Research news

UCalgary study offers new insight into deadly fungal invasion of the lungs

Fungi such as Aspergillus are so common in our surroundings that we breathe in hundreds to thousands of spores every day. In healthy people, fungi typically pose no threat, but they can cause deadly infections in those with compromised immune systems. However, it is increasingly recognized that viral infections such as influenza or SARS-CoV-2 can increase the risk of invasive Aspergillus infections even in healthy people.

Working with researchers at McGill University, Snyder Institute members Dr. Bryan Yipp, MD, and PhD candidate Nicole Sarden have provided new insight on why the immune system fails, and find reason behind – and therapy for – serious fungal infection in the lungs.

“We discovered that influenza and COVID-19 destroy a previously unknown natural immunity that we need to resist invasive fungal infections,” says Sarden, first author on the study. Read the full story.

Dr. Dan Gregson warns Albertans that a big influenza season may be ahead of us

While influenza activity has dropped considerably since its early and dramatic peak in Alberta, infectious disease expert and Snyder Institute member Dr. Dan Gregson, MD, cautions the province is not out of the woods yet.
According to Alberta Health Services data, there have been 8,495 confirmed cases of flu in the province so far this season and 90 deaths. The data shows that 1,918 people have been hospitalized due to the flu to date, including 196 ICU admissions.

"This will be one of the bigger influenza seasons we've seen in recent memory," says Gregson, an infectious disease physician and associate professor at the Cumming School of Medicine. "There are increasing numbers of people coming into hospital with bacterial pneumonias after influenza…. Some are in and staying in because they have complications. And the other thing we see after influenza and COVID, for that matter, is strokes and heart attacks are up." Learn more.

Dr. Keith Sharkey helps demystify cannabis use on this episode of CBC’s The Nature of Things

Now that recreational cannabis is legal in Canada, there seems to be a shop on every corner, with an overabundance of products to choose from. It's an explosion of the different types of cannabis products from dried flower for smoking, to vaporizers, to edibles, to candies to confectionary beverages – an incredible array of different products.

Cannabis has been used as a medicine for thousands of years, but scientific research is relatively new.

According to this CBC report, in 2022, 27% of the population in North America reported using cannabis for medical purposes.

“The question is, can cannabis in particular, even CBD, help to reduce chronic pain?,” says Dr. Keith Sharkey, PhD, a professor of Physiology and Pharmacology at the Cumming School of Medicine and member of the Snyder Institute. Watch the episode.

Research by Snyder Institute members Altier, Yong and Parkins highlighted in the top ten most read UCalgary research stories of 2022

Years of hard work paid off in 2022 as the University of Calgary achieved its goal of being named one of Canada’s top five research universities. The list of research stories coming out of UCalgary is impressive, and the following three involve Snyder Institute members:
• Dr. Christophe Altier, PhD and his research team discover a molecule in the nervous system that may treat chronic pain. Read more.

• Dr. V. Wee Yong, PhD and his research team have found that an anti-malaria medication may slow the onset of disability in patients with primary progressive MS. Read more.

• Dr. Michael Parkins, MD and collaborators across Alberta are tracking evidence of COVID-19 in wastewater of 3.2 million Albertans. Read more.

See the list of top ten most-read UCalgary research stories.

Congrats

• The Snyder Institute is extremely pleased to congratulate Bill Sembo, former Chair and current board member of the Snyder Institute’s Strategic Advisory Board, on his recent appointment as a Member of the Order of Canada, announced on December 29, 2022 by Her Excellency the Right Honourable Mary Simon, Governor General of Canada.

• Drs. Chris Andrews, MD, Yasmin Nasser, MD, PhD, and Kathy McCoy, PhD of the Snyder Institute, along with Dr. Ian Lewis, were the recipients of a Snyder Institute Clinical Problems in Chronic & Infectious Diseases Incubator Grant. Their project will focus on metabolomics and inflammatory marker assessments of small intestinal luminal fluid. The project is a collaboration with UCalgary-linked medical device start-up Nimble Science (www.nimblesci.com), which makes a novel ingestible capsule to collect content from the small intestine for analysis. The Investigators are evaluating differences between healthy controls and irritable bowel syndrome. Dr. Andrews is seeking participants for a follow-on study using the capsule, both in healthy controls and people with GI disorders (e.g. IBD, celiac, IBS). Learn more – and how to participate – here https://lnkd.in/gG8AfndV.
- **Dr. Yasmin Nasser, MD, PhD** recently received an early career investigator TRIANGLE (TRaining A New generation of researchers in Gastroenterology and Liver) Canada SECURE award. This award provides holistic support and funding for professional and career development, and support for trainees.

