

**MESSAGE FROM THE ACTING CHAIR****Dr. Jen Gommerman**

Dear colleagues:

As promised, the daffodils are here and April, the cruelest month, is behind us. And now we turn our attention to spring. And that theme is perfect for celebrating our budding young scientists, in particular our post-doctoral fellows who have clinched COPRA awards. Conceived by JC, this first annual competition was set up to create a new opportunity to spur interactions among Immunology post-doctoral fellows. The award gives them an opportunity to develop a new collaborative project. We have awarded 2 teams this year:

- Drs. Saurav Roy Choudhury and Tapas Mukherjee (Martin/Philpott labs) who, together, will test the hypothesis that “*DUPD1 phosphatase plays a critical role in promoting inflammation, including IBD, obesity, T2D, and NAFLD through autophagy*”.
- Drs. Yuqing Feng and Bruna Bertol (Martin/Brooks labs) whose proposal entitled “*AM72A-mediated mutagenesis in cancer and immunity: the two-sided coin*” will evaluate the pros and cons of tumour mutation burden.

Please send them your encouragement and congratulations. The results for their collaborative project will be shared at the 2023 retreat as oral presentations.

In addition to the COPRA award, we will soon hear the outcome of the BD Postdoctoral Award. Mark your calendars for [June 13rd, 2022 at 12pm](#) for the winning lecture presented in hybrid format. Also, a reminder that the retreat will take place [September 11-12th, 2022](#) at Fern Resort where you can hear more trainee presentations at this entirely IGSA run event.

Lastly, I would like to thank all the Faculty members who are giving of their time and energy to see our second-year students through their Qualification exams. The students take this process very seriously - it is one of the most important benchmarks of their career. We are beta-testing some new processes for this exam to make it a more even experience for our students. The goal is to encourage a well-vetted blueprint for their doctoral thesis work that will serve them in the years to come.

I hope you all enjoy the warming weather and if you are attending AAI or CSI that your travel experience is better than mine was last night – 'tis conference season. Get that NEXUS card!

Take care and stay well,

Jen

Professor Department of Immunology
Canada Research Chair in Tissue-specific Immunity



UPCOMING EVENTS

CHARLES GOULD EASTON SEMINARS

Mondays, 11:05 – 12:00

May 16, 2022 at 11:05 am via Zoom

Daniela Quail, PhD

[Assistant Professor, Rosalind and Morris Goodman Cancer](#)

[Research Centre](#)

[Department of Physiology](#)

[McGill University](#)

Title: TBD

Host: Immunology Graduate Student Association

Via Zoom

May 30, 2022 at 11:05 am – Hybrid Delivery (MSB2172 & Zoom)

Susan Kaech, PhD

[Professor and Director](#)

[NOMIS Centre for Immunobiology and Microbial](#)

[Pathogenesis](#)

Title: TBD

Host: David Brooks, PhD

Hybrid Delivery

*No Easton Seminars on May 2nd & May 9, 2022

Department Special Seminar

May 5, 2022 at 4 p.m. Hybrid Delivery

Stephen Schoenberger, PhD

[Professor, Center for Cancer Immunotherapy](#)

[La Jolla Institute for Immunology](#)

Talk Title: CD4+ T cells in cancer and microbial infection

Host: Dr. Juan Carlos Zúñiga-Pflücker

Room: MSB 7231 & Zoom

May 18, 2022 at 10 a.m. In-Person Seminar

Bruno Lemaitre, PhD

[Global Health Institute, EPFL, Lausanne Switzerland](#)

"Layers of immunity: Deconstructing the Drosophila effector response"

Host: Drs. Dana Philpott & Stephen Girardin

Room: MSB 2170

STUDENT SEMINARS

Mondays, 10:00-11:00 a.m.

May 2nd, 2022 at 10 am via Zoom

Characterizing Gut-Resident IgA⁺ Plasmablasts and Plasma Cells in Alzheimer's Disease

Kameel Khan (Rojas Lab)

Rebuilding human T cell development with induced pluripotent stem cells

Yangmin Clay Qiu (JCZP Lab)

Potential Biomarkers of Chronic Hepatitis B Using Exosomes

Lauren Fernandez (Gehring Lab)

May 9th 2022 at 10 am via Zoom

Predicting T cell Receptor Specificity using Amino Acid Sequence

Dong Hoon Han (Hirano Lab)

Immunomodulation of Human Precision-Cut Liver Slices (PCLS) to Promote Regeneration and Differentiated Function

Damra Camat (MacParland Lab)

Harnessing CRISPR/Cas9 to Study Innate Lymphoid Cells

Johanne Audouze-Chaud (Crome Lab)

May 16, 2022 at 10 am via Zoom

Role of cherubism mutations in driving cd47-blockade-mediated phagocytosis

Munira Verdawala (Rottapel Lab)

Effects of postnatal overfeeding on central nervous system autoimmunity

Carmen Ucciferri (Dunn Lab)

Title TBD: Zhewei Liu (Rotation)

May 30, 2022 at 10 am – Hybrid Delivery

Exploring differences in CD8+ T cells in PD-1 responder and non-responder cancers

Ksenia Meteleva (Ohashi Lab)

Title TBD: Anqi Yan (Rotation)

Optimizing the Human Endothelial Cell-based Recycling Assay (HERA) to Characterize FcRn-mediated Transport of Multivalent SARS-CoV-2 Antibodies

Ammarah Naseer (Treanor Lab)



Graduate Program Update

CONGRATULATION for completing PhD Program!

