

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

Dear colleagues:

This will be my last newsletter for my period as Acting Chair and then it's back over to JC. It's been a pleasure to work with all of you over the last 6 months. We got off to a bumpy start with Omicron in January but everyone rose to the challenge – kudos to all of you who had to pivot their lecture delivery (again!) and a special thanks to Dr. Jasty Singh and Kate Sedore for re-organizing (again!) our undergraduate teaching.

I also wanted to highlight some excellent trainees who have won departmental awards. First our undergraduates:

- The Immunology Undergraduate Prize: Faith Wershba and Charlie Carr
- The Immunology Undergraduate Service Award: Kunal Kolhatkar
- Winners of OQUIC 2022: First Place: Eryn Bugbee (4th-Year, University of Toronto, Gommerman Lab); Second Place: Yubing Xia (4th-Year, University of Toronto, Crome Lab); Third Place: Cindy Wei (4th-Year, University of Toronto, Hirano Lab)

In addition, I would like to congratulate Dr. Yuqing Feng (Martin Lab) on winning the BD Bioscience Immunology Postdoc Lecture award. Well done! Dr. Feng will give a seminar on Monday, June 27th entitled "Co-opting DNA repair to create genetic diversity: implications for antibody diversification and cancer". The delivery will be hybrid, but we encourage you to join us as there will have a reception afterwards with some lunch items in the MSB Naylor Student Common (also known as Stone Lobby). Hope to see you there!

I would like to provide some thanks to people who have made this term happen:

- Dr. Thierry Mallevaey for his leadership in the Graduate Program and the members of the graduate committee. Thanks to them and the superpowers of Kate Sedore, we have a stellar cohort of first year PhD students joining us in September.
- Dr. Korosh Kianizad for shepherding the Applied MSc program and his work in recruiting an outstanding cohort of incoming advanced and regular standing students.
- The Awards Committee for making tough decisions on graduate student awards.
- Sherry Kuhn, Bethany Babinchak and Leah Edwards for their support in the office. Leah kept me on task and I couldn't have had a better right hand woman.

I wish you all a safe and restful summer. Your next Newsletter will drop September 2022 penned by JC.

Jen

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



## UPCOMING EVENTS

### CHARLES GOULD EASTON SEMINARS

Easton seminar will commence in September 2022.

### FACULTY SEARCH SEMINARS via Zoom

Our department is in process of recruiting a new teaching stream faculty to expand our undergraduate course offerings. We have 2 Faculty seminar this month. The seminars will be via Zoom. We would like to encourage our community to join the seminar if your schedule allows.

**Wednesday, June 8<sup>th</sup> at 11 am via Zoom**

**Dr. Tanya Da Sylva**

Lecture title: Preparing for the unknown: Antibody structure & generation of diversity.

Host: Dr. Jen Gommerman

**Thursday, June 9<sup>th</sup> at 11 am. via Zoom**

**Dr. Ray Amith**

Lecture title: "Innate Immunity: The Innate Immune Cell Team Roster"

Host: Dr. Jen Gommerman

### PhD Research Seminars

**Monday, June 13, 2022 at 2 p.m.**

**Adrian Kuiper**

"Defining the role of novel therapeutics on hepatitis B virus-specific CD8 T cell recognition of infected hepatoma cells and the characterization of mediators of the male bias of liver disease"

Supervisor: Dr. Adam Gehring

**Wednesday, June 15, 2022 at 2 p.m.**

**Mahmoud El-Maklizi**

"Elucidating Notch Functions In CD4/CD8 Lineage Commitment And Intrathymic Development Of CD8 $\alpha\alpha$  Intraepithelial T Cell Precursors"

Supervisor: Dr. Cynthia Guidos

### <HYDRID> BD Biosciences/Immunology Postdoc Lecture Award Seminar

**Monday, June 27, 2022 at 12 pm - Room MSB2172**

**Dr. Yuqing Feng**

Seminar Title: "Co-opting DNA repair to create genetic diversity: implications for antibody diversification and cancer"

