



FROM THE CHAIR'S DESK

Dear MIMM^{ers},

It is not news that we face significant challenges in terms of funding biomedical research in Canada. These challenges may dampen the enthusiasm of some to pursue a research career. But biomedical research has never been as exciting as it is now, on an accelerated pace that keeps bringing more discoveries and many, many opportunities (for some, even too many!). As an example, take a look at the Google Life Sciences initiatives and the groundbreaking projects they are developing. It is inspiring. As I learn more about these initiatives, I see new avenues of collaborations and partnerships that we need to explore.



Tightly linked to our commitment to research is our accountability to our communities. In the last couple of weeks, we have seen several prominent scientists based in the Nation's capital engage the media (e.g., Ottawa Citizen) stressing the importance of research funding. I encourage you to take any opportunity in your hands to ensure that you share with the general public the excitement of your research and how this has changed or can change our lives for the better. Positive engagement is essential to ensure that the current change in the political landscape translates into a change in funding policy.

I would like to use this opportunity, as we come to the end of 2015, to wish you and your families and friends a Happy Holiday Season and all my best wishes for you all for 2016. Have a relaxing and invigorating Christmas break and see you all in the New Year.

Yours in service,

Quim



RESEARCH

Publications

1. Elisabeth Kugelberg. [Resetting the scene](#). *Nature Reviews Immunology* (2015) doi:10.1038/nri3937. Published online 30 October 2015.
2. Maurice C. A [Gut Feeling about You](#). Volume 163, *Cell* Volume 163, Issue 4, 5 November 2015, Pages 785
3. Li R, Rezk A, Miyazaki Y, Hilgenberg E, Touil H, Shen P, Moore CS, Michel L, Althekair F, Rajasekharan S, Gommerman JL, Prat A, Fillatreau S, Bar-Or A; Canadian B cells in MS Team. [Proinflammatory GM-CSF-producing B cells in multiple sclerosis and B cell depletion therapy](#). *Sci Transl Med*. 2015 Oct 21;7(310):310ra166. doi: 10.1126/scitranslmed.aab4176.
4. Li Z, Peres AG, Damian AC, Madrenas J. [Immunomodulation and Disease Tolerance to Staphylococcus aureus](#). *Pathogens*. 2015 Nov 13;4(4):793-815.

FACES OF EXCELLENCE

Dr. Hervé Le Moual
Faculty Member



How long have you been with the Department?

I am part of the Department since January 2001. I am also a cross-appointed member of the Faculty of Dentistry.

What is your job description?

After a PhD in Biochemistry at the Université de Montréal, I did a postdoctoral training at U.C. Berkeley working on bacterial chemotaxis. I started my research laboratory at the Université de Sherbrooke and moved to McGill in 2001.

Research in my laboratory focuses on Gram-negative bacterial pathogens, including Enterohemorrhagic *Escherichia coli* (EHEC), uropathogenic *E. coli* (UPEC) and *Citrobacter rodentium*. We study bacterial resistance to host antimicrobial peptides and bacterial signaling pathways that could be targeted to prevent virulence.

My teaching is on Bacterial Pathogenesis (MIMM 465) and Microbiology of the Oral Cavity (DENT 217).

What do you look forward to when you come to work every day?

Every day, I try to learn something new by reading at least one paper.



ANNOUNCEMENTS



Our heartfelt congratulations to Nirmin Alsahafi for the prize she has received for her poster presentation at FRQS conference on Friday October 31, 2015!



Congratulations to Dr. Corinne Maurice for being successful in getting funding from the **Bill and Melinda Gates Foundation**. The proposal was selected in the Grand Challenges competition and focused on the role of bacteriophages in stunting in children. Also congratulations for an upcoming CRC/CFI award... Stay tuned!



Congratulations Dr. Selena Sagan for your three year reappointment!



Dr. Greg Matlashewski got the Rajandra Memorial Foundation Day Award for his work on elimination of Leishmaniasis. Congratulations!

Congratulations to Drs. Shantelle Lafayette, Joanne Leung and Caroline Vincent on their PhD Oral Defense



Thank you to Vertex Pharmaceuticals (Canada) for the gift of a Beckman Coulter CYAN ADP, Water System Flow, Cytofluometer. This unit will be very helpful in supporting our Teaching Mission!



Erica Ma Takes Second Place at the Undergrad Research Conference at McGill in Medical Sciences Category By Olga Okoulova

Erica Ma, a fourth year in the MIMM undergraduate program at McGill, presented her research project and placed second at this year's Undergraduate Research Conference (URC) at McGill, in the category of medical sciences. The conference, which took place on October 16, 2015 and was organized by the Faculty of Science, serves as an opportunity to showcase the many varied research projects conducted by students within the faculty.

This was the eleventh annual Undergraduate Research Conference with a total of forty-six undergraduate student participants who worked with professors to complete their unique research projects, mostly in the summer preceding the conference.

Ma's supervisor and principal investigator for the project was Dr. Irah King, an assistant professor in the MIMM Department. When asked about Dr. King's involvement, Ma replied, "He [Dr. King] was involved in so many ways". More specifically, Erica went on to explain that, "He was my supervisor and my PI; he funded the research that I did, he mentored my project and my development as an undergrad researcher, he offered advice on the progression of my project".

Ma's research, which was titled "systemic coordination of eosinophilia following immune challenge", involved the investigation of eosinophil cells in a helminth infection.

"In most immune responses you need an influx of immune cells to the site of infection or immune challenge. This accumulation of cells is partially responsible for generating an effective immune response. My project, specifically, was on the accumulation of a specific immune cell called eosinophil in response to a certain infection, specifically, a helminth infection," Ma explained.

The conference was divided into five categories – biological sciences, computational and mathematical sciences, physical sciences, psychology and neurosciences and, of course, medical sciences. Out of the students presenting, all had been selected beforehand out of a pool of individuals who had applied to present.

While Ma spoke about her second place victory as a "nice validation of the work that I and Dr. King had done", she also said, "I take it with a grain of salt because there were many really excellent presentations at the conference... especially from our department". She concluded with, "It's an honour, in itself, to be presented [at the conference]".

When asked for the key to a successful and effective presentation for those students who

wish to participate in the conference in the future, Ma replied, "To be honest, I'm not exactly sure. I guess, maybe try to make the presentation accessible, because the judges aren't specifically from your specific subfield." She went on to explain that, "For example, my field was immunology but I had a biologist as a judge, in addition to a biochemist. Just make things easier to understand, perhaps. And let your enthusiasm for your project show."

The next Undergraduate Research Conference (URC) is set to take place in the Fall of 2016. Best of luck to all those applying and preparing to undertake their various research projects within their specific categories. Congratulations, once again, to Erica Ma and to all those who competed in this year's Undergraduate Research Conference. It is a privilege, year after year, to celebrate the unique endeavours and accomplishments of the students in the MIMM undergraduate program.

