



CHAIR'S CORNER



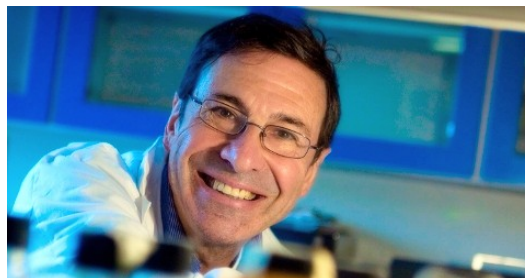
A word from the MIMM Chair

Dear MIMMers,

Welcome back everybody! After a very busy year in 2016, I hope you all had a wonderful, relaxing and invigorating Holiday break surrounded by family and friends.

As you already know, the Search Committee to recruit the new MIMM Chair was struck last Fall. The Search Committee is composed of 7 members including 3 from our Department (Drs. Mara Ludwig (Vice-Dean Academic

ACHIEVEMENTS



Dr. Wainberg received Distinguished Lecturer Award

Congratulations to [Dr. Mark Wainberg](#) on receiving the Gertrude Elion Distinguished lecturer award. This award is a testimony of his accomplishments in the field of infectious disease, in particular HIV/AIDS research.

CANADA RESEARCH CHAIRS

Dr. Sagan receives CRC Tier 2 award

The Canada Research Chairs Program invests approximately \$265 million per year to attract and retain some of the

Affairs, Faculty of Medicine), Jörg Fritz (MIMM), Marina Klein (Department of Medicine), Greg Matlashewski (MIMM), Christine McCusker (Department of Pediatrics), John Orlowski (Chair of Physiology), and Martin Richer (MIMM)). This is a very important time in the history of our Department and it is critical that you voice your opinion. The next MIMM Chair may be in office for the next 10 years. I thus encourage everybody to submit comments about both the expected qualifications of the new Chair and your vision for the future of our Department directly to [Dr. Ludwig](#) or to any of the Search Committee members.

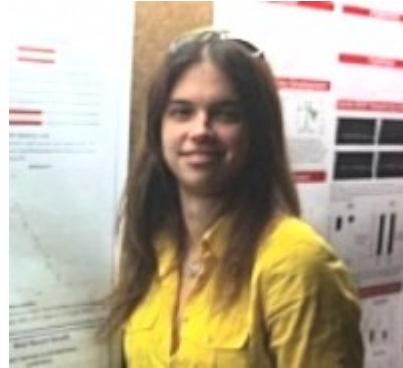
The annual MIMM Holiday pot luck party was held on Friday December 16th, 2016 at the Thomson House. Many attendees cooked their best recipes and the event was a great success. Many thanks to MIGSA and the organizers that did a wonderful job again this year. Please stay tuned for more MIMM events for the Winter term (e.g. 5th MIMM Graduate Research Day, Teaching Retreat, MISA Wine and Cheese, Faculty Happy Hour, MIMM Gala).

Finally, I would like to wish everybody a wonderful and successful year in 2017 both personally and professionally.

All the best!

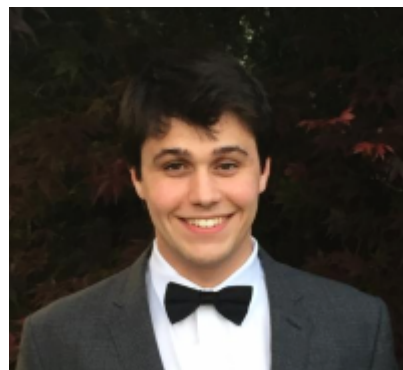
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world's most accomplished and promising minds. The Minister of Science, Kirsty Duncan, announced over \$173 million in funding for 203 new and renewed Canada Research Chairs (CRC) at universities across Canada. [Dr. Selena Sagan](#), representing the Microbiology and Immunology department, received a Tier 2 CRC award in RNA Biology and Viral Infections.



Award Winner for Best Poster

Natalie Giannakopoulou, a PhD Student at McGill who is co-supervised by Drs. [Gruenheid](#) and [LeMoual](#), won the Best Poster Award at the McGill University Research Center on Complex Traits Symposium on November 28th and 29th, 2016.