Host: Dr. Jen Gommerman

### STUDENT SEMINARS

**June 6, 2022 via Zoom 10 am – 12 pm**

Leveraging Pre-existing Immunity to Enhance Subunit Vaccine Immunogenicity

**Eric Sun (Julien Lab)**

Differentiation of Hepatotoxic CD8 T Cells in Chronic Hepatitis B Virus Infection

**Jonah Lin (Gehring Lab)**

The role of CD5 antigen-like in regulating neuroinflammation during Major Depressive Disorder

**Deeva Uthayakumar (Wang / Julien Labs)**

Characterizing the spatial landscape of the tumor immune microenvironment during pancreatic cancer development

**Matthew Bianca (McGaha Lab)**



Immune Responses to SARS-CoV-2 mRNA Vaccination in Patients with Immune-Mediated Inflammatory Diseases (IMID)

**Michelle Cheung (Watts Lab)**

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The role of Notch signaling during iNKT cell development

**Manjula Kamath (Zúñiga-Pflücker / Mallevaey Labs)**

**June 13, 2022 via Zoom 10 am – 12 pm**

Cytotoxic CD<sub>4</sub> T Cells in Chronic LCMV Infection

**Melissa Liu (Brooks Lab)**

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Defining the Impact of Pre-existing Coronavirus Specific T-cell Responses on SARS-CoV-2 Incidence & COVID-19 Clinical Outcome

**Diana Yang (Kaul Lab)**

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title TBD

**Faisal Abdul Razzaq (Woo Lab)**

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Treatment of Purine Nucleoside Phosphorylase Deficiency with Autologous ex vivo Lentiviral Gene Therapy

**Robyn Loves (Grunebaum Lab)**

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Development of Novel CAR-T cells Targeting MPO for Acute Myelogenous Leukemia

**Yi Fei Zheng (Hirano Lab)**

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Efficient genome editing of human induced pluripotent stem cells using CRISPR-Cas9 system and serine integrase for gene knock-in approaches

**Thomas Zhou (Zúñiga-Pflücker Lab)**

**June 20, 2022 via Zoom 10 am – 11 am**

title TBD

**Siran Liu (Brooks Lab)**

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Characterizing the relationship between MAIT cells, the microbiome, and murine tumor progression

**Adriana Vukosich-Pennell (Sacher Lab)**

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The Role of Lead on NLRP<sub>3</sub> Inflammasome Activation in the murine model of Kawasaki Disease

**Clare Wang (Yeung Lab)**



## Graduate Program Update

### Congratulations!

#### PhD Qualifying Exams

Alex Florescu (Gommerman lab) – May 17, 2022  
Meghan Kates (Ohashi/Saibil labs) – May 17, 2022  
Ruth Li (Zuniga-Pflucker lab) – May 17, 2022  
Carol Nassar (Wither lab) – May 18, 2022

Martin Mak (Crome lab) – May 20, 2022  
Natalia Ogradnik (Martin lab) – May 30, 2022  
Robbie Jin (McGaha lab) – May 30, 2022  
Siu Ling Tai (Mortha lab) – May 31, 2022

## IMMSA

Hi Immunologists,

We hope summer has been going well for all of you so far! We are Vicky Xie and Momo Lin, your IMMSA Co-presidents of the 2022-2023 academic year. We would like to extend our gratitude to the previous co-presidents, Shaivy Tiwari and Kunal Kolhatkar, for the time and effort they devoted to leading IMMSA and creating an inclusive and warm environment in the midst and in spite of the pandemic. (They were able to efficiently carry out events despite arranging everything virtually.) As IMMSA members in the past years, we are really looking forward to applying what we learned from Shaivy and Kunal and bringing in more engaging events (hopefully more in-person) to the community.

For a quick overview, the potential events we are planning on holding include: mentorship meetups, welcome back lunches, academic seminars, and more. Of course, we are open to any ideas and suggestions from you guys. Throughout the next academic year, we also aim to improve our social media engagement by actively promoting IMMSA events and frequently posting entertaining immunology-related content. Hopefully, through interaction on our social media platforms, our audience will gain more interest in immunology and bring together more people to the immunology community.

Last but not least, feel free to contact us if you have any questions or concerns. We are excited to meet you all in our future events! Have a great rest of the summer!

