The Biomeder gets a new look!

Time flies when your having fun! As this is Volume 36, that means it has been exactly 3 years since I began my position as chair and volume 1 was published. I thought it was time for a new look for the department newsletter.

So here we are. Hope you like the new look...ENJOY!
Tami Martino's research quoted in BBC news

Dr. Tami Martino was pretty excited to be quoted by the BBC news for her research innovating circadian medicine for animals and humans!

Check out the full story here: http://www.bbc.com/future/story/20190904-is-there-a-worst-time-of-day-to-get-sick

Tami also gave a TedX talk, which can now be found on YouTube, about her research on Circadian Medicine for cardiovascular disease, and how circadian medicine can change the world. She also talk briefly about applying it to veterinary medicine, and OVC. If you have 13 minutes - click the link below to get a "big picture" on Tami's research program on human/animal health:

https://m.youtube.com/watch?v=r6x9Dc73ja4

Congrats Tami!
A publication on horse-related information from around the world, has published the research findings of from Dr. Jeff Thomason's lab. The results were generated by OVC student, Alexis Szpakowski and graduate student Danielle Halucha.

OVC student Alexis Szpakowski presented her findings on the interaction between body size and surface type on hoof loading at the recent International Society for Equitation Science conference at the University of Guelph. “Footing is very important simply because the characteristics of each surface directly affect the loading of the hoof,” Szpakowski says. “I loved the hands-on aspect of data collection in this study and how even preliminary results, such as mine, can contribute to a growing body of knowledge to improve equine health and help reduce injuries related to footing including lameness and limb fractures.”

Graduate student Danielle Halucha, also with the college, presented findings at the conference from her study on asymmetrical limb loading in thoroughbred racehorses as a possible cause for injury. Halucha’s study looked at risk factors for injury and loading of the hoof under different conditions. These conditions were chosen from the Equine Injury Database and current epidemiologic studies conducted on North American racehorses.

The idea that the horse “took a bad step” suggests that the variability and the outliers in the data set collected might provide more information than the magnitude of loading or mean changes in loading when identifying risk factors for injury.

Well done Jeff, Alexis and Danielle!
Avicanna (TSX: AVCN) Enters an Exclusive Research Agreement with the University of Guelph for Proprietary Cannabinoid-based Products and Formulations to Treat Psychiatric Disorders.

TORONTO, Sept. 13, 2019 /CNW/ – Avicanna Inc., a biopharmaceutical company focused on the development, manufacturing and commercialization of plant-derived cannabinoid-based products, is pleased to announce that it will further the research and development and pre-clinical analysis of its proprietary prescription and over-the-counter (“OTC“) cannabinoid products and formulations through an exclusive research agreement with the University of Guelph in Canada for a project to be performed by Dr. Jibran Khokhar, Assistant Professor at the University of Guelph, Ontario Veterinary College, Department of Biomedical Sciences, as principal investigator.

“We believe the studies that we have designed with Dr. Khokhar, which will be performed by his team at the University of Guelph, will provide a unique opportunity to evaluate disorders of brain health and are an essential step in a committed research program for evaluating the role of cannabinoids as therapies for several human neurological disorders,” said Dr. Amza Ali, the Company’s Chief Medical Officer.

The collaboration with the University of Guelph will focus on evaluating a variety of dosage forms on preclinical models of several human psychiatric conditions, including depression, anxiety, schizophrenia, PTSD and substance abuse. A unique aspect of this collaboration is to determine brain cannabinoid levels and cerebral activity function using electrophysiology and behavioral methods with various Avicanna formulations and common to rare cannabinoids. The studies under this agreement are expected to take two (2) years and the cost of the studies are expected to be approximately $300,000.

Congrats Jibran!
Vaping cannabis just one time can cause prolonged brain changes, according to the first-ever study of brain impacts of vaping by University of Guelph researchers – a finding that raises further concerns about the practice growing in popularity among youth.

The study revealed that a single exposure to THC can change brain activity in ways that resemble changes seen in schizophrenia, especially in regions involved with cognitive function, even in individuals lacking risk factors for the illness. It also found that these changes last for up to a week after the exposure. “Even a single exposure to THC can change brain patterns and function,” said study co-author Prof. Jibran Khokhar. Published this week in the Canadian Journal of Addiction, the study was performed on rats and is the first to investigate the brain effects of vaping THC in animals or humans.

