



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



September 2022

Message from the Director



Dear Snyder Institute Member,

Welcome back! I hope you had an excellent vacation and are energized for the year ahead. I extend a special and warm welcome to new trainees and new faculty as we delve into the 2022/23 academic year. We at the Snyder Institute

are looking forward to working with each of you, and we are here to support your work throughout another year of discovery and translational research that continues to change the lives of many living with chronic and infectious disease.

A reminder to all faculty to **please send your updated/current lists of students and their email contact information** to SITC@ucalgary.ca and snyderadmin@ucalgary.ca so we can keep students in the loop of all that is happening for their benefit. And please check our website for the latest research success stories and upcoming events. The following newsletter is packed with great information to help launch an exceptional fall term for all of us at the Snyder Institute. Take care and I look forward to seeing you soon.

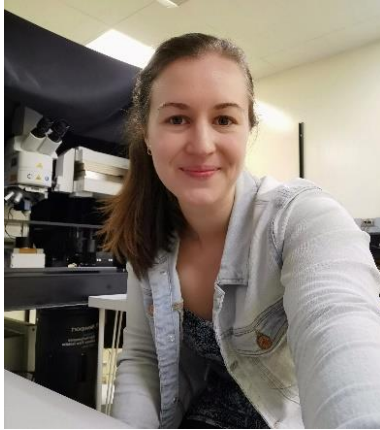
Warm regards,

Derek McKay

Director, Snyder Institute for Chronic Diseases
Professor: Department of Physiology & Pharmacology
Cumming School of Medicine, University of Calgary

Research news

Snyder researchers discover new approach to healing skin infections and wounds

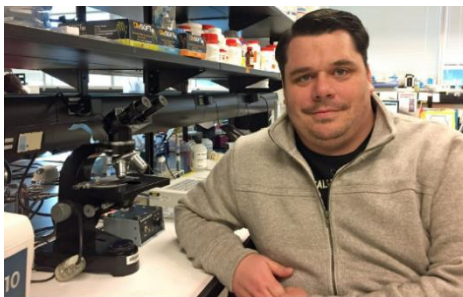


Researchers at the University of Calgary and Snyder Institute have identified a promising new approach to treating bacterial skin infections. In a study recently published in *Nature*, first author Dr. Rachel Kratofil, PhD, and co-senior authors [Drs. Paul Kubes, PhD](#), [Justin Deniset, PhD](#), and their research team show new insight which could lead to advancements in treating bacterial infections and wounds.

“While translating our research from bench to bedside will require many more experiments and involve a model more closely related to human disease, it is exciting that we have made a fundamental discovery that could improve infections and tissue repair in humans, especially hard-to-treat cases,” says Kratofil.

The findings offer new insight into why patients with diabetes and obesity may have difficulty healing. [Read more.](#)

The flu is back, and COVID has not yet disappeared. Dr. Craig Jenne explains what we can expect this Fall



At a time when hospitals are plagued by severe staffing shortages, Alberta could be hit this fall by a double whammy of influenza and COVID-19 for the first time since the start of the pandemic.

Alberta’s free flu immunization campaign is set to begin next month. High-risk groups, such as people living in care homes, are expected to start getting their flu shots the week of Oct. 3. The vaccine should be available to everyone else — six months and up — starting mid-October.

“We do know that flu is back,” says [Dr. Craig Jenne, PhD](#), associate professor in the Department of Microbiology, Immunology and Infectious Diseases at the Cumming School of Medicine, and member of the Snyder Institute for Chronic Diseases. “As these other general public health measures such as indoor masking or capacity limits are eased, the flu can transmit just as well as it did prior to the pandemic.” [Read more.](#)

Dr. Gil Kaplan speaks to Time magazine about environmental factors that increase the risk of IBD



There's no question that genetic factors play a part in a person's risk for inflammatory bowel disease — and especially for Crohn's disease. But the increases in IBD incidence and the disease's pronounced geographical patterns strongly suggest that environmental factors are also at play.

“Following World War II, we've seen a rapid rise in IBD incidence throughout the developed world,” says [Dr. Gilaad Kaplan, MD](#), professor and gastroenterologist at UCalgary and member of the Snyder Institute for Chronic Diseases and the O'Brien Institute for Public Health. “Something about a Western lifestyle seems to be allowing this disease to flourish.” What is that something? That's the unsolved mystery. [Read more.](#)

Monkeypox: Infectious disease expert Dr. John Gill talks about transmission, symptoms, prevention and increased collaboration across medical disciplines



John Gill © Courtesy John Gill

The World Health Organization (WHO) declared monkeypox an escalating global outbreak and an international public health emergency on July 23, after more than 3,000 cases were confirmed in 47 countries, including Canada. Monkeypox is an illness caused by the monkeypox virus. It can present as a range of symptoms, including a skin rash or lesions, fever and muscle ache. It is part of the same family of viruses that causes smallpox. The illness tends to be self-limiting, meaning it usually goes away on its own. In rare cases involving the most severe symptoms, the disease has led to hospitalization and even death.