Cheers,

Vicky Xie and Momo Lin  
IMMSA Co-presidents 2022-2023  
Immunology Students' Association (IMMSA) Co-Presidents 2022/23  
Website: <http://immsauoft.com> | Instagram: @immsta



Hi Immunologists!

We wish you a happy spring! May has been a busy month for many of us, whether it be scheduling committee meetings or preparing for the return of all the in-person conferences. During these busy times, we hope you found moments to take a breather in the longer daylight and warmer weather that has been emerging here in Toronto.

We would also like to take this time to address the past and ongoing events happening across the globe that may be affecting our students. IGSA is here to provide support during these tough times. Please feel free to reach out to us at [utgsu.immunology@utoronto.ca](mailto:utgsu.immunology@utoronto.ca) if you would like to be connected to any resources.

Things have been picking up for our second-year Fundamental Immunology students, who have been preparing for reclassification or qualification into their PhDs. To help with this, our mentorship representative, Bobby, has been organizing practice talks throughout the month of May. Thank you to all the upper year students and fellow second-years that have sat into each of these sessions to give feedback. We wish everyone the very best for their exams and congratulations to those who have successfully qualified!

This month, IGSA had the pleasure of hosting and facilitating student discussions with two Easton speakers. Students signed up for small scientific and career discussions with Dr. Daniela Quail and Dr. Susan Kaech, virtually AND in-person! We were able to learn about the incredible work they do and received advice in navigating our own PhD journeys. We would like to thank them for their time!

Although a little belated, we would like to extend our thanks to Robbie Jin, our UTGSU representative, for his work in securing our winter head grant. This fund goes directly towards events for the student body, and helps in making IGSA events possible. We are excited to put the funding to good use and host some fun events!

With the weather getting warmer, we are looking to facilitate more in-person events. One popular wellness event (hint: there's barking!) will be making a summer comeback, and our social representatives have planned a future event for drinks under the sun. Make sure to follow our socials and keep an eye out for our emails so that you don't miss out on these upcoming events!

We have been hearing some chattering going around about the summer retreat and we are just as excited as you are! As a small teaser for what's to come, we're happy to announce that our in-person poster competition will be making its comeback. Keep your eyes peeled for our emails; we will be releasing more details soon.

Stay well and safe,  
Tiff & Kitt - IGSA Co-presidents 2021-2022  
Website: [igsaimm.com](http://igsaimm.com)  
Instagram: [@igsauoft](https://www.instagram.com/igsauoft)



### Immunology Publications (Jan 2022 – April 2022)

Wong EOY, Brownlie EJE, Ng KM, Kathirgamanathan S, Yu FB, Merrill BD, Huang KC, Martin A, Tropini C, Navarre WW. 2022. The CIAMIB: a Large and Metabolically Diverse Collection of Inflammation-Associated Bacteria from the Murine Gut. *mBio*. **13(2)**.

Sheikh-Mohamed S, Isho B, Chao GYC, Zuo M, Cohen C, Lustig Y, Nahass GR, Salomon-Shulman RE, Blacker G, Fazel-Zarandi M, Rathod B, Colwill K, Jamal A, Li ZJ, de Launay KQ, Takaoka A, Garnham-Takaoka J, Patel A, Fahim C, Paterson A, Li AX, Haq N, Barati S, Gilbert L, Green K, Mozafarihashjin M, Samaan P, Budyłowski P, Siqueira WL, Mubareka S, Ostrowski M, Rini JM, Rojas OL, Weissman IL, Tal MC, McGeer A, Regev-Yochay G, Straus S, Gingras AC, Gommerman JL. 2022. Systemic and mucosal IgA responses are variably induced in response to SARS-CoV-2 mRNA vaccination and are associated with protection against subsequent infection. *Mucosal Immunology*. **Online Ahead of Print**.

Viode A, Smolen KK, Fatou B, Wurie Z, Van Zalm P, Konde MK, Keita BM, Ablam RA, Fish EN, Steen H. 2022. Plasma Proteomic Analysis Distinguishes Severity Outcomes of Human Ebola Virus Disease. *mBio*. **Online Ahead of Print**.