- **Dr. Samuel Lee, MD**, won the runner-up prize in the Medical Post inaugural annual awards for Canadian doctors, in the 'Innovation' category for his telehealth work to deliver hepatitis C care and treatment to remote Indigenous communities in western Canada. Dr. Lee was also recognized by the Kai'nai (Blood) tribe for his work, and given the Blackfoot name A-kai-kit-soo-taki, which means 'Many Offerings'.

- MSc student **Parker Volk (McKay lab)** was awarded the 2022 Henry Koopmans Memorial Entrance Award for outstanding scholarship.

Congratulations to each of you!

**Education news**

**Snyder Institute Endowed Chair Seminar Series**

**February 3, 2 – 3pm**, HSC G500, Foothills Campus. 
*DEMISTIFYing Pulmonary Fibrosis: Understanding the Importance of Multi-Morbid Fibrotic Disease*

Presented by Dr. Gisli Jenkins, MD of Imperial College London, international leader in the field of pulmonary fibrosis and founding trustee of Action for Pulmonary Fibrosis. The Snyder Endowed Chair Seminar Series is hosted by Snyder Institute members holding endowed chairs, and features distinguished basic and clinician-scientists at the top of their fields of research. This seminar is hosted by Dr. Richard Leigh, MD, and will be followed by an informal reception in conjunction with the CSM Social. [Register here.](#)

**Welcome**

- Please join us in welcoming new member, **Dr. Andrew Leidal, PhD**, Assistant Professor in the Department of Physiology and Pharmacology.
- We also welcome new member **Dr. Ann Zalucky, MD**, Clinical Scholar in the Department of Critical Care Medicine.

We look forward to working with you both!
Changes to Snyder Institute governance and staff

**Strategic Advisory Board**

After some 14 years as our Strategic Advisory Board Chair, Bill Sembo has stepped down as Chair and will continue to remain a valued member of our SAB. We are pleased to welcome long-time SAB member Matt Brister to the position of SAB Chair. Learn more about our Strategic Advisory Board members.

**Executive Council and Operations Committee**

*Welcome* to the following folks moving into new leadership positions at the Snyder Institute:

- Dr. Kris Chadee, PhD – joining our Operations Committee as Research Portfolio Lead
- Dr. Braedon McDonald, MD, PhD – joining our Operations Committee as Inter-Institute Portfolio Lead
- Dr. Kamala Patel, PhD – joining as Snyder Institute Deputy Director and Chair of Operations Committee
- Dr. Ranjani Somayaji, MD – joining our Executive Council; stepping down as Operations Committee Membership Portfolio Co-Lead

*Heartfelt thanks* to the following Snyder members stepping down or moving into different leadership positions:

- Dr. Carla Coffin, MD – stepping down as Translational Research Co-Lead on our Operations Committee
- Dr. Simon Hirota, PhD - stepping down from Executive Council
- Dr. Chris Mody, MD - stepping down from Executive Council
- Dr. Shalina Ousman, PhD – stepping down as Inter-Institute Portfolio Lead on our Operations Committee
- Dr. Nathan Peters, PhD – stepping down as Snyder Institute Deputy Co-Director and starting new role as MIID Department Head
- Dr. Michael Parkins, MD – stepping down as Translational Research Co-Lead on our Operations Committee
- Dr. Bryan Yipp, MD – stepping down as Research Portfolio Lead on our Operations Committee

We appreciate your outstanding contributions over the past few years, and we very much look forward to working with our new leaders.

**Staffing update**

We are sad to say goodbye to Saba Aslani, Community Engagement and Outreach Coordinator on the Snyder Business Team since June, 2022, as she pursues her goal to attend medical school. Thank you for your excellent work in moving our education and community outreach efforts forward, Saba, we wish you the best.
We are pleased to announce that Snyder Business Team member Hannah Reilly is transitioning from her position as Research Operations Assistant to the role of Community Outreach Coordinator effective February 1. Welcome, Hannah, to this important role at the Institute!

