Department of Immunology

Newsletter

VOL IV – ISSUE 1

Message from the Chair, Dr. Juan Carlos Zúñiga-Pflücker

I am happy to say that the Department of Immunology Newsletter is back, and I am sure most of you were really missing your monthly updates from the Department of Immunology, since we are starting our 4th Volume halfway through the 2015-16 academic year.

As most of you know, we had a fabulous end of year Immunology Holiday party, and I would like to thank Dennis Lee (Gommerman lab) and Helen Luck (Winer lab) for organizing a fantastic event. During the evening festivities several of our students were recognized for their achievements, including: Charles Tran (Ohashi lab) with the Hardi Cinader Prize, Payam Zarin (Zúñiga-Pflücker lab) with the Richard G. Miller Award, Magar Ghazarian (Winer lab) and Payam Zarin with the Immunology Outreach Award, and Dario Ferri with the Undergraduate Immunology Prize.

As we start the winter term, I want to encourage our faculty members to consider welcoming more undergraduates that belong to our Immunology program into their laboratories for a summer research experience. Please see below for more details.

WELCOME

Graduate Students

Jelena Acimovic Iulia Barbu Anh Cao Eric Yixiao Cao Yoojin Choi Najmeh Edraki Alexey Gurevich Sridhar Kandala Yee Tung Leslie Leung Priya Makhijani Albert An Nguyen

Zoya Qaiyum Jie Li Shen Anna Maria Sitnik Juan Mauricio Umana Chung-Hsi Wang Kuan-Chung Wang Xinyan Wang Kelly Wong An Qi Xu Qi Yang Spencer Sixuan Zeng January 2016

image provided by Lori Waters

UPCOMING SEMINARS

EASTON SEMINARS February 2016 Room 2170 MSB at 11:10 a.m.

February 1st, 2016 Diane S. Lidke, Ph.D. "Imaging Mast Cell Activation: from Single Molecules to Synapses" (Host: Dr. Bebhinn Treanor)

February 8th, 2016 David Masopust, Ph.D. *"Tissue Resident Memory CD8 T Cells: Location and Function"* (Host: Dr. Tania Watts)

February 15[™], 2016 Family Day – No Seminar

February 22nd, 2016 Shannon Turley, Ph.D. "Stromal Regulation of Leukocyte Function and Spatiality" (Host: Dr. Host: Dr. Jen Gommerman)

February 29th, 2016

Filip Swirski, Ph.D. "Pumping Iron: When Monocytes Come to the Rescue" (Host: Dr. Clint Robbins)

Department of Immunology

Newsletter

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Faculty

Dr. Tracy McGaha Dr. David Brooks Dr. Slava Epelman

CONGRATULATIONS

Reclass

Edward Chen (Zúñiga-Pflücker lab) – June 1, 2015 Helen Luck (Winer lab) – June 8, 2015 Clare So (Martin lab) – June 9, 2015 Alex Ling (Martin lab) – June 18, 2015 Angela Li (Robbins lab) – June 29, 2015 Mark Gower (Guidos lab) – June 30, 2015 Irene Lin (Mallevaey lab) – September 29, 2015 Ronald Galiwango (Kaul lab) – November 10, 2015

MSc

Sherine Ensan (Robbins lab) – June 29, 2015 Shang Xiang (Anderson lab) – August 25, 2015 Aashiq Rahman (Philpott/Girardin labs) – September 23, 2015 Alexia Kim (Wither lab) – October 1, 2015

PhD

Derek Clouthier (Watts lab) – July 8, 2015 Dylan Johnson (Ohashi lab) – July 30, 2015 Patrycja Thompson (Zúñiga-Pflücker lab) – August 24, 2015 Matthew Sorbara (Philpott lab) – November 23, 2015 Nafiseh Talaei (Wither lab) – December 10, 2015 STUDENT SEMINARS February 2016 Room 4171 MSB at 10:00 a.m.