Award Winner for Best Short Talk

Tyler Cannon, a MSc student in the [Gruenheid](#) lab, won the Best Short Talk award at the McGill University Research Center on Complex Traits Symposium on November 28th and 29th 2016.



Annual MIMM Holiday Potluck Party

A Big THANK YOU to all who attended the annual MIMM Holiday Party. A great time was had by the graduate students, Faculty and Staff members in attendance, as they enjoyed the festivities and the spirit of the season. Special thank you to MIGSA for planning this event and making it a huge success!

STUDENT ASSOCIATION UPDATES



MISA's corner

Welcome back and Happy New Year everyone!

EVENTS



Infection and Immunity Seminar Series

There are no seminars scheduled for the month of January. The next one will be on February 16th with Dr. Jonathan Spicer. Click here for [details](#).

PUBLICATIONS

Li, G., Yao, P., Cong, P., Ren, J., Wang, L., Feng, J., Lau, PCK., Wu, Q., Zhu, D. (2016). New recombinant cyclohexylamine oxidase variants for deracemization of secondary amines by orthogonally assaying designed mutants with structurally diverse substrates. *Scientific Reports* 6:24973. [Read this article](#).

Shanmugam, SR, Chaganti. SR, Lalman. JA, Heath, DD, Lau, PCK, Shewa, WA. (2016). Long term impact of stressing agents on fermentative hydrogen production: Effect on the hydrogenase flux and population diversity. *Renewable Energy* 88:483-493. [Read this article](#).

Thomassin JL, Leclerc JM, **Giannakopoulou N**, Zhu L, Salmon K, Portt A, Daigle F, **Le Moual H**, **Gruenheid S**. Systematic analysis of two-component systems in *Citrobacter rodentium* reveals positive and negative roles in virulence. *Infect Immun*. doi: 10.1128/IAI.00654-16. [Read this article](#).

Yachnin, BJ, Lau, PCK, **Berghuis, AM**. (2016). The role of conformational flexibility in Baeyer-Villiger

Stay tuned via [Facebook](#) and our [website](#) for information on our upcoming events this semester.

MISA would like to highlight the following initiative for the MIMM students: U3 Honours MIMM students Clare Fogarty, Nousin Hussain and Madlen (Maddee) Nash are members of the editorial board of [The Prognosis](#). It is the first student journal at McGill that aims to spark global health discussion among young people in Montreal. Global health is a fairly new term that can be interpreted in many ways. The students involved in this journal would like to organize debates on the topic of global health, by presenting articles, opinions, and research on diverse issues related to health in different parts of the world. For a previous edition, click [here](#).

The board is currently looking for papers of all disciplines regarding child & adolescent health. If interested, please submit your paper by January 21st 2017 to:
theprognosis.mcgill@gmail.com.



monooxygenase catalysis and structure.
BBA (Proteins and Proteomics)
1864:1641-1648. [Read this article.](#)

FACE OF THE MONTH



**Face of the Month: Ali
Mohammed**

Tell us about yourself

My name is Ali Mohammed and I am the founder of Fahrenheit 99 (F99); a community outreach initiative that I have started with Dr. Quim Madrenas, the former Chairman of the Department of Microbiology and Immunology. The main long-term goal of this project is to facilitate story-telling from the world of the life sciences.

Personally, I find it rewarding to interact with youth groups. It's very hard initially because you need to justify why biology is interesting. Indeed, quite amusingly, you need to show the evidence for that argument.

MISA's Get Smart About Antibiotics Week Challenge

Last November, with Dr. Gruenheid's support, MISA decided to take part in the **Get Smart About Antibiotics Week Challenge** offered by Small World Initiative (SWI) and Centers for Disease Control and Prevention (CDC). The goal was to raise awareness for antibiotic resistance by selling Microbial Crafts (MiCrafts). These MiCrafts were hand-crafted by MIMM's very own talented students and the one and only Dr. Gruenheid. Over the 2 fundraising weeks, a total of \$500 USD was raised and donated to SWI to help them train educators from under-resourced schools. As combating antibiotic resistance requires global collaborative efforts, MISA hopes that more schools and students join this cause and get more involved.