**Thank you**

**Fundraiser for Ukraine a big success**

MSc student Julianna Svishchuk launched a fundraiser at the Snyder Institute last year to help the war effort in Ukraine. Through the enthusiasm and efforts of Julianna and many others, $5,750 was raised, and with the support of Ukrainians in Montreal, an abundance of medical supplies was purchased and delivered to Ukrainian hospitals.

Julianna created this gorgeous Ukrainian wreath to thank all those at the Snyder Institute who donated. Below the wreath is a framed letter of thanks from the General Director of one of the recipient hospitals in Lviv, Ukraine, thanking Canadians and indicating how important the supplies are in saving lives and treating the wounded. The wreath and letter are mounted on the wall across from the Snyder Institute boardroom, HRIC 4AC56. Stop by and take a look!

**Upcoming events**

The Snyder Institute presents Mini-Medical School: *The War Waged Within – Pacman in the Fight Against Autoimmunity*, February 6, 6:30 – 8 pm, in-person and online

Join us for the Snyder Institute’s Mini-Medical School: *The War Waged Within – Pacman in the Fight Against Autoimmunity*, presented in person and also online by Dr. May Choi, MD and Dr. Antoine Dufour, PhD. Learn how art and the Pacman video game influence autoimmune disease research and how that can translate into the identification of diagnostic, predictive, and pathogenic biomarkers to improve autoimmune disease outcomes. **This interactive lecture will be presented in person at the Libin Theatre at UCalgary’s Foothills campus, and also online via zoom.** Mini-Medical School lectures are free, but you must register to attend. [Register here](#).
The OADR Grant Development Office is hosting a panel discussion (via Zoom) on February 7, 10-11 am with recent CIHR Project Grant reviewers: **The Black Box of CIHR Peer Review Committees – 2023 Edition**

This is a great opportunity for department and institute members to learn what CIHR peer review committees look for in a grant application, specifically CIHR Project Grants, and gain advice from experienced reviewers who have been successful applicants.

Early career researchers are particularly encouraged to attend. Audience questions for the panelists are welcome and can be sent to Brandi Povitz (brandi.povitz@ucalgary.ca) in advance or asked during the Zoom meeting. [Find out more and register.](#)

**Cumming School of Medicine presents the Friesen Prize Institutional Visit Lecture, with Dr. Lorne Tyrrell**

Monday, February 27, 3:30 pm, in person @ Libin Theatre

Join Dr. Lorne Tyrrell, MD, PhD, 2021 Friesen International Prize in Health Research recipient for his lecture *Contributions to Viral Hepatitis, Vaccine Task Force and COVID-19.*

Dr. Tyrrell has been honoured with the 2021 Friesen Prize in recognition of his multi-faceted career in academic medicine, virology, pharmaceutical enterprise, and dedicated advocacy for health research. [Register here.](#)

**Save the date, register now: Lymphatic Forum 2023 June 13 – 17 registration now open**

The **Lymphatic Forum, June 13 – 17, 2023 in Banff, Alberta** is a biennial event that brings together researchers from around the world to present and discuss studies on the lymphatic system in health and disease. Under the sponsorship of LE&RN and NAVBO and the Lymphatic Research and Education Program, the Snyder Institute for Chronic Diseases is organizing the **Lymphatic Forum 2023 (LF2023)**, the fifth iteration of this meeting. For more information, including the program, registration, and abstract submission, please visit [http://lymphaticforum.org](http://lymphaticforum.org). We look forward to seeing you there.
Save the date, register now: Neuroimmunophysiology of the Gastrointestinal Tract 2023 conference, September 28 – 30, 2023

Held in Banff, Alberta, the Neuroimmunophysiology of the GI Tract 2023 conference will focus attention on the complex interrelationships that exist among and between the regulatory systems that contribute to normal intestinal homeostasis. The meeting will also explore the ways in which deviations from this norm can lead to gastrointestinal disease states. The breadth and diversity of the program will challenge and inspire you. The concepts that will be developed over the two days of the meeting will broaden your thinking and can provide a new impetus to your research.

The meeting will be a success if lasting friendships are formed, and new collaborations emerge. We hope that you will enjoy some great science surrounded by the awe-inspiring Rocky Mountains. For more information, including the program, registration, and abstract submission, please visit https://snyder.ucalgary.ca/neuroimmunophysiology-conference.

Other news

Snyder Institute Emergency Freezer

The Snyder Institute has purchased a -80C back-up freezer for emergency use by Snyder members and it is now ready for use. Find out how to access the back-up freezer.

Do you want 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 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
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). 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