February 1st, 2016 Milica Tanic (Supervisor: J.C. Zúñiga-Pflücker) Blair MacDonald (Supervisor: C. Guidos)

February 8th, 2016 Kelly Tai (Supervisor: Jongstra-Bilen/Cybulski) Rodney Rousseau (Supervisor: R. Kaul)

February 15[™], 2016 Family Day – No Seminar

February 22nd, 2016 Yu Chen Yao (Supervisor: Inman) Christopher Yau (Supervisor: J. Danska)

February 29th, 2016

Kogulan Yoganathan (Supervisor: M. Anderson/J.C. Zúñiga-Pflücker) Miki Gams (Supervisors: C. Guidos)

SPECIAL SEMINAR

Thomas Eiwegger, Ph.D. Staff, Division of Clinical Immunology and Allergy, Scientist, Physiology & Experimental Medicine Program Sick Kids Hospital

"TBA"

Thursday February 11th, 2016 3:00 p.m. Medical Sciences Building (MSB), Room 7231 University of Toronto

image provided by Crista Mason

GPD Highlights

Program News

Directed by Dr. Nana Lee, Immunology's graduate professional development program has been receiving national and international recognition. In the Conference Board of Canada November 2015 Report of Inside and Outside the Academy: Valuing and Preparing PhDs for Careers, our GPD program was cited as an example of "Best Practice."<u>http://www.conferenceboard.ca/e-library/abstract.aspx?did=7564</u> GPD was also featured as a special course that helps students become "market ready" in a January 2016 edition of University Affairs.<u>http://www.universityaffairs.ca/career-advice/career-advice-article/professional-development-program-teaches-valuable-soft-skills-science-phds/</u> In the last few months, Dr. Lee has had invited speaking invitations regarding GPD from the Conference Board of Canada, U of Ottawa, Western University, The Canadian HIV Vaccine Initiative (CHVI) Research and Development <u>Alliance Coordinating</u> <u>Office</u> - International Centre for Infectious Diseases (ICID), U of Toronto Life Science Career Development Society, U of Toronto SGS GPS, Sick Kids, and other campus workshops. She has also been consulting with various GPD initiatives across North America including Western University, U of Ottawa, Syracuse University, University of Connecticut, and others.

People News

IMM PhD grads who have found exciting careers after GPD include Peter Chen, Gloria Lin, Samia Afzal, Michael Wortzman, Derek Clouthier, Thiru Selvanantham, Angela Zhang, Leesa Pennell, Daniel Chapman. Congratulations!

DEADLINES/REMINDERS

Graduate Admissions

Fundamental Immunology – PhD and MSc

The early application deadline for September 2016 thesis-based programs in Fundamental Immunology has passed and applications are under review. Interested applicants are encouraged to apply for the final admissions deadline of May 20th, 2016.

Applied Immunology – MSc

The deadline for Advanced Standing (May 2016 start) in the MSc in Applied Immunology is March 1st, 2016. Interested students currently taking IMM450 are encouraged to apply. The final deadline for standard entry into the MSc in Applied Immunology is May 20th, 2016. Faculty who already know that they are recruiting grad students for September 2016 are encouraged to send a message to graduate.immunology@utoronto.ca, indicating how many students are being recruited, and available projects, if known.

image provided by Crista Mason

Immunology Summer Student Research Program 2016 – Call for Supervisors

Faculty members who are recruiting undergraduate summer students in their lab this year are asked to send a message to <u>undergraduate.immunology@utoronto.ca</u> indicating the project title and number of students sought.

UPCOMING AWARD DEADLINES

OGS (Domestic and International) – March 21, 2016. For more information on this competition, please visit the SGS website: <u>http://www.sgs.utoronto.ca/currentstudents/Pages/Ontario-Graduate-Scholarship.aspx</u>

QEII-GSST Aventis Pasteur (Dept. of Imm only) – March 21, 2016. Applicants must apply for OGS to be considered for this award.

Faculty of Medicine QEII-GSST – March 31, 2016. For more information, please visit the Graduate and Life Science Education (GLSE) website: <u>http://www.glse.utoronto.ca/fom-qeii-gsst-competition</u>

#techtalks

Earlier this academic year, we launched a new look and feel to the Department's website. With this redesign, the look is cleaner, responsive and easier to navigate. On the homepage, you'll find the 5 upcoming departmental presentations, a list of recent publications from our members, as well as quick links to important pages.

