Young Scientists](#). She also received the Faculty of Graduate Studies 2023 [Governor General's Gold Medal](#) for her exceptional doctoral thesis work. Read Rachel's essay [here](#).

Postdoc **Dr. Simone Paerregaard, PhD** (Katharina Lahl Lab) was awarded the [TRIANGLE Postdoctoral Fellowship](#) for her work in gastroenterology and liver research and patient care.

Congratulations to you all!

## Welcome

Welcome **new Snyder member** [Dr. Arshad Ayyaz, PhD](#), Assistant Professor, Faculty of Science, Department of Biological Sciences. Dr. Ayyaz's areas of research focus are understanding the mechanisms of immune escape in tumor initiating colorectal cancer cells, colorectal cancer, stem cells, immunotherapy resistance, immune escape and genomic stress.

Welcome **Visiting Scientists** as part of the Snyder Institute Visiting Scientist program:

- **Dr. Eugenia Corrales-Aguilar, PhD**, Coordinator of the Virology Section at the Tropical Diseases Research Center (CIET) at the Faculty of Microbiology, University of Costa Rica, based in the Arrieta lab at UCalgary.
- **Dr. J. Efraín Olguín, PhD**, Associate Career Professor at Faculty of Higher Studies Iztacala (FES-I), National Autonomous University of Mexico, and



Coordinator of the Flow Cytometry Core Facility at FES-I. He is based in the McKay lab at UCalgary.

- **Dr. Luciane Alarcão Dias-Melicio**, PhD, Assistant Professor and Head of the Department of Pathology, Medical School of Botucatu, Sao Paulo, Brazil, in collaboration with Dr. Paul Kubes to conduct the project “Role of phagocytic cells in the early stages of experimental *S. aureus* infection: In vivo imaging of host – *S. aureus* interaction in the lung and skin of mice and the participation of complement system”, based in the Kubes lab at UCalgary.

Deadline for the next round of Visiting Scientist Grants is June 1.

## Education news

### **Snyder Institute Endowed Chair Seminar Series: Molecular Phenotyping of Critical Illness: Moving Towards Precision Critical Care Presented by Dr. Carolyn Calfee – Dec. 1, 2-3 pm, **\*New location: Theatre One****

Please join us for the second lecture of the 2023-2024 Endowed Chair Seminar series on December 1, 2023, from 2:00-3:00 PM in Theatre One. This lecture will feature invited speaker **Dr. Carolyn Calfee**, who will present on **Molecular Phenotyping in Critical Illness: Moving Towards Precision Critical Care**. Snyder trainees and postdocs are also invited to attend a trainee roundtable lunch with Dr. Calfee on December 1 at noon, in HRIC @AC56. Registration required.



**Dr. Carolyn S. Calfee, MD, MAS** is Professor of Medicine and Anesthesia at the University of California, San Francisco, where she attends in the intensive care units. She received her medical degree from University of Pennsylvania and completed her residency, chief residency, and fellowship at University of California, San Francisco. Her primary academic focus is the pathogenesis and treatment of the acute respiratory distress syndrome (ARDS), with special interest in molecular phenotypes and precision medicine in critical care, the role of environmental exposures in acute lung injury, and novel treatments for ARDS and sepsis. **Register for the lecture [here](#), and the trainee/postdoc roundtable [here](#).**

### **Snyder Institute Trainee Research Day – December 6, 9 am – 3 pm, Theatre 3 and HRIC Atrium**

Snyder Trainee Research Day will feature oral presentations from Snyder students, chalk talks from Snyder postdocs and a trainee poster session. Coffee and lunch will be

provided to registrants. Trainee Research Day will be followed by the Snyder Holiday Party, which will commence at 3 pm. [Register here](#).

### **Project Management for Researchers – by Mitacs – December 12 and 13, 8:45 am – 4:45 pm, HSC**

Presented in partnership with the Alberta Children's Hospital Research Institute (ACHRI), the Hotchkiss Brain Institute (HBI), and the Snyder Institute for Chronic Diseases. Open to graduate students and postdoctoral scholars in the ACHRI, HBI, or Snyder institutes. [Find out more](#).

### **Beverly Phillips Rising Star Program applications due December 15, 4 pm MST.**

This award aims to recruit outstanding PhD students and postdoctoral fellows to innovative basic science and translational research training in autoimmune, inflammatory, immunological and infectious disorders within the Snyder Institute through the offer of highly competitive scholarships/fellowships. **Application deadline is December 15, 4:00 PM MST.** [Find out more here](#).



