MORE funding success!

This past month, we heard of the success awarded to our faculty from the NSERC. Four NSERC Discovery grants were funded, with one faculty getting an "accelerator top-up" (see next page!) and two others getting a Discovery Launch Supplement. This is tremendous success for our faculty and in particular, our 2 latest recruits! Total funding to the dept over the next 5 yr = $742,000!!!

Congratulations to Laura, Jibrain, Craig and Matt for their strong contribution to our overall research success!

Department updates

Matt's "new" Frontier

Award winning Grad students!

Jibrain gives Plenary lecture

Tami gets to See it, Be it, STEM it!

Health & Safety updates

Biomed B-ball showdown!

Grad student corner

Upcoming events in Biomed!

...and much more!
Dr. Matthew Vickaryous is one of a number of recipients as part of an international and interdisciplinary team research award. HFSP funds collaborative projects that bring researchers from different background and countries together to investigate a common question.

His grant - titled 'Unravelling an unusual biomineralization from nano to micro scale using advanced technologies' - is a collaboration between researchers from three countries (UK, France and Canada). Using a combination of approaches, ranging from imaging and biomechanics to developmental biology, comparative genomics, and experimental biology, our goal is to investigate an unusual collection of skeletal elements called osteoderms.

Osteoderms are bones that only form in the skin. Osteoderms are common to armadillos, crocodiles and many species of lizard. While they are present in a diverse number of species, we know very little about how these bones evolved, how they developed, and how they function in living animals. In addition, there are numerous questions about their skeletal structure. Their findings will shed light on the basic biology of these skeletal elements, and have implications for various pathological conditions and bio-mimicry.

In total, the research grant is $400k/year (USD) for 3 years. **Matt will be receiving $50K/year (USD) for 3 years.**

*Matt was also the recipient of an Accelerator supplement of $40,000 with his NSERC DG renewal (one of the largest in our department!).*

*Right on Matt....Congrats!*
Dr. Christian Vigneault, an industrial researcher at L'Alliance Boviteq Inc., a biotechnology company specialized in the production of bovine embryos, gave a talk to our Department. Christian met with many of our MBS, MSc and PhD students involved in research in the Reproductive area. He talked about what his company does and job/career opportunities in the field. If interested, please contact Laura Favetta or Allan King.
Dr. Peter Siegel, Associate Professor in the Department of Medicine, Biochemistry and Anatomy and Cell biology and Associate Director, Rosalind and Morris Goodman Cancer Research Centre at McGill University, was an invited speaker to Dr. Alicia Villoria-Petit's Cancer biology course. Dr. Siegel spent the day in the department meeting with many faculty and graduate students.
Graduate Student Corner

Congrats to all of our award-winning graduate students!

<table>
<thead>
<tr>
<th>Award name</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Pari K. Basrur Travel Scholarship</td>
<td>Kathy Jacyniak</td>
</tr>
<tr>
<td>Biomed Sci Gradaute Scholarship</td>
<td>Anita Luu</td>
</tr>
<tr>
<td>Blythe James Chase Scholarship</td>
<td>Andrew Poon</td>
</tr>
<tr>
<td>Tamara Denberg Memorial Scholarship</td>
<td>Kathy Matuszewska</td>
</tr>
<tr>
<td>Harry Downie Travel Grant</td>
<td>Reem Sabry</td>
</tr>
<tr>
<td>Michael &amp; Nancy Goldberg Scholarship</td>
<td>Danielle Halucha</td>
</tr>
<tr>
<td>Betty Goldhart Scholarship (Biomed)</td>
<td>Hayley Thorpe</td>
</tr>
<tr>
<td>Betty Goldhart Scholarship (OVC)</td>
<td>Thomas Parmentier</td>
</tr>
<tr>
<td>Graduate Student Recognition Award</td>
<td>Jyoti Sharma</td>
</tr>
<tr>
<td>OVC 1962 Grad Award Clinical Research</td>
<td>Thomas Parmentier</td>
</tr>
<tr>
<td>Lyle &amp; Louise Rea Grad Entrance Scholarship</td>
<td>Shahnaza Hamidullah</td>
</tr>
</tbody>
</table>

Please swing by and see their names inscribed in the plaques in the glass showcase across the hall from the Biomed Admin office!

AND...