We're not stopping here though. Coming soon we will be uploading new Faculty portraits for our online directory, introducing an adaptive page helping those interested in joining the department find the right information, and many more fantastic upgrades. Stay tuned!

IGSA

Dear Immunology Family,

Happy 2016!

As a quick recap from the end of 2015, we hope everyone had a fun and memorable evening at the Holiday Party in December. Thank you again to over 30 sponsors who donated their money, time and/or masterpieces to the toy/food drive, silent auction and raffle. Together, we were able to fundraise over \$700.00 and a full box of goods for Nellie's Shelter!

To start off the New Year, IGSA will be embracing the cold winter by hosting a Skate and Pub at Nathan Phillips Square on January 26th, 2016. Also, please look forward to our Valentine's Day fundraising initiative to spread some love and cheer throughout the graduate department in February.

Love,

IGSA

image provided by Crista Mason

IMMSA

Dear Undergraduate Immunology Students:

We hope this message find you well relaxed after the winter break! IMMSA is very excited to start the new semester and we have a ton of great events planned, but first a quick recap:

We started off the semester with the **Welcome Back Lunch at the Trinity JCR**. We then partnered with the MolGen Students Union (MGYSU) and the Biochemistry Students Union (BUSS) for the **B.I.G. Meet & Greet** where students from across all three departments came out to meet professors and their peers over a catered lunch in the MSB stone lobby.

Our executive members gave a fantastic seminar **on finding research experience as an undergraduate**, which was highly attended and many students found very helpful. We also had the pleasure of welcoming **Dr. Naoto Hirano to give an academic talk** on his current research in more effective and safer T cell receptor gene therapy for cancer.

Coming up this semester, we will be having our graduate school information session, a joint pub night with Biochemistry, and the annual Bio Jeopardy competition! We will also have our career panel with MolGen, and another academic talk from one of our department's esteemed professors. In May, we are excited to be hosting the 8th annual Ontario Quebec Undergraduate Immunology Conference (OQUIC), which will see undergraduates from across the two provinces presenting their undergraduate research and hearing from two fantastic keynotes: Dr. Michael Julius and Dr. Connie Krawczyk. Stay tuned for more updates, they're coming soon!

We would like to **thank the department** for their continuing guidance, especially **Dr. Alberto Martin**, **Dr. Juan Carlos Zúñiga-Pflücker**, and **Dr. Jennifer Gommerman**. We would also like to thank our **superb executive** for their hard work and the **general student body** for their support and engagement.

Looking forward to an excellent semester!

Best wishes,

Andrea Macikunas & Vivian Tia

Immunology Students Association (IMMSA) Co-Presidents <u>http://immsauoft.com</u> | @IMMSA_UofT | <u>http://facebook.com/IMMSA.UofT</u>

PUBLICATIONS FROM THE DEPARTMENT OF IMMUNOLOGY (December 2015)

