Welcome to 2019!

Happy New Year! Not sure what the statute of limitations is on that, but I hope you all had a peaceful and relaxing holiday season with friends and family. We had a lot to be thankful for as we celebrated our accomplishments in 2018. I am confident we will have even bigger and better accomplishments and celebrations in 2019 and beyond.

I wish you all the best in health, happiness, and continued success. Cheers!
Fond farewell to Karla and Frances

It was with sad emotions that Biomed and Patho faculty, staff and students gathered to wish both **Karla De Uslar** and **Frances Graziotto** all the best in their new positions on main campus.

Karla has accepted a financial clerk position with the Animal Food Lab, and Frances is the new financial manager for the Central Animal Facility.

Karla has been with us for 19 yrs and Frances for almost 13, and they have made a tremendous contribution and impact on the productivity of our faculty...THANK YOU!!!

All the best Karla and Frances!!
You may be gone, but you will not be forget!
**NIIG Rounds**

**NeuroImaging Interest Group**

“Substance Use and Schizophrenia: Cracking the Chicken-or-Egg Problem”

This talk will combine pharmacological, behavioural, electrophysiologic and pre-clinical MRI (resting-state functional connectivity and magnetic resonance spectroscopy) approaches to study the neurobiological basis of substance use disorders in schizophrenia.

**Jibran Y. Khokhar, Ph.D.**  
Assistant Professor  
Department of Biomedical Sciences  
Ontario Veterinary College at the University of Guelph

**Wednesday January 16th 2019 @ 4pm**

PGCRL, 3rd floor Multi-media room  
686 Bay Street, Toronto M5G 0A4

**Sign up for the NIIG mailing list**

**Refreshments will be served**

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**Dr. Jibran Khokhar** gave a talk on January 16th at Sick Kids Neuroimaging Interest Group titled: *Substance Use and Schizophrenia: Cracking the Chicken-or-Egg Problem.*

**Congrats Jibran!**
Dr. Tami Martino was very honoured and excited to give a *TedX talk* on Saturday January 19, 2019.

Topic was “*Circadian Medicine will Forever Change the World*”. The talk was about how every cell in our body connects with just light.

**Photo:** *Circadian Desynchrony and Social Jet-Lag. The upper left panel shows our region from space – Guelph, Kitchener-Waterloo, Hamilton – from the International Space Station. We light up the sky at night with light that should not be there – and is hazardous to our health!*

The Centre for Cardiovascular Investigations hosted Distinguished Cardiovascular Scientist Dr. Brian Foster, PhD, Director of Cardiovascular Biochemistry at Johns Hopkins University School of Medicine – Thursday Jan 25, 2019.

Photo from the event with the Distinguished Scientist, and Executive faculty, graduate and undergraduate students (including many Biomeder’s) who helped to organize the event.

Dr. Tami Martino was appointed to the University of Guelph’s GenEQ Team. The GenEQ initiative is led by Dr. Charlotte Yates (Provost and Vice President Academic) with leadership and support from across UoG. Dr. Martino is hoping to shed light on some of the great research endeavours that our science laboratories do related to women’s health. *If you have any suggestions of work being done in Biomed labs, please send an email anytime to tmartino@uoguelph.ca.*  

*Thanks Tami!*
Jim Petrik and colleagues in the news!

Study shows benefit of vascular normalization in OV therapy for advanced epithelial ovarian cancer. The authors of this study are: Kathy Matuszewska, Lisa A. Santry, Jacob P. van Vloten, Amanda WK Au Yeung, Pierre P. Major, Jack Lawler, Sarah K. Wootton, Byram W. Bridle, Jim Petrik

Jim is studying the use of viruses to treat cancer, which until now have seen acute vascular shutdown as a positive response to oncolytic virus (OV) therapy. This novel process, which is characterized by the drastic reduction of blood flow to a tumour after treatment, is believed to make OV treatment more effective by increasing oxygen starvation in cancer cells and sequestering the viruses within the tumours.

Jim is part of a team of scientists partially funded by the Terry Fox Research Institute (TFRI) is challenging this paradigm after finding that vascular normalization – rather than shutdown – leads to more effective OV therapy. These findings, which were published in Clinical Cancer Research (September 2018), could open the door to improving the use of OVs for advanced epithelial ovarian cancer (EOC).

To reach this conclusion, Dr. Bridle and colleagues created a novel therapy that combined a drug named 3TSR used to normalize tumour vasculature, with a known oncolytic virus named Newcastle Disease Virus, known for its effectiveness in gynecological malignancies.

Congrats Kathy and Jim!

Byrum Bridle (seated), Jim Petrik and Sarah Wootton
After almost 30 years, Dr. King retires from OVC!

Thanks to Kim Best and Sydney Savedra for organizing a fantastic retirement party for Dr. Allan King. Thanks also to Jon LaMarre for being our M-Cee and keeping all the speeches short and sweet!

Congratulations Allan and we wish you all the best in retirement!

See you on the golf course!
More retirement pics...!
Dear Friends

Thank you for celebrating my retirement, a milestone in my life. I was very touched by the tributes, gifts and friendship, you truly are my department family. You make it hard to leave so I will stay. I will be in the department but not as regularly. I hope that doesn’t mean I can’t keep my new golfing equipment, I really look forward to testing them and improving my game. They will always remind me of my friends in Biomedical Sciences and OVC.

