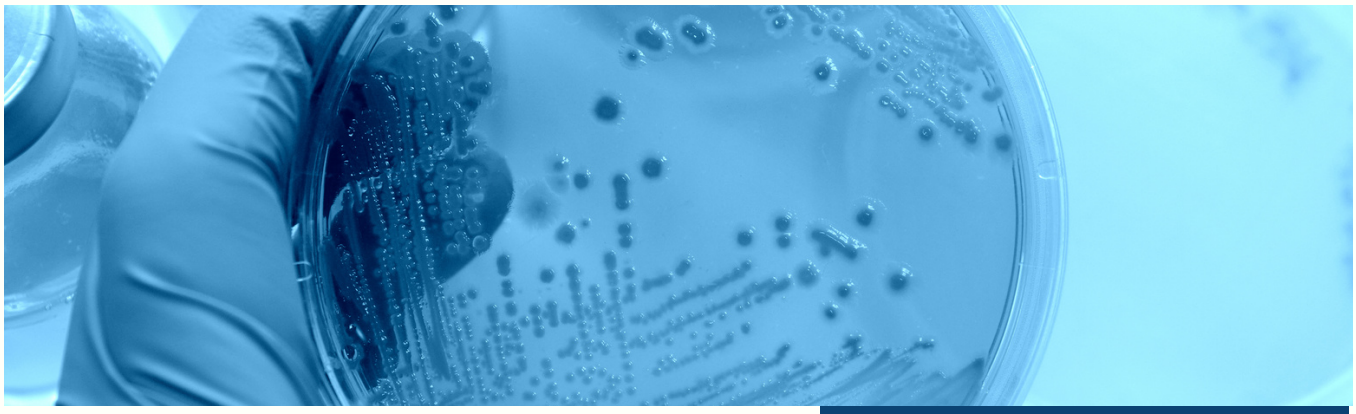
SPRING/SUMMER, 2022

MBIM NEWSLETTER

UBC Department of Microbiology & Immunology

We live, work and learn on the traditional, ancestral, and unceded, traditional, ancestral territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səlílwətaʔɬ (Tsleil-Waututh) Nations.



A safe return to campus!

By Department Head, Dr. Michael Murphy

Things are starting to look more and more normal as the days pass - though the concept of "normal" has changed drastically over the past two and a half years. Just a couple days ago, we celebrated the graduating class of 2022 through a UBC graduation ceremony and Department graduation tea, the first in-person graduation celebration we've had in years. And since August 2021, we have been celebrating a successful return to campus. After returning to campus to interact with students in-person and to meet everyone face-to-face, I appreciated the value of connecting to build community and consensus.

We also know that the virtual reality of the past two years has changed how we connect with the world around us, especially how we collaborate through research – inspiring new ways to work together and extending our reach beyond our borders...