[Dr. John Gill, MD](#), a professor with the Cumming School of Medicine and Snyder Institute member, and an internationally recognized expert in infectious disease and human immunodeficiency virus (HIV) answers some pressing questions about monkeypox, including what researchers in Calgary are doing to better understand the disease, how it's spread and ways to enhance disease prevention measures. [Read more.](#)

Study reveals a cell type traditionally thought to be destructive is actually helpful in maintaining a healthy gut

Eosinophils are known to be an important cell type that are associated with allergic disease and are traditionally viewed as being pathogenic, leading to tissue destruction. Until now, the reason for their high presence in the small intestine was not understood.

Snyder Institute members [Dr. Kathy McCoy, PhD](#), and postdoctoral fellow [Dr. Aline Ignacio, PhD](#) and their study team set out to understand why these pathogenic cells were found in the healthy gut. They discovered that eosinophils help to coordinate the response to the microbiota and are crucial for the maintenance of a healthy gut. Rather than being destructive to the gut tissue, they are required to limit inflammation in response to the microbiota and prevent overt tissue destruction. The study was recently published in *Immunity*, and an image from this study won the cover position for the July 12, 2022 issue of the journal (congrats McCoy team!) [Read more.](#)

Wastewater data tracker now includes COVID-19 variant info and flu data



The University of Calgary's online wastewater data tracker now offers insights on COVID-19 variants and the seasonal flu in two new data sets. Citizens have visibility into what COVID-19 variants are the most prevalent in Alberta and how they are increasing over time, as well as data about the amount of influenza virus present in Alberta communities, based on wastewater analysis.

This data is monitored as part of the pan-Alberta wastewater monitoring partnership led by the universities of Calgary and Alberta, in partnership with Alberta Health, Alberta Health Services, Alberta Precision Laboratories, The City of Calgary, EPCOR, and 18 other municipal partners throughout Alberta.

Snyder Institute member [Dr. Michael Parkins, MD](#), professor in the Cumming School of Medicine, and [Dr. Casey Hubert, PhD](#), professor in the Faculty of Science, answer questions about what the new data means and why it's important for citizens and health-care professionals. [Read more.](#)

Congrats

Snyder members excel in the CIHR 2022 Spring Project competition

Colleagues at the Snyder Institute are proud to celebrate award recipients, whose awards collectively translated to a 39% success rate for the Institute. Well done! [Read more](#).

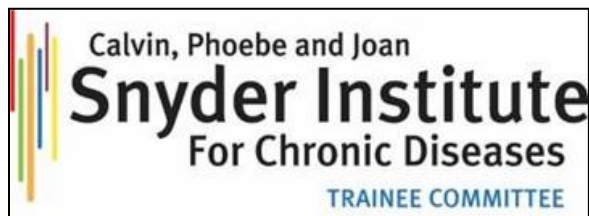


Way to go Snyder Institute members!

Our members are publishing ground-breaking studies and winning prestigious awards for their outstanding work.

- **Dr. Herman Barkema, DVM, PhD**, receives prestigious [Plowright Prize for dairy cattle research](#)
- **Dr. Craig Jenne, PhD**, receives [2022 UCalgary Teaching Award](#)
- Congratulations to Cumming School of Medicine and Snyder Institute members **Dr. Mike Parkins, MD**, recently promoted to Professor, and **Dr. Bayan Missaghi, MD**, promoted to Clinical Associate.
- **Dr. Mark Giembycz, PhD** has been unanimously elected as the new Group Chair of the [Lung Health Research Group](#) (formerly Airways Inflammation Group). We thank **Dr. David Proud, PhD** for his years of service and leadership as the outgoing Chair.

Education news



Successful Summer Student Research Day

Summer Student Research Day on August 25 was a colossal success! Many thanks and congratulations to all who participated.

Who were the winners of the oral and poster presentations? [Find out here!](#)





Searching for novel pharmaceuticals in microbiomes, presented by Dr. Arvind Kumar September 29



The UCVM Infection Biology Research Group and the Snyder Institute for Chronic Diseases are pleased to host Dr. Arvind Kumar, DVM, PhD, and Sr. Director at Elanco Animal Health. [Register here.](#)

Snyder Institute Science Communication Workshop Series October 12 – November 23



Do you remember those times when you were preparing a presentation and had to fit so much content into only 10 slides, while making sure the information flowed well? Or the time you were asked by a friend with no scientific background, or an individual with the condition you study, “What is your

research about?” and you weren’t sure how to talk about it in a language that was accessible to your audience?

If you’re answering yes, you will likely be interested in what’s coming!

We're happy to announce that the first series of the **Snyder Institute Science Communication Workshops** will begin on October 12 and run until November 23.