- Dr. Elisabeth Foerster (Philpott lab) – February 14, 2022
- Dr. Brett Wang (Hirano lab) – March 24, 2022
- Dr. Carolina Munoz Grajales (Wither lab) – April 13, 2022

We would like to welcome the following students to the **MSc in Applied Immunology** graduate program!

- Eryn Bugbee (Gommerman Lab)
- Felice Chun (Woo Lab)
- Oliver De Sa (Philpott Lab)
- Riley Dow (Cybulsky Lab)
- Ingrid Hsieh (Serghides Lab)
- Mariane Jeong (Mortha Lab)
- Zhenyu Li (Mallevaey Lab)

IMMSA

Hi Immunologists,

It's Kunal and Shaivy here, your 2021-22 IMMSA Co-Presidents! With our term coming to an end, we wanted to thank you all for giving us the opportunity to work on your behalf over the last 12 months. From research seminars to socials to apparel sales, it has been an hour to seeing the enthusiasm and brilliance of all you Immunology undergrads, and we cannot wait to see where life takes you all. We are enormously excited to present IMMSA's new executive team for the 2022-23 Year:

Co-Presidents: Vicky Xie & Momo Lin

Vice-President: Daniel Yu

Administrative Director: Ryan Tan

Technical Director: Liana De Luna

Director of External Affairs: Milad Saadati

Finance Director: Adrian Chow

Events Director: Shiva Ivaturi

Deputy Events Director: Ananya Gupta

Graphic Designer: Jenny Chen

4th-Year Representative: Peter Lombardi

3rd-Year Representative: Catherine Chi

IMMSA has 1 last event for the 2021-22 academic year, and that's OQUIC 2022! If you haven't heard about it already, OQUIC is our annual undergraduate immunology research conference where students from across Canada present their work for the chance to hone their presentation skills and win cash prizes. You can register for OQUIC 2022, which will be held over Zoom on Saturday, May 7th and Sunday, May 8th, at the following link: <https://www.eventbrite.ca/e/oquic-2022-tickets-320938213837>

Congrats to all of you for enduring your final exams this year, especially to all of our graduating students - we know you will do amazing things! And with that, we'll wrap up this message and our time as your IMMSA Co-Presidents!

Thanks for everything,

Kunal Kolhatkar & Shaivy Tiwari

Immunology Students' Association (IMMSA) Co-Presidents 2021/22

Website: <http://immsauoft.com> | Instagram: @immsta



IGSA

Hi Immunologists!

Spring is finally here! With all the warmer weather settling in, we're excited to try some new events and bring back some old traditions.

We started off our April with our annual 8K and 5K Spring Run-Off at High Park, organized by our sports representative Natalia, where both students and faculty came out to raise money for the Princess Margaret Cancer Foundation. A big thank you to everyone who came out. Thanks to you, we've raised a whopping total of \$1337.20 towards a great cause.

In addition to running, the Immunodominators concluded their volleyball, dodgeball, and ultimate frisbee games with a final pub night held this month by Natalia to celebrate the end of a great run. Thank you to all the athletic members of the department for coming out and for your patience in helping us figure out how to safely participate in intramurals this year. We hope you had a great time!

As part of our outreach, our outreach representative Baweleta has led a team of volunteers to complete educational pamphlets to explain a variety of scientific topics in accessible terms. The two most recent copies are ready for distribution. They provide a comprehensive review of vaccines and describe the changes in our immune system throughout various life stages. Here's a sneak peak! Full pamphlets will be available on the Departmental website for you to view and to share with your non-immunologists friends!

The Immunology of Life

What happens to your immune system as you age?

The immune system is composed of a **multitude of different cells** that interact with each other, either directly or through signaling proteins, to protect you from foreign organisms and maintain the necessary balance (**homeostasis**) of your body. As you grow and undergo experiences in life, **many changes occur in your immune system** that influence how you may respond to environmental stimuli. We share some of the changes that occur during life below.