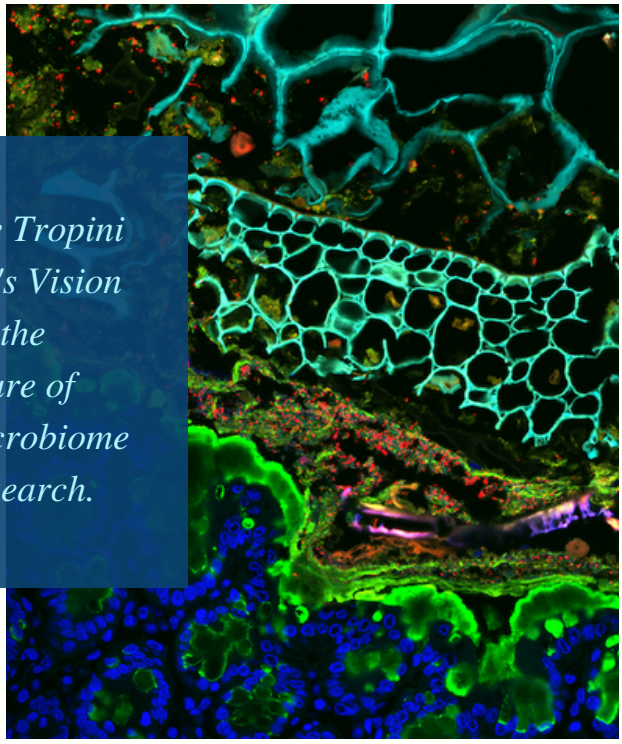
IN THIS ISSUE

Message from the Department Head

The pandemic also amplified the importance of outreach by students, staff and faculty in the Department who provided the public with the appropriate knowledge to make their own, well-informed vaccine decisions. With the option to attend each of our events either in-person or virtually, people from anywhere could also learn about science and research at our weekly seminars, ask questions at our Vaccine 101 info sessions, and stay up-to-date on both departmental and scientific news.

We know the class of 2022 is special, as they achieved their success through many life changes and versions of “normal.” We are proud to have them join our diverse group of alumni, many of whom are frontline researchers, educators, and effective science communicators both at UBC and around the globe.

In this year’s newsletter, we celebrate the achievements of our Microbiology and Immunology community and how you can stay connected for years to come.



The Tropini lab's Vision for the future of Microbiome Research.

News

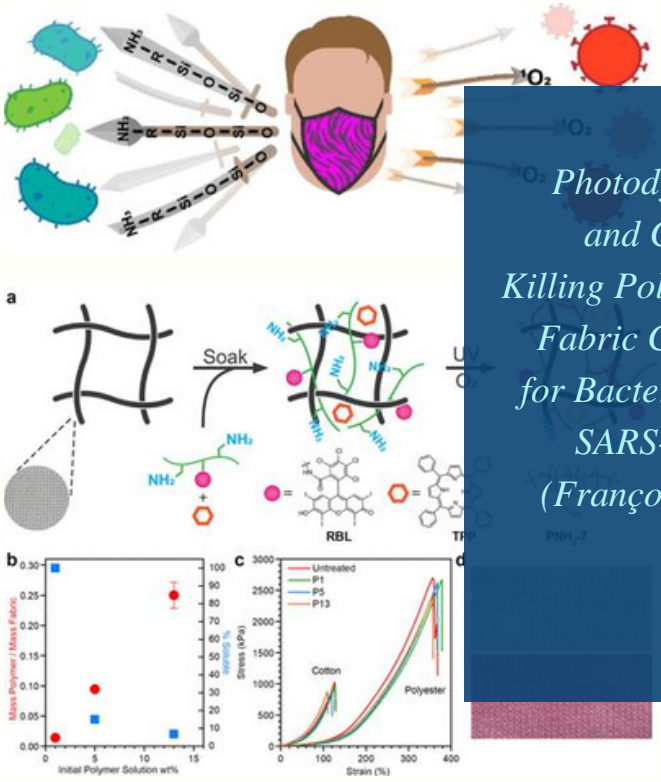
The UBC Department of Microbiology & Immunology regularly updates its website and social media platforms with department news: research stories from students and/or faculty labs, announcements, awards, and important days or events! Stay updated wherever you get your news.

Website - https://www.microbiology.ubc.ca/news-events/news
Twitter - @UBCMicroImmuno
Instagram - @ubcmbim
LinkedIn - https://www.linkedin.com/school/ubc-microbiology/

Publications

Every week, the department updates the website with new publications from research faculty and students! Research has been featured in journals in publications such as Nature, PLOS Pathogens, ISME Journal, Oncoimmunology, mBio, Journal of Virology, and more.

Stay up-to-date with M&I publications: https://www.microbiology.ubc.ca/articles



Photodynamic and Contact Killing Polymeric Fabric Coating for Bacteria and SARS-CoV-2 (François Jean lab),

New nasal spray treats Delta variant infection in mice, indicating broad spectrum results

Jean lab

**Seen on UBC News, UBC Science, CTV News, Global News, The Economic Times, and more!*

"Researchers have shown a new compound delivered in a nasal spray is highly effective in preventing and treating COVID-19 caused by the Delta variant in mice.

The researchers, from UBC [Dr. François Jean, associate professor in the UBC Department of Microbiology and Immunology], Université de Sherbrooke, and Cornell University, believe this is the first treatment of its kind proven to be effective against all COVID-19 variants of concern reported to date, including alpha, beta, gamma and delta. Published in Nature, the research opens the door to developing a therapeutic spray for humans."