### **Snyder Graduate Seminar Series – 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 4, Theatre Four:**

- Gerone Gonzales, MDBC PhD Graduate Student  
Drs. Canton's Laboratory, Department of Biochemistry and Molecular Biology
- Nicole Sarden, MDIM PhD Graduate Student  
Dr. Yipp's Laboratory, Department of Critical Care Medicine



#### **December 11, Theatre One:**

- Maneesha Subha, MDIM MSc Graduate Student  
Dr. Jenne's Laboratory, Department of Biochemistry and Molecular Biology
- Josefien Hommes, MDIM PhD Graduate Student  
Dr. Surewaard's Laboratory, Department of Physiology and Pharmacology

**December 18, Theatre One:**

- Oscar Tejada, MDIM MSc Graduate Student  
Dr. Kubes' Laboratory, Department of Physiology and Pharmacology
- Kosar Khani, MDIM MSc Graduate Student  
Dr. Surewaard's Laboratory, Department of Microbiology, Immunology & Infectious Diseases

**December 25, University Holiday, no seminar**

**January 1, University Holiday New Year's Day, no seminar**

## **Fundamentals of Effective Figure Design, January 9, 12:30 – 2:30 pm, Foothills Campus**

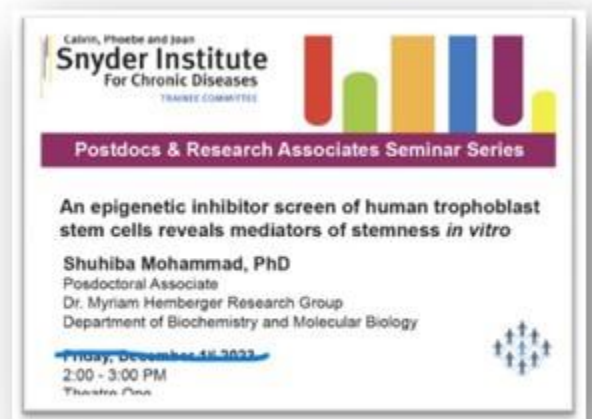
Improve your scientific figures by learning how figure design can affect readability, interpretation, and impact. Whether you are writing a grant application, manuscript, or presentation, you have limited space to explain your science. Figures that are clear, intuitive, and robust to misinterpretation are essential to your success. This module is open to graduate students and postdocs in the ACHRI, Charbonneau, HBI, Snyder, and Libin institutes. Registration will be confirmed the first week of January. [Register here.](#)



## **SITC Postdocs and Research Associates Seminar Series Next seminar RESCHEDULED! To **Friday, January 19**, 2 – 3 pm, HSC Theatre One**

Our next Postdocs & Research Associates Seminar Series lecture will be "An epigenetic inhibitor screen of human trophoblast stem cells reveals mediators of stemness *in vitro*", presented by Shuhiba Mohammad, PhD.

As part of the series of events on professional development and education for members within the Snyder Institute, the Snyder Institute Trainee Committee (SITC) holds a seminar series dedicated to Postdocs and Research Associates seeking an opportunity to present their



research or improve their teaching skills by giving a chalk talk for the Snyder community. The seminars take place monthly. If you are interested in joining this and further opportunities, please provide your contact information [here](#).

[More upcoming SITC events](#)

## **Snyder Institute Catalyst Grant – deadline December 15**

The Snyder Institute is pleased to announce its new Catalyst Grant program. A \$1-million gift from the McKay Family Foundation is providing critical seed funding for researchers at the Snyder Institute. This grant program will help launch bold, innovative and unfunded research investigations which could lead to future new medical treatments.



The new [Snyder Institute Catalyst Grant](#) program bridges the gap for ambitious research projects which have the potential to attract substantial government support once promising initial data can be gathered. The grants support innovative, high-risk, high-reward research that aligns with the Snyder Institute's mandate and priorities and makes significant use of its [Live Cell Imaging Lab](#) and other core research platforms and affiliated platforms. [Learn more and apply by December 15 !](#)

## **Meet the donors who are sparking positive change at UCalgary and the Snyder Institute**

Snyder's Strategic Advisory Board Chair Matt Brister and his wife Tara Brister received the type of education at UCalgary that allowed them to thrive in the competitive energy sector. They appreciated the foothold their degrees provided — and never forgot it.



“UCalgary puts people in a pretty good relative position to succeed,” says Matt, BSc'81, who — with his wife, Tara, BSc'82 — was recently presented with an Arch Award recognizing alumni service to UCalgary. “(Coming out of the Department of Geology and Geophysics), I can say that we were well-equipped to compete very well.

“So, once we were able, it was natural for us to want to give back.” [Read more](#).

## **Researcher Spotlight: Visiting Scientist Dr. Eugenia Corrales-Aguilar, University of Costa Rica**

The Snyder Institute's Visiting Scientist Grant was launched to facilitate Snyder Institute members in hosting project-based visits by senior postdoctoral fellows or early- to mid-career faculty from less developed geographic regions at the Snyder Institute. Ideally, visiting researchers will acquire skills to help with their research program, career advancement and capacity building upon return to their home region.