Read the full story here: https://news.uoguelph.ca/2019/09/vaping-cannabis-only-once-can-impact-the-brain-according-to-a-first-ever-u-of-g-study/

In addition, here is some of the news coverage for our recently published work:

AM640: https://omny.fm/shows/kelly-cutrara/study-shows-brain-activity-is-dampened-by-vaped

CTV Kitchener: https://kitchener.ctvnews.ca/mobile/video?clipId=1789315

Way to go Jibran!
Dr. Jibran Khokhar continues his quest to spread the word on his research. He recently presented his work at UTM Psychology titled: "Substance Use and Schizophrenia: Cracking the Chicken-or-Egg Problem"
A conference for North American Veterinary Regenerative Medicine Association (NAVRMA) was held at Niagra-on-the-lake on Sept 8-11. This conference typically goes between the East and West coast of the US, but for the 1st time, was led and organized by Dr. Thomas Koch and held in Ontario this year.

The event was very well attended with over 150 participants (including basic scientists and clinicians). Numerous stakeholders from the University as well as Equine Guelph and the racehorsing industry were present. This was a great way to showcase both equine research as well as advancements in stem cell and regenerative medicine.

As part of the conference, a poster presentation was held and the winner of the 1st place award went to our own Olivia Lee for her poster titled "Effects of Dosing, Timing and Pre-Activation on the Immunomodulatory Effects of Mesenchymal Stromal Cells"

Congrats Thomas and Olivia!
On Sunday September 8th, the fourth Ovarian Cancer Canada Walk for Her took place at the Arboretum. Dr. Jim Petrik has been co-chairing the walk and Kathy Matuszewska and Madison Pereira have also been part of the organizing committee for over 3 years, having raised more than $80,000 for ovarian cancer research, awareness and education. Watch out for updates on how you can get involved in next year’s walk on September 14th, 2020!
We hope your fall semester is off to a great start! First and foremost, we just want to welcome all new incoming graduate students to the department. Although many of you attended the graduate student orientation, and most students in the department know who we are, we wanted to briefly introduce ourselves. We are both the graduate student representatives and peer helpers for the Department of Biomedical Sciences.

As the graduate student representatives, our role is to promote a positive graduate experience and act as a liaison to faculty and staff. Part of this role includes planning social events for graduate students in the department. To welcome the new graduate students, we will be hosting a **Graduate Student Meet and Greet on October 9th**. This will take place from **6-9pm at 74 Lounge** (located in the back of Brass Taps, the local bar in the University Centre on main campus). We also invite any comments and/or suggestions for future graduate student events!

Apart from our role as graduate student representative, we are peer helpers for the department. Our goal is to provide guidance and resources to promote good mental health and well being for graduate students. Some of our roles include providing students with peer support, referring students to appropriate services and programs, and to act as a liaison with the OVC counsellor Bruno Mancini. We want to let you all know that we are here for you! If you would like to meet and chat anytime, please don’t hesitate to e-mail either Kathy (kjacynia@uoguelph.ca) and/or Anita (aluu@uoguelph.ca) at any time, all discussions will be strictly confidential.

We also have two ongoing activities in the department: a **Monthly Coffee House** and a **“Lets Talk About It” board**. The monthly Coffee House style event has free coffee and treats! The purpose of this event is to allow students to get together regularly, and to talk to one another in a safe and judgment-free environment. Whether it is to vent about a protocol that has not been working, or just to take a midday break from the lab, the coffee house is the place to be! The “Lets Talk About It” board is in the Biomedical Sciences Common Room. Staff, faculty and students are ALL welcome to contribute by writing a message on the board regarding a mental health experience they have encountered (which can be signed or anonymous). It can include anything- having a grant rejected, feeling anxious about your research project, a situation or experience that made you feel a certain way. All the supplies (i.e.: speech bubbles for submitting a story, and notes for encouragement) are in the common room on the board. If you don’t feel comfortable writing your story by hand, please consider sharing it via this google form: [https://goo.gl/forms/1g21wdYtwjrRPbOI2](https://goo.gl/forms/1g21wdYtwjrRPbOI2), and we will print and post for you!

We hope that everyone is off to a great start to the semester and that we get the chance to meet each of you newcomers sometime soon, say, at our upcoming Meet and Greet perhaps? Best, Anita and Kathy
United Way Campaign Kick off!

Support U of G’s United Way Campaign – Make Local Issues #UNIGNORABLE. This year, U of G’s goal is $620,000 and beyond! President Franco Vaccarino announced the goal at the campaign’s kick-off barbecue on Sept. 24. “Through our involvement with the United Way campaign, we aim to improve life – our singular purpose here at the University of Guelph,” he said.

Our department has 2 graduate student representatives on the OVC United Way campaign committee, Shahnaza Hamidullah (Khokhar lab) and Simran Bhullar (Madan’s lab).

In the past few years, Biomeders have given most generously to this campaign, EXCEEDING our target fundraising goal!

Please continue this trend of generous giving during this year's campaign!

Keep up the great work Biomed!!
As usual, my door is always open...

so pop in for a chat anytime!!

Tarek Saleh
Dept. Chair

All hail the "King" of Biomed swag!!

Proof that I am not ALL work and NO play!