In addition to having a strong foundation of knowledge about microbiology and immunology, students from MIMM also have many extracurricular talents. The MiCrafts featured in this newsletter provide a glimpse of the many talents MIMM has. While the crafters were designing and working on these crafts, MISA was working on showcasing their talents and spreading awareness all over the world. MISA set up an eBay platform and a PayPal account in order to touch people's hearts through crafts. These MiCrafts are relatable, educational and simply cute as a button. They are the perfect global ambassadors to spread the awareness about antibiotic resistance!

The Microbial Crafts team:

- Organizer: Tzu-Wei (Joy) Tseng, MISA VP Finance, with the support of all MISA members
- Knitters: Dr. Samantha Gruenheid, Bushra Khan (U3), Shannon

Take the cliché statement “*the mitochondria are the powerhouse of the cell*”. It’s often referenced as a token of the impractical facts that we must memorize. In March 2016, however, everyone got to witness the impact of mitochondria on the “real world” when Maria Sharapova tested positive for meldonium. She was subsequently suspended from playing tennis. What does meldonium do? Amongst other things, it targets *that* powerhouse of the cell.

Once you establish a culture of “anyone can appreciate the complexities of biology” (i.e. once they understand the problems that researchers are trying to solve), that’s when their interest peaks. You can see it in their eyes, there’s a certain spark and, of course, you always get the most interesting questions which often you can’t answer.

What do you like about the department/the program?

I am majoring in Anatomy and Cell Biology but I spend a lot of time, because of F99, working with professors, students, and staff from MIMM.

There’s a pattern which I have noticed in both departments and that is the increasing concern that surrounds the quality of education which undergrads like me are receiving. It’s a full-time passion for some, like Dr. Claire Trottier who is the education specialist in the Department of Microbiology and Immunology.

It’s a good feeling to know that any voiced feedback is taken seriously; that there are people that genuinely care about this and are looking for ways to improve the program.

Hewgill (U2), Jennifer Hitti (U2),
Kailee Wark (U1), Anita Raja (U1),
HyeRim Han (U3), Michelle Chen
(U1) and Catherine Caldwell (Idea
Initiator)

- Cross-stitcher: Ashley Campbell
(U3)
- Button designer: Elena Lin (U3)

SERVICES



Duff Biobar Updates

The Biobar stocks useful lab supplies including Kleenex, bleach, gloves, and paper towels at competitive prices. BioBar operating hours are from Monday to Friday: 8:00 -12:00 & 1:00 -3:30.

[More information.](#)



Jobs Available!

Still looking for a job? Visit the postings available [online](#) or have a look at the job binder located in Room 511 of the [Duff Medical Building](#).

How are you involved in the department?

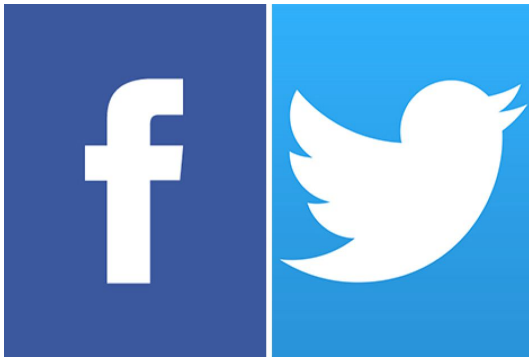
Currently, F99 is managing two community outreach projects; one involving the development of a podcast with many researchers from the department and the other involving a “life sciences immersion program” for a high school. In the latter, 3 groups of graduating high school students will get to visit the department as well as a couple of museums and libraries around campus. For more information (and on how you can get involved), I urge you to visit our [website](#).

What is your passion?

Something other than science, medicine, and education would be Brazilian Jiu-Jitsu. I started last semester and it has added much needed movement in my day to day schedule. It’s a combat sport and because of this, it often involves a baggage of connotations.

For one, I am an undergraduate research student at a laboratory that studies bone biology. So, people get quite confused by the dichotomy: during the day, I am trying to contribute to our understanding of bone health with hopes of helping researchers and clinicians figure out ways to treat bone diseases. Later, I spend my evenings learning about different joint locks that can cause damage, dislocation, and bone fracture.

The key that helps me resolve this is that bone itself expresses this same contrast. Osteoblasts are cells that form bone while osteoclasts are cells that breakdown bone. Note, that both are required for proper health and growth.



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Want to contribute an item to the MIMM Bites? Here's where to send it: office.microimm@mcgill.ca
Check out the latest updates on our website: www.mcgill.ca/microimm

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