Machine learning and AI used to rapidly detect sepsis, cutting risk of death dramatically

Hancock lab

**Seen on UBC News, CTV, and more!*

A groundbreaking advance in quickly detecting sepsis using machine learning has been pioneered by researchers in the Hancock Lab and the department of microbiology and immunology at UBC.

Congratulations

Nicole Wang from the Haney lab awarded a Governor General's Gold Medal!

Nicole Wang, an MSc student from the Haney lab, has been awarded a Governor General's Gold Medal – an award for the top achieving student (academics and research) in *all* of UBC. Nicole took advantage of every opportunity given to her and was awarded for her outstanding achievements, commitment to research, and community engagement in the M&I department and at UBC.

Read more about Nicole and her achievements at: https://www.microbiology.ubc.ca/news/nicole-wang-governor-general-gold-medal

Dr. Parvin Bolourani and Paula Littlejohn from M&I receive UBC Science Excellence in Service Awards!

On March 2, 2022, Dr. Parvin Bolourani (Outreach, Alumni Engagement, Postdoctoral Affairs & Project Coordinator in the Department of Microbiology & Immunology) and Paula Littlejohn (PhD Candidate in the Finlay lab, Michael Smith Laboratories) received UBC Science Excellence in Service Awards.

Ashina Nagra and Cindy Shaheen Awarded 2021 Zymeworks Fellowship in Immunotherapeutics

Ashina Nagra from the UBC M&I Harder lab is one of two students awarded the 2021 Zymeworks Fellowship in Immunotherapeutics. Receiving an award like this early in her career, Nagra reflects:

"The *Zymeworks Fellowship in Immunotherapeutics* has given me the resources to begin my PhD with a bang, as I can begin making early contributions to my research field in Immunology.

Virginie Jean-Baptiste from the Horwitz lab is first to receive the Julia Levy Fellowship Award

Virginie Jean-Baptiste, a PhD student in the Horwitz lab (Department of Microbiology and Immunology), is the first ever recipient of the Julia Levy Fellowship award. The award is named after Dr. Julia Levy, the first woman faculty member in the Department of Microbiology & Immunology, who had an exceptional career and made important contributions to training the next generation of scientists.

UBC iGEM takes gold at iGEM Giant Jamboree

UBC iGEM took home a gold medal at the 2021 iGEM Giant Jamboree held last November. The team's project, titled "DetecTME: Untangling the immune-modulated tumour microenvironment using a tumour-colonizing bacterial vector and reporter system," was also nominated as a finalist in the Best Diagnostics Project category.

Dr. Evelyn Sun

Meet Evelyn Sun - the department's newest lecturer! First joining M&I as an undergraduate student in the Biotech program, Evelyn moved on to become a graduate student in the Hancock lab, a post-doctoral research fellow in the department, and now a lecturer! Known for enhancing the student experience as an advisor for UJEMI (the department's in-house undergraduate research journal) and the Undergraduate Research Symposium for the past two years - Evelyn shares how her research has changed over the years.

As a doctoral student, she investigated a novel form of bacterial motility called surfing.

"My research *now* has changed quite drastically since then," she says. "I went from investigating how bacteria behave under certain disease conditions to how students behave under certain learning conditions."

https://www.microbiology.ubc.ca/news-events/news/evelyn-sun-lecturer-spotlight

Infectious Diseases and Immunity Hiring Cluster

The Department has an ambitious plan to recruit up to 5 research faculty members over the next three years. The hiring cluster aims to recruit a team of investigators to develop a new understanding of the societal impacts that lead to the emergence of new pathogens, the mechanisms of pathogen transmission between species, and the mechanisms of pathogenesis to develop new methods to control infections and prevent future pandemics.