Tang BL, Lee JB, Cheng SQ, Pan TZ, Yao W, Wang DY, Tu MJ, Xiang ZQ, Chu XD, Geng LQ, Qiang P, Teng PP, Sun GY, Liu HL, Wang J, Schimmer AD, Yang LM, Sun ZM, Zhang L, Zhu XY. 2022. Allogeneic double-negative T cell therapy for relapsed acute myeloid leukemia patients post allogeneic hematopoietic stem cell transplantation: A first-in-human phase I study. *American Journal of Hematology*. **Online Ahead of Print**.

Kuiper A, Mahamed D, Nkongolo S, D'Angelo JA, Valiente AJ, Mehrotra A, Chapman WC, Horton P, McGilvray I, Janssen HLA, Gehring AJ. 2022. The Human Male Liver Is Predisposed to Inflammation Via Enhanced Myeloid Responses to Inflammatory Triggers. *Frontiers In Immunology*. **13**.

Aeschlimann FA, Yeung RSM, Laxer RM. 2022. An Update on Childhood-Onset Takayasu Arteritis. *Frontiers In Pediatrics*. **10**.

Upton JEM, Hoang JA, Leon-Ponte M, Finkelstein Y, Du Y, Adeli K, Eiwegger T, Grunebaum E, Vadas P. 2022. Platelet-activating factor acetylhydrolase is a biomarker of severe anaphylaxis in children. *Allergy*. **Online Ahead of Print**.

Brooks DG, Ohashi PS. 2022. DC1s shield TpeX cells to bolster PD-1 blockade. *Immunity*. **55(4):577-579**.

Grazziotin LR, Currie G, Twilt M, Ijzerman MJ, Kip MMA, Koffijberg H, Benseler SM, Swart JF, Vastert SJ, Wulfraat NM, Yeung RSM, Marshall DA. 2022. Real-world data reveals the complexity of disease modifying anti-rheumatic drug treatment patterns in juvenile idiopathic arthritis: an observational study. *Pediatric Rheumatology*. **20(1)**.



Wang HL, Zuniga-Pfluecker JC. 2022. Thymic Microenvironment: Interactions Between Innate Immune Cells and Developing Thymocytes. *Frontiers In Immunology*. **13**.

Fish EN. 2022. Tribute to Howard Young. *Journal Of Interferon and Cytokine Research*. **Online Ahead of Print**.

Wu NC, Cadavid JL, Tan XZ, Latour S, Scaini S, Makhijani P, McGaha TL, Ailles L, McGuigan AP. 2022. 3D microgels to quantify tumor cell properties and therapy response dynamics. *Biomaterials*. **283**.

Wong MK, Liu JT, Budyłowski P, Yue FY, Li ZJ, Rini JM, Carlyle JR, Zia A, Ostrowski M, Martin A. 2022. Convergent CDR<sub>3</sub> homology amongst Spike-specific antibody responses in convalescent COVID-19 subjects receiving the BNT162b2 vaccine. *Clinical Immunology*. **237**.

Matsumoto Y, Dimitriou ID, La Rose J, Lim M, Camilleri S, Law N, Adissu HA, Tong JF, Moran MF, Chruscinski A, He F, Asano Y, Katsuyama T, Sada KE, Wada J, Rottapel R. 2022. Tankyrase represses autoinflammation through the attenuation of TLR2 signaling. *Journal of Clinical Investigation*. **132(7)**.

Saleiro D, Wen JQ, Kosciuczuk EM, Eckerdt F, Beauchamp EM, Oku CV, Blyth GT, Fischietti M, Ilut L, Colamonici M, Palivos W, Atsaves PA, Tan D, Kocherginsky M, Weinberg RS, Fish EN, Crispino JD, Hoffman R, Plataniias LC. 2022. Discovery of a signaling feedback circuit that defines interferon responses in myeloproliferative neoplasms. *Nature Communications*. **13(1)**.

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Dunk CE, Serghides L. 2022. Protease inhibitor-based antiretroviral therapy in pregnancy: effects on hormones, placenta, and decidua. *Lancet HIV*. **9(2):E120-E129**.