[Learn more.](#)

Snyder Institute Distinguished Lecture Series October 27: Join us for the first lecture of the series! Dr. Volker Gerdts, Director and CEO of the Vaccine and Infectious Disease Organization (VIDO) at the University of Saskatchewan will share insights about his research. [Learn more.](#)

SITC Equity, Diversity & Inclusion (EDI) Workshop Series

The Snyder Institute Trainee Committee will resume their Equity, Diversity, and Inclusion workshop series soon. These workshops are aimed at providing a new framework for thinking about inclusive language, teaching, classroom diversity, and other intersections in an academic space. More information and registration details will be shared [on the website](#) soon.

Find out more about all that’s happening with [Snyder trainees and the Snyder Institute Trainee Committee](#).

Other news

The Human Organoid Innovation Hub (HOIH) has moved. You can find them at HSC2870 and HSC2830 on the second floor. [Learn more.](#)

Snyder Institute Visiting Scientist Grant – applications due October

15. The primary goal of the Visiting Scientist Grant is to assist Snyder Institute Members in hosting project-based visits by senior PDFs or early- to mid-career faculty from less developed regions to the Snyder Institute. Visiting Scientists will acquire skills that will help with their research program, career advancement and capacity building upon return to their home region. The grant is also intended to help researchers gain an experiential advantage that will lead to external research grant and funding opportunities. [Learn more.](#)

CIHR Project Grant Competitions – A reminder that there are a number of excellent resources available on the faculty [Internal Peer Review \(IPR\) site](#) to help you develop your application. The site provides resources required to arrange an internal review of pending grant submissions to increase your success in obtaining grant support. You'll also find a range of resources and links to help with your grant development and writing. [Visit the site](#) and access the advantages of peer review.

Don't forget! To use the **Snyder Institute virtual background** for media interviews and external meetings whenever possible. It helps raise your profile and that of the Institute as well (which can lead to great opportunities for all of us at Snyder). Please contact Holly (holly.kerr@ucalgary.ca) if you do not have the virtual background image.

Zero Styrofoam Waste Initiative



Daniel Castañeda Mogollón and Micky Ahn launched an initiative to recycle Styrofoam across labs and facilities at Foothills campus. It is now possible for students to recycle Styrofoam at the loading dock, where bins are allocated for the appropriate disposal of type #4 (low-density polyethylene) and type #6 (Styrofoam/expanded polystyrene). Daniel and Micky are currently using the GSA Quality Money funding for this project. In the first three months of the initiative, they were able to recycle an equivalent of 30.58 cubic meters of Styrofoam (which translates to the CO₂ produced when charging 83,820 smartphones). With this initiative they hope to recycle a minimum of 240 cubic meters of Styrofoam.

- *Where do I recycle it?* Take your Styrofoam boxes and/or low-density polyethylene to the appropriate bins located in the loading dock of Foothills campus (in front of the Delivery Services by the basement of Health Science Centre). Recycling will not be picked up from labs/hallways.
- *How do I recycle it?* Take the Styrofoam boxes and remove any duct tape, cardboard, or any material adherent to the box. Do not break down the boxes into smaller pieces for its recycling.
- *When do I recycle it?* There's not a schedule for Styrofoam recycling. Recycle regularly, but please hold onto Styrofoam if the bins are full.

- *Who can recycle it?* The program is currently limited to users at Foothills Campus. There will eventually be two active stations at Main Campus. Stay tuned! [Learn more here.](#)

Welcome new members and staff

Welcome new Snyder members!

- [Dr. Tim Shutt, PhD](#), Associate Professor, Department of Medical Genetics and Department of Biochemistry and Molecular Biology
- [Dr. Christina Thornton, MD, PhD](#), Assistant Professor, Department of Medicine and Department of Microbiology, Immunology and Infectious Diseases
- And welcome new staff member, **Dr. Ewandson Lameu, PhD**, Snyder-supported Senior Data Scientist. Operating within the IMC Data Science Service Core, his focus will be assisting researchers with advanced statistical needs, including multivariate and multi-omic analyses. E: ewandsonluiz.lameu@ucalgary.ca.

We look forward to working with each of you.

Upcoming events



CSM Socials are back!

The next CSM Social (formerly TGIF) will be on **October 7**, 3 – 5 pm, HRIC Atrium. The socials will be every Friday, 3 – 5 pm, most often in the HRIC Atrium South, and occasionally in the HMRB Atrium West. All students, faculty and staff are welcome.

Child Health and Wellness Seminar Oct. 17: Dr. Simon Hirota presents Drugs & Bugs – A Pharmacologist Attempting to Navigate the world of the Gut Microbiota. [Learn more.](#)

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 us 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

To ensure your event receives the highest level of exposure, we ask that you please send your event information for website and social media **no less than one week before the event date; (two weeks is even better)**. Please contact Holly if you have any questions (holly.kerr@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 Holly Kerr, holly.kerr@ucalgary.ca

snyder.ucalgary.ca/

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