Promoting the Vaccination

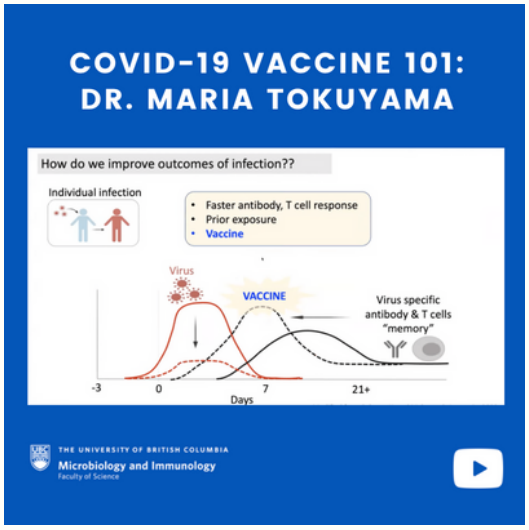
In preparation for the in-person return to campus, the Department of Microbiology & Immunology put together resources to promote information about the vaccine.

Vaccine 101: How, why, and where to get vaccinated in BC

To help the public understand more facts about the COVID-19 vaccine, we put together a helpful list, including: how a vaccine is made, general components of a vaccine, how we know it's safe, how a vaccine works, who should get the vaccine, why to get a vaccine, why two doses are better than one, and extra public resources for more specific information.

https://www.microbiology.ubc.ca/news-events/news/vaccine-101

COVID-19 Vaccine Info Session with Dr. Maria Tokuyama

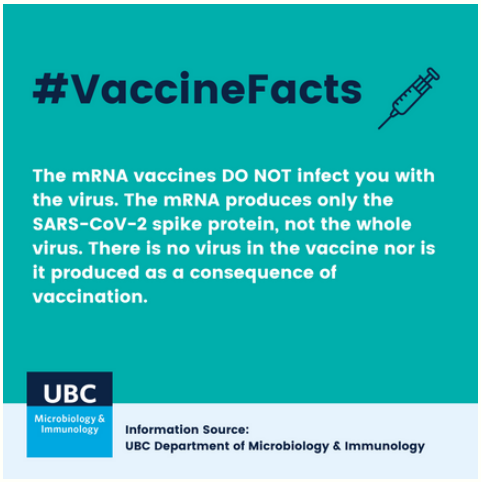


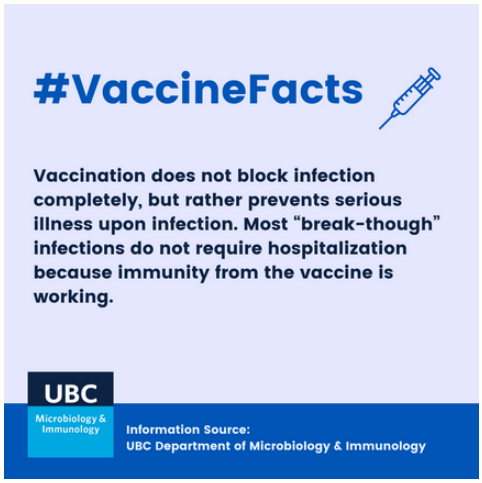
Aside from our Vaccine 101 page, which we shared with our broader UBC community and on all of our social media platforms; Dr. Maria Tokuyama also hosted a virtual Q&A session about the vaccine. This info session answered frequently asked questions, addressed concerns, and provided information about how the immune system works and why vaccination is important. The discussion is a live recording, which anyone can access via YouTube!

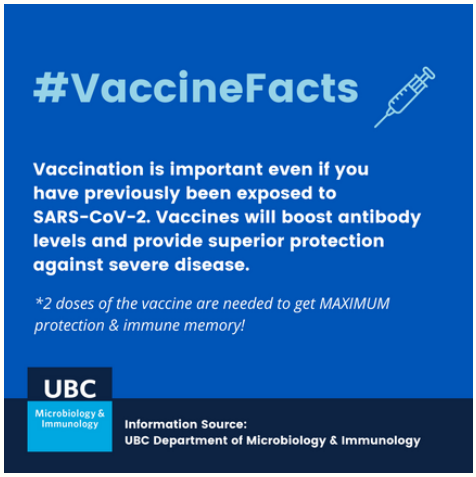
https://www.microbiology.ubc.ca/news-events/news/covid-19-vaccine-101-maria-tokuyama