The grant is also intended to facilitate Snyder researchers and visiting scientists in gaining an experiential advantage that will lead to external research grant and funding opportunities. An additional goal is to build research collaborations between the Snyder Institute and research programs from less-developed regions.

Dr. Eugenia Corrales-Aguilar, PhD, one of our visiting scientists, is a Costa Rican microbiologist specializing in virology and is the Coordinator of the Virology Section at the Tropical Diseases Research Center (CIET) at the Faculty of Microbiology, University of Costa Rica. [Read more.](#)

### **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](#)

### **Do you have new trainees or new staff working with you?**

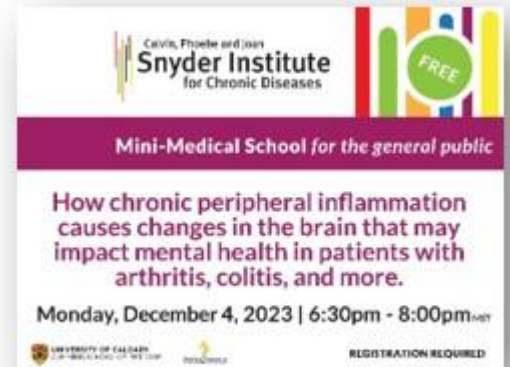
If you do, please send us their contact information so we can add them to our mailing list and ensure they receive all pertinent Snyder news. Email [snyderadmin@ucalgary.ca](mailto:snyderadmin@ucalgary.ca).



## Upcoming events

### The Snyder Institute presents Mini-Medical School: How chronic peripheral inflammation causes changes in the brain that may impact mental health in patients with arthritis, colitis, and more, December 4, 6:30 – 8 pm, in-person and online

Join us for the Snyder Institute's Mini-Medical School, presented in person and also online by Dr. Quentin Pittman, PhD, and Dr. Mark Swain, MD. Learn how chronic inflammation causes changes in the brain that may influence psychiatric co-morbidity in diseases like arthritis, colitis, and more. This interactive lecture will be presented in person at Health Sciences Centre Theatre 4, UCalgary's Foothills campus, and also online via zoom. Mini-Medical School lectures are free, but you must register to attend. [Register here](#).



### Come one, come all! Snyder Institute Holiday Party – December 6, 3-6 pm, HRIC Atrium

Join us to kick off the holiday season! Great food, great wine, spirits and other beverages, and excellent company! Please [RSVP by November 27](#).



### UCalgary United Way Workplace Campaign – 50/50

Purchase tickets until Dec. 12, and the winner will walk away with half the total money raised (up to \$10,000) while the rest goes straight to United Way. Open to all Albertans!

<https://www.rafflebox.ca/raffle/ucalgary5050dec2023> | <https://cumming.ucalgary.ca/unitedway>

### Snyder/MIID Coffee Meet-ups for Faculty: Next meet-up December 13, 10 – 11am, UCVM HRIC 2AC56

Snyder Faculty members, come and get to know your Snyder/MIID colleagues! Please join us for coffee and treats in an informal setting on **December 13, 10 – 11 am**. \*We'll provide the coffee and treats; please bring your own mug or cup if possible. New location: UCVM HRIC 2AC56. [More info](#).



## Snyder EDI Action Group next meeting January 29, 10:30 – 11:45am, HSC G382

[Dr. Laura Sycuro, PhD](#), is the Portfolio Lead of the Snyder EDI Action Group. Launched in Fall 2022 by Snyder trainees Dr. Karen Lithgow and Diana Changirwa, the Group currently has ~30 members working to initiate policies and advance practices that address structural inequities, celebrate diversity and promote an inclusive environment for all.



Three sub-committees have formed and will be managed by Action Leaders: one faculty member and one staff or trainee member for each group.

*\*\*Open to all faculty, trainees & staff who want to get involved\*\**

There are opportunities to join as a member-at-large or sub-committee leader.

Remaining regular meetings are held on the 4<sup>th</sup> Monday of **every other month**, 10:30-11:45 am, in HSC G382

- January 29, 10:30 am in G382
- March 25, 10:30 am in G382
- May 27, 10:30 am in G382

Learn more about the [Snyder Institute EDI Action Group](#).

### 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)
- Twitter, LinkedIn 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 Holly if you have any questions ([holly.kerr@ucalgary.ca](mailto:holly.kerr@ucalgary.ca)). Thank you.

For the latest news and information, visit us at [snyder.ucalgary.ca](https://snyder.ucalgary.ca),  
and at



If you have news to share, please send it to Holly Kerr,  
[holly.kerr@ucalgary.ca](mailto:holly.kerr@ucalgary.ca)

[snyder.ucalgary.ca/](https://snyder.ucalgary.ca/)

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