- 1. Chapman, D. C., P. Stocki, and D. B. Williams. 2015. Cyclophilin C Participates in the US2-Mediated Degradation of Major Histocompatibility Complex Class I Molecules. Plos One 10.
- Gracey, E., Y. Baglaenko, N. Prayitno, N. Van Rooijen, A. Akram, A. Lin, B. Chiu, and R. D. Inman. 2015. Pulmonary Chlamydia muridarum challenge activates lung interstitial macrophages which correlate with IFN-gamma production and infection control in mice. European Journal of Immunology 45: 3417-3430.
- 3. Haeryfar, S. M. M., and T. Mallevaey. 2015. Editorial: CD1-and MR1-Restricted T Cells in Antimicrobial Immunity. Frontiers in Immunology 6.
- 4. Michel, L., H. Touil, N. B. Pikor, J. L. Gommerman, A. Prat, and A. Bar-Or. 2015. B Cells in the Multiple Sclerosis Central Nervous System: Trafficking and Contribution to CNS-Compartmentalized inflammation. Frontiers in Immunology 6.
- Ombrello, M. J., E. F. Remmers, I. Tachmazidou, A. Grom, D. Foell, J.-P. Haas, A. Martini, M. Gattorno, S. Ozen, S. Prahalad, A. S. Zeft, J. F. Bohnsack, E. D. Mellins, N. T. Ilowite, R. Russo, C. Len, M. O. E. Hilario, S. Oliveira, R. S. M. Yeung, A. Rosenberg, L. R. Wedderburn, J. Anton, T. Schwarz, A. Hinks, Y. Bilginer, J. Park, J. Cobb, C. L. Satorius, B. Han, E. Baskin, S. Signa, R. H. Duerr, J. P. Achkar, M. I. Kamboh, K. M. Kaufman, L. C. Kottyan, D. Pinto, S. W. Scherer, M. E. Alarcon-Riquelme, E. Docampo, X. Estivill, A. Guel, P. I. W. de Bakker, S. Raychaudhuri, C. D. Langefeld, S. Thompson, E. Zeggini, W. Thomson, D. L. Kastner, P. Woo, B. S. Grp, S. Randomized Placebo Phase, C. Grp, B. Grp, and G. Int Childhood Arthritis. 2015. HLA-DRB1*11 and variants of the MHC class II locus are strong risk factors for systemic juvenile idiopathic arthritis. Proceedings of the National Academy of Sciences of the United States of America 112: 15970-15975.
- 6. Paun, A., and J. S. Danska. 2015. Immuno-ecology: how the microbiome regulates tolerance and autoimmunity. Current Opinion in Immunology 37: 34-39.
- Pikor, N. B., J. L. Astarita, L. Summers-Deluca, G. Galicia, J. Qu, L. A. Ward, S. Armstrong, C. X. Dominguez, D. Malhotra, B. Heiden, R. Kay, V. Castanov, H. Touil, L. Boon, P. O'Connor, A. Bar-Or, A. Prat, V. Ramaglia, S. Ludwin, S. J. Turley, and J. L. Gommerman. 2015. Integration of Th17-and Lymphotoxin-Derived Signals Initiates Meningeal-Resident Stromal Cell Remodeling to Propagate Neuroinflammation. Immunity 43: 1160-1173.
- Sibony, M., M. Abdullah, L. Greenfield, D. Raju, T. Wu, D. M. Rodrigues, E. Galindo-Mata, H. Mascarenhas, D. J. Philpott, M. S. Silverberg, and N. L. Jones. 2015. Microbial Disruption of Autophagy Alters Expression of the RISC Component AGO2, a Critical Regulator of the miRNA Silencing Pathway. Inflammatory Bowel Diseases 21: 2778-2786.
- 9. Steiman, A. J., D. D. Gladman, D. Ibanez, B. Noamani, C. Landolt-Marticorena, M. B. Urowitz, and J. E. Wither. 2015. Lack of Interferon and Proinflammatory Cyto/chemokines in Serologically Active Clinically Quiescent Systemic Lupus Erythematosus. Journal of Rheumatology 42: 2318-2326.
- York, A. G., K. J. Williams, J. P. Argus, Q. D. Zhou, G. Brar, L. Vergnes, E. E. Gray, A. Zhen, N. C. Wu, D. H. Yamada, C. R. Cunningham, E. J. Tarling, M. Q. Wilks, D. Casero, D. H. Gray, A. K. Yu, E. S. Wang, D. G. Brooks, R. Sun, S. G. Kitchen, T.-T. Wu, K. Reue, D. B. Stetson, and S. J. Bensinger. 2015. Limiting Cholesterol Biosynthetic Flux Spontaneously Engages Type I IFN Signaling. Cell 163: 1716-1729.

image provided by Crista Mason

- 11. Zhang, M. A., J. J. Ahn, F. L. Zhao, T. Selvanantham, T. Mallevaey, N. Stock, L. Correa, R. Clark, D. Spaner, and S. E. Dunn. 2015. Antagonizing Peroxisome Proliferator-Activated Receptor alpha Activity Selectively Enhances Th1 Immunity in Male Mice. Journal of Immunology 195: 5189-5202.
- Zhang, Z., T. Huang, F. Yu, X. Liu, C. Zhao, X. Chen, D. J. Kelvin, and J. Gu. 2015. Infectious Progeny of 2009 A (H1N1) Influenza Virus Replicated in and Released from Human Neutrophils. Scientific Reports 5.

We'd like to hear from you! Comments or Questions – Please contact: Immunology.communications@utoronto.ca