	Infancy	Adolescence	Adulthood and Old Age
<p>Innate System</p> <ul style="list-style-type: none"> ○ First line of defense ○ Non-specific response ○ No immune memory generated <p>Adaptive System</p> <ul style="list-style-type: none"> ○ Slower response time ○ Highly specific response ○ Generates immune memory <p>Environmental Factors</p>	<ul style="list-style-type: none"> ○ Higher chance of viral and bacterial infections due to lower innate system function ○ Reduced innate cell function includes: Neutrophils – poor bacteria killing abilities; Monocytes and Macrophages – weak tissue repair and ingestion of invading pathogens ○ T cells: Initial T-cell stock built in early life ○ B cells: Limited neonatal antibody production ○ Maternal antibodies (transferred to the fetus through the placenta before birth) serve as protection after birth for several months, until the adaptive immune system develops more ○ Initial exposures to diverse microbes (e.g. via birth mode, food, and 	<ul style="list-style-type: none"> ○ During puberty, there is a maturation of innate immune cells in the central nervous system (e.g. microglia) that support puberty associated brain development ○ Maturation and functional activation of innate cells continues until adulthood ○ T cells: T cell production, selection and maturation continues throughout childhood but slowly ceases after puberty ○ B cells: Approaching adulthood, antibody responses are quicker, stronger, more specific, and more durable than those elicited in infants ○ Challenges to the immune system (social stress, drug use, injury) affect 	<ul style="list-style-type: none"> ○ Chronic inflammation due to the presence of pro-inflammatory proteins (cytokines) known as inflammaging ○ Reduced function of innate immune cells (e.g. macrophages, neutrophils) that are a necessary first line of defense ○ Enhanced repertoire of memory cells for ongoing immunity against harmful organisms (pathogens) ○ T cells: More dysfunctional. Impact immune function and increase risk of infections ○ B cells: Inflammatory B cells and antibody producing cells can expand during aging and contribute to inflammaging ○ Viral infections during life can negatively impact immune cell function with age

VACCINES

ALL ABOUT

Training wheels for the immune system

When a disease-causing bug (**pathogen**) enters our bodies, our immune system will try to get rid of it by making special proteins (**antibodies**) or by directing specialized immune cells against it. We usually get sick the first time we are infected because it takes time for the protective response to be generated from scratch. Once we recover, our immune system remembers how the pathogen looks like and how to fight against it, protecting us from the same disease in the future. This feature of our immune system is called immune memory.

Vaccines help us generate immune memory in a safe, controlled setting. They contain a part of a pathogen (**antigen**) or a weakened form that mimics an initial infection without causing disease, which trains our immune system to defend against the real pathogen.

What's in a vaccine?

ANTIGENS



On the outreach front, the IMMspire has worked hard over the past months in putting together an immunology event for high school students. It was a two-day event filled with inspirational talks and creative hands-on workshops depicting immunology techniques such as flow cytometry and ELISA. A huge congratulations to the IMMspire team, led by Annie and Baweleta, for yet another successful event!

It is a stressful time this time of year as students prepare for their various meetings, presentations, and exams. To help destress, IGSA social reps Kameel, Meggie, and Robyn

hosted a chill and casual virtual trivia night at the end of month. We hope you are all rejuvenated and ready to tackle May!

As you may have heard, our departmental summer retreat is returning in person at Fern Resort from Sept 11-12th, 2022! Make sure to mark your calendar and keep an eye out for an email with more details in the next few months!

As we enter the month of May, we wish all of our qualifying graduate students luck on their qualification exam! Our mentorship representative, Bobby, will be hosting practice sessions in helping you prepare, so keep an eye out for an email if you'd be interested.

We wish you a great month ahead!

Stay well and safe,

Tiff & Kitt

IGSA Co-presidents 2021-2022

Website: igsaimm.com

Instagram: [@igsa.uoft](https://www.instagram.com/igsa.uoft)

Wellness, Inclusion, Diversity, and Equity

Our departmental Wellness, Inclusion, Diversity and Equity (WIDE) Committee has extended the availability of our survey until May 16th – we hope to hear from you about what WIDE issues are most important to you, and what you would like to see from your WIDE committee. The anonymous survey has 16 questions and should take about **5 minutes** to answer. Students, Faculty, PostDocs and Staff have received the survey by email. If you need the link again, please contact Kate at graduate.immunology@utoronto.ca

We value your thoughts on how to make the efforts of the WIDE committee more impactful in promoting an inclusive, diverse, and accommodating space in our department. We thank you in advance for your time and cooperation. For any questions or concerns about the survey, please reach out to Rysa Zaman at rysa.zaman@mail.utoronto.ca. Thank you!



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A Note from CAMPUS HOUSING

Beware of Rental Scams!

The Toronto rental market is extremely competitive, especially for rentals beginning September 1. We would like to remind students who are looking for a place to live off-campus for the coming school year - especially those who are not going to be in Toronto over the summer for in-person viewings - that landlord/rental housing scams are real and on the rise in the GTA and can happen to an unsuspecting renter.

Here are our best tips to help you avoid getting scammed:

- Conduct basic research. Be suspicious of any rent or unit that has a price that is listed is far below market value or sounds too good to be true.
- When looking for a rental, never rent sight-unseen and always meet the landlord in person. Consider renting from verified property management companies if you are renting from outside of the GTA and are unable to schedule an in-person viewing.
- Landlords can only legally ask for first and last month's rent and a refundable key deposit, which should be paid at the time of signing the lease. No other fees are legal.
- Never pay a rental deposit with cash, wire transfer, Moneygram, Bitcoin, or MoneyPak, as these forms of payment are impossible to track.

Click [here](#) to know more about common rental housing scams, and learn more tips [here](#) on how to protect yourself from Landlord or Rental scams. For more information or to consult with a member of the University of Toronto [Housing Services](#) team contact housing.services@utoronto.ca.