Congratulations to Khizer Hafeez (MSc with Dr. Pyle) who was 1 of 25 students (MSc, PhD and PDF) across Canada selected and awarded a CIHR award ($3211) to present his research at the International Gender Medicine Conference/OSSD. Abstract was accepted as well and will be published in the Gender and the Genome Journal. **Congrats Khiz!**
Dr. Jibran Khokhar gave a Plenary lecture at the Schizophrenia International Research Society 2019 Annual Meeting in Orlando Fl on April 14th titled: *Schizophrenia and Substance Use Disorders: A Unifying Hypothesis.*

*Congrats Jibran!*
Over the winter semester, students in the **MBS Reproductive Biotechnologies program** went for placements at different IVC clinics around the GTA. The IVF clinic placements were at **One Fertility Clinic Burlington, Mount Sinai Fertility as well as Hannam Fertility and CCRM both in Toronto**. During their time at the IVF clinics they had the opportunity of seeing different sperm preparation techniques for IUI and IVF. They observed egg retrieval procedures, embryo freezing and some frozen embryo transfers (FETs). To cap up this experience, they had the opportunity of seeing how things are done on the veterinary side of the field. The placements included a visit to a **donor farm in Woodstock where they observed Dr Adam Haight (OVC 2015)** as he performed Ovum pick up in donor cows.
Summary from the “Unmasking mental health issues faced by scientists: Addressing the silent pain among us” webinar

- Lack of research on mental health in academia, making it difficult to understand the scope of the problem. The research that does exist shows that ½ grad students experience significant psychological stress, 1/3 are at risk of mental health issues.

- Academia is STRESSFUL! The pressures to achieve funding and to consistently publish are factors faced by students and faculty.

- The culture in academia is to project confidence and to hide the daily struggles. Factors like failed experiments and rejected papers and grants impact our mental health, but we don’t talk about it enough.

- We tend to share our successes, and internalize our failures. On top of this, many students tie their self-worth to the projects, so when things are not working in the lab graduate students tend to put the blame on themselves.

- How can we improve in our department?
  1. We need to start the conversation, especially faculty! It is difficult to seek help when you feel as thought you are struggling alone. Take the time to regularly ask your graduate students and other faculty members how things are going.
  2. Create your support networks. The nomadic life of academia can be isolating, so create connections with those around you so you have people to lean on.
  3. Try to identify signs. If you notice that your student is showing signs of distress, ask them if everything is okay.
  4. Talk to your mental health ambassadors (our equivalent= Peer Helpers Anita and Kathy). We are here to listen and provide resources!
  5. Be aware. Take time to connect outside of research (take time for self-care).
  6. Break large goals into smaller, doable tasks. Working towards a larger goal takes a lot of time! Breaking things up will make the goal seem less daunting and you can see your progress as you work towards your goals.
  7. Faculty set the culture in the lab, remember this! Create a positive environment that fosters support and life outside of the lab.
  8. Support graduate students that do not want to continue in academia. Graduate school is about exploring and knowing what options are available after convocation.

- Lastly, if you are interested in watching the webinar it is still available at: https://www.scientemag.org/custom-publishing/webinars/unmasking-mental-health-issues-faced-scientists-addressing-silent-pain

Thanks for reading!
Anita & Kathy
"See it, Be it, STEM it" profiles Tami's research!

**Dr. Tami Martino** was profiled on “See It, Be It, STEM It”, an initiative which hopes to inspire young girls to pursue their interest in a career in Science, Technology, Engineering, and Mathematics (STEM).
https://www.seeitbeitstemit.com/search?q=Tami%20Martino

Tami was chosen as the Invited Speaker for the Inaugural “Women’s Heart Health Research Rounds” at the Ottawa Heart Institute, April 29, 2019. The annual lecturer is chosen by the trainees, and then invited by Dr. Thais Coutinho, Chair of the Heart Institute’s Canadian Women’s Heart Health Centre. The talk will focus on Circadian Medicine, the lab's 5 recent research publications on women’s heart health, and their research on Women’s heart health as featured by the Heart and Stroke Foundation of Canada.

Tami was also chosen as a grant reviewer for circadian postdoctoral students in the European Union, and was also very excited to be chosen as a speaker for the undergraduate Bio-Medical Sciences students “Careers Day” at UGuelph (March 22, 2019). She was interviewed by 570 News Radio regarding the Liberal MPP bill to abolish the twice yearly time change and by CBC Radio earlier in April on health and Daylight Saving Time (DST) as an expert on DST and heart health.