Once again thank you

Allan
In addition to receiving a travel award from STEMCELL Technologies to present at the North American Regenerative Medicine (NAVRMA) meeting in September, STEMCELL also interviewed Dr. Sarah LePage for their website. Feel free to check it out!

https://www.stemcell.com/technical-resources/educational-materials/sarah-lepage.html
Thanks to Charly McKenna (MSc with Tony Mutsaers) for organizing a Wellness road trip to pick up some plants for those in Biomed wishing to cheer up their workspace! All plants went to very good homes/desks/offices within a few hours!!

ENJOY AND BE WELL!
New in the Histo suite...!

Thanks to a collaboration with Dr. Andrea Clark from HHNS, we are excited to add a Leica Autostainer XL and CV5030 Coverslipper to the Histology Suite.

Please contact Jodi Morrison (jmorris7@uoguelph.ca) for more information.
The Department of Biomedical Sciences recently acquired a *Droplet Digital PCR system* from Bio-Rad.

On **Tuesday, February 26**, Bio-Rad will host a training session in **OVC 1642 from 12:00 pm – 1:30 pm** for anyone interested in this technology. Digital PCR is ideal for measurements of copy number variation, rare sequence detection, gene expression, target DNA/RNA, and microbial quantification. This technology offers flexible digital PCR chemistry that can use Taqman hydrolysis probes or EvaGreen assays for high-precision absolute quantification of nucleic acid targets without the need for a standard curve.

If you are interested in attending, please RSVP with Monica ([mantenos@uoguelph.ca](mailto:mantenos@uoguelph.ca)) by **Tuesday, February 19**.

**Lunch will be provided!!**
Upcoming events

CTRIMN FACULTY LECTURE SERIES W19

Fridays, Jan. 25 – April 5

10 – 11.20 AM, Room 1642
Department of Biomedical Sciences, OVC.

• Jan 25: Osteoarthritis: Challenges and Opportunities for Regenerative Medicine by Prof. Mark Hurtig, Department of Clinical Studies, OVC.

• Feb 1: Investigating The Mechanisms By Which Integrin Apha1beta1 Protects The Knee From Osteoarthritis by Prof. Andrea Clark, Department of Human Health and Nutritional Sciences, CBS.

• Feb 8: Novel Therapeutic Strategies to Counteract Cartilage Destruction during Osteoarthritis by Prof. Mohit Kapoor, PhD, Krembil Research Institute, Toronto.

• Mar 1: Status After A Decade With Equine Cord Blood MSCs by Prof. Thomas Koch, Department of Biomedical Sciences, OVC

• Mar 8: Where Biology Meets Biomedicine: Tales Of Regeneration From Lizards In The Lab by Prof. Matt Vickaryous, Department of Biomedical Sciences, OVC.

• Mar 15: Angiogenic Mechanisms Associated With Tissue Regeneration by Prof. Jim Petrik, Department of Biomedical Sciences, OVC.

• Mar 29: Pluripotent Stem Cells – The Swiss Army Knife of Cell Therapies by Prof. Sarah Lepage, Department of Biomedical Sciences, OVC.

• April 5: Synovial Joint Cellular Therapies by Prof. Mark Hurtig, Department of Clinical Studies, OVC.

Hosted by The Comparative and Translational Regenerative Medicine Network at Guelph as part of graduate course BIOM*6712
Upcoming events

RM@GUELPH INVITED SPEAKER
PROF. MOHIT KAPOOR

“Novel Therapeutic Strategies to Counteract Cartilage Destruction during osteoarthritis”
Friday, February 8th, 2019
10.00 AM, Room 1642, Biomed Sci, OVC

Dr. Mohit Kapoor is the Director of Arthritis Research Program (the largest multidisciplinary Arthritis Research Program in Canada) at the University Health Network (Toronto), where he is directing basic, clinical, and translational research in orthopedics, rheumatology, hand and osteoporosis programs.

He is the Tier 1 Canada Research Chair in the Mechanisms of Joint Degeneration. Dr. Kapoor’s translational research program is directed towards: (1) Understanding the complex cellular and molecular mechanisms associated with joint destruction during osteoarthritis; (2) Identifying reliable biomarkers for early identification of patients with osteoarthritis to enable early intervention; (3) Identifying novel therapeutic targets to stop/delay osteoarthritis and restore joint function.

His research is funded by various research organizations including the Canadian Institute of Health Research (CIHR), Canadian Foundation for Innovation (CFI), Natural Sciences and Engineering Research Council of Canada (NSERC), Krembil Foundation, The Arthritis Society, Stem Cell Network, etc. He also sits on review panels & boards of various research/funding organizations across the globe. His work has been published in reputed journals including Nature Medicine, Science Translational Medicine, Annals of The Rheumatic Diseases, Nature Reviews Rheumatology etc.

Hosted by the Regenerative Medicine @ Guelph Network
Important update!

To all faculty and staff submitting OR-5 forms or requesting a room booking, please note that we are now moving to a new org account:
- ovcsas.biom@uoguelph.ca

Eventually the following email addresses will be phased out:

biomor5@
roombiom@

but for now they are being forwarded. PLEASE ensure you send your OR-5 forms and room booking requests to this new address. THANKS!!

Bit of fun in BIOM*6110...

Thomason Lab -- Data collection for Limb-biomechanics projects

In the field with a live horse
Recording device on saddle pad
Wires to recording device
Sensors on foot

In the 6110 Lab module, with a live ‘volunteer’
Saddle pad with recorder
Wires wrapped to leg
As usual, my door is always open...

so pop in for a chat anytime!!

Tarek Saleh
Dept. Chair