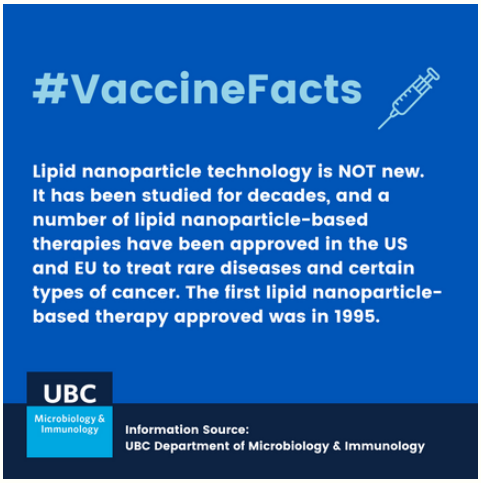
#VaccineFacts Campaign

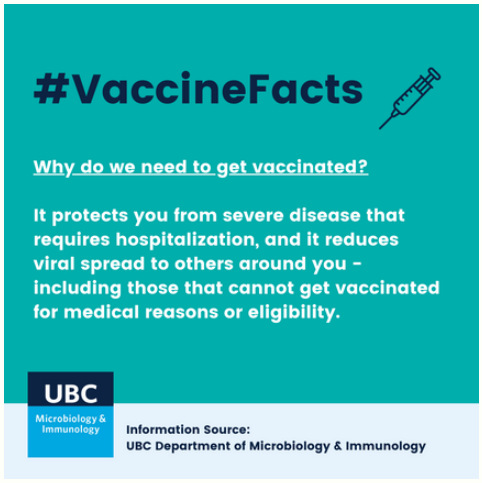
During the return to campus at the start of the fall semester, we shared a collection of tweets over two weeks to promote different facts about the vaccine, along with where and how to get vaccinated on campus and in the greater Vancouver area.

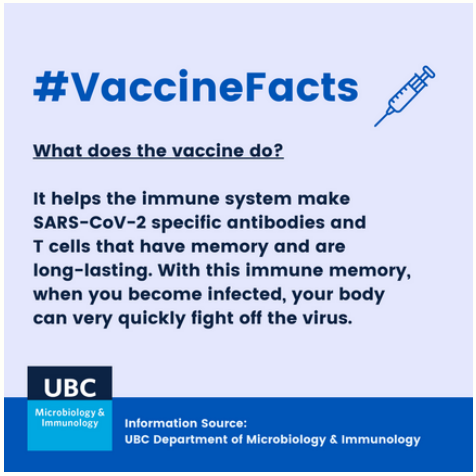












Vaccine Hesitancy in the Information Age

Grad student Mihai Cirstea (M&I, MSL) brought together a group of motivated grad students to put together an event on December 2, 2021 - a multi-disciplinary panel for a discussion and Q&A focused on understanding the root causes of scientific and institutional mistrust, combating misinformation, and learning communication tools to discuss vaccine hesitancy with friends, family, and the public.

Hosted by UBC Department of Microbiology & Immunology Graduate Students and the UBC Vaccine Literacy Club; this event was open to both the UBC community and the public to have their questions answered! https://www.microbiology.ubc.ca/news-events/events/vaccine-hesitancy-panel-2021

ALUMNI

The #Classof2022 were gifted a beautiful sunny day as they celebrated their graduation on the UBC Vancouver campus! Along with proud families and friends, new graduates joined M&I staff and faculty in the LSI West Atrium for messages of congratulations and wishes of success for the future.

It was our first in-person Graduation Tea event since 2019, and the excitement of seeing everyone together is something our community will never take for granted. It was the perfect way to welcome M&I's newest alumni.

It is not "goodbye", it is "see you later!" We can't wait to see you again soon.

KEEP *in touch*

Visit our Alumni page and share your experience by submitting an alumni profile, attending a career night, mentoring a trainee, or recruiting students and postdocs.

CONTACT

Communications Coordinator
Laryssa Vachon
laryssa.vachon@ubc.ca

JOIN US ON SOCIAL MEDIA!

https://twitter.com/UBCMicroImmuno

https://www.instagram.com/ubcmbim/

https://www.linkedin.com/school/ubc-microbiology/