The Martino lab's recent publication on why heart failure patients suffer depression and impaired thinking was featured in media at UGuelph, nationally, and internationally. This work features Bio-Med co-first authors **Cristine Reitz** (PhD student) and **Austin Duong** (MBS student), as well as other Bio-Med members (**Dr. Emma Louth, Dr. Mina Rasouli, Ashley Zwainman**), and in collaboration with **Dr. Boyer Winters lab** (Psychology) and co-senior author **Dr. Craig Bailey’s lab** (Bio-Med) e.g. https://www.eurekalert.org/pub_releases/2019-04/uog-uog040519.php

*Congrats Tami et al for your outreach activities!*
Our H&S board has a new look! H&S information and news will be posted here, so be sure to stop by and check it out regularly!

**REMINDERS:**

Staff and students *(particularly undergraduate students)* are discouraged from working alone after hours -- Please read the SOP on the department website under “Safety”

Keep SDS and chemical inventory updated! Please provide copies to Sarah Donato

New staff and students must be given a lab safety orientation, and the associated form must be filled out and sent to Sarah Donato. *This is the responsibility of faculty!*

*Inspect and flush your eyewash stations weekly!*

Keep unoccupied rooms locked at all times, and keep valuables/personal belongings out of sight. *Please speak with a member of your H&S committee or a supervisor if you are feeling unsafe in your workplace.*

Thank you to all the graduate students who participated in Andrew Poon’s health and safety survey! Overall, graduate students feel very safe working in the lab — *way to go Biomed!*
Health & Safety

It’s the beginning of a new semester, which means new personnel working in the laboratory! Health and Safety Orientations MUST occur before new students, staff and/or volunteers start in the lab, and Health and Safety Orientation for New Employees, Students and Volunteers forms MUST be signed. Please keep hard copies of these signed forms in the lab, and forward an electronic copy to Sarah Donato (sdonato@uoguelph.ca) by May 23rd.

**PLEASE SEE ATTACHED CHECKLIST**!

The Annual Chemical Hazardous Waste Disposal Amnesty Program is taking place April 29th to May 10th! Take advantage of this opportunity to rid your lab of any unneeded chemicals. Stickers can be found on the Health & Safety shelf next to the mail room. Place one sticker on each box of compatible chemical waste, and call ext. 54270 to schedule a pickup time.

No yellow tags needed!

Please contact Sarah Donato (sdonato@uoguelph.ca) with any health & safety concerns you may have.
Biomeders Bring down the BOOM!

The FIRST, annual Biomed B-ball tournament between faculty/staff and students was held on April 25th at the UC. Thanks to everyone who participated and special thanks to Dr. Sarah LePage for organizing the event!

Final score on next page!
The score was a nail-biting 19-21 with faculty & staff claiming the victory!

Representing faculty and Staff were Tarek, Pavneesh, Jibran (LeBron), Anish (Pavneesh's son and our star ringer!), Stephanie Bradley (volleyball, turned B-ball star), Sarah Donato and Sarah LePage (both Sarah's had the most hustle during the game!). Students were very well represented by Kathy J, Laura Austin, Anita Luu (all 3 were amazingly enthusiastic and great sportspeople!), Paul Del Rio, Matthew Deratnay (carried their team to a 19-19 tie), Mackenzie Wong and Mia Cadieux (both amazing b-ball players!).

REMATCH ANYONE??
Tree-hugers unite!

On a freezing Saturday morning, faculty (Gord, Yamashiro and Tarek), staff (Sarah LePage, Mina and her husband and Kim) and graduate students (Anita Luu) represented Biomed at Guelph lake to plant trees. Fun was had by all and what a great legacy to leave behind!
Upcoming events

12th Annual Neuroscience Research Day

Save the Date: Wednesday May 1, 2019

Arboretum Centre
University of Guelph

An excellent opportunity for the diverse neuroscience community at the University of Guelph to network and exchange ideas.

A chance for undergraduates, graduate students, and post-docs to present their work and interact with neuroscientists from across campus.

Additional information and Call for Talks and Posters will be forwarded closer to the day.
As usual, my door is always open...

so pop in for a chat anytime!!

Tarek Saleh
Dept. Chair