NSERC Funding Success!

CONGRATULATIONS to Drs. Samantha Payne and Giannina Descalzi on receipt of their NSERC funding!

Sam was funded $31,000/yr for 5 yrs for her project on "Nerve Dependency of Regeneration", plus a $12,500 ECR supplement.

Giannina received $37,487 from the Research Tools Initiative competition for "Biochemical measures of gene expression networks and neural circuits".

An amazing accomplishment by both of our Early Career Researchers. Well Done!
Biomed has secured a partnership with the Centre for Commercialization of Regenerative Medicine (CCRM) and its subsidiary, OmniaBio, that will have CCRM/OmniaBio leasing lab space in the OVC for training purposes.

This lab space will be retrofitted specifically to support the cell culture training of a growing workforce at CCRM/OmniaBio; OmniaBio is intending to hire 500 people by 2024!

They will be doing this in partnership with another group called CATTI (Canadian Advanced Therapies Training Institute), a training organization to support GMP manufacturing of human cell/gene therapies.

What this means for the OVC/UofG is twofold: 1) CCRM/OmniaBio employees will be regularly visiting Biomed/Guelph, meaning ample networking opportunities for undergrads/grad students, and 2) Their training space will also be used for a new Regenerative Medicine graduate course being developed (BIOM*6930; 1 credit, 2 semester), so our grad students can experience industry-specific training within this course! The course and in-house practical training are part of the Collaborative Specialization in Regenerative Medicine program based in Biomed.

Because CATTI will be spearheading this training, they will be the primary tenants of the space. The leased space is located in room 1611. They are interested in meeting with faculty to discuss their learning paths and ideas for training grad students for the cell+gene therapies field.

Huge thank you to Dr. Sarah LePage for nurturing this relationship and being a key player in this partnership going forward!
It is my pleasure to share the news that Dr. Pavneesh Madan has been recognized as a Community Builder and received the Guelph & District Multicultural Award 2022 during Guelph's multicultural Fair.

Dr. Pavneesh Madan receives Multicultural Award!

Congrats Pavneesh!

May 26th, 2022
Dr. Pavneesh Madan
145 Dinmon Ave.
Guelph, ON
N1G 3C5

Re: Guelph & District Multicultural Award-2022

Dear Dr. Madan,

The GDMF Board of Directors and Award Committee gratefully acknowledge your outstanding contributions to the community and would like to take this opportunity to thank you for your dedication and the generosity of your time and skills. We are deeply grateful for your efforts, and it pleases us immensely to be able to recognize you with the 2022 Guelph & District Multicultural Award. Congratulations!!!!!

The award presentation will take place on Friday, June 10th, following the Opening Ceremony of the 2022 Multicultural Festival (6:30 p.m. Mainstage, Riverside Park, Guelph). Please confirm your attendance by Friday, June 3rd, 2022 and extend an invitation on our behalf to your nominators, family and friends to attend the award presentation ceremony.

Thank you again for your rich contributions to the community, and looking forward to hearing from you.

Sincerely,

Ann Saxena
President, Board of Directors, GDMF Inc.

Introducing in 2007, the Guelph & District Multicultural Award provides everyone with an opportunity to recognize the exceptional contributions of any individual or association that makes a difference in our community. Local Associations and Organizations are encouraged to submit their nominations for this special recognition.
Pavneesh's Teaching Award!

OVC Undergraduate Teaching Award

Dr. Pavneesh Madan, Department of Biomedical Sciences

OVC Undergraduate Teaching Award for outstanding classroom teaching, creating challenging and innovative courses and new and innovative teaching methods as well as publication or presentation of teaching methods to other educators.

This is the inaugural offering of this award for OVC, and I cannot think of a more deserving candidate. Well done Pavneesh!
Laura's students in Atlanta!

Dr. Laura Favetta’s lab presented at ENDO 2022 in Atlanta, Georgia on June 11-14.

PhD student, Reem Sabry and Master students Vivien Truong and Emilia Kourmaeva attended and presented at the ENDO 2022 conference in Atlanta, Georgia.

Reem and Emilia were selected for both an oral and a poster presentation and Vivien presented a poster.

Well done Laura et al.,!
I may have mentioned this in the past, but this is a common practise of publishing papers written as part of the course requirement in Dr. Neil MacLusky's Biomedical Communication course (BIOM*4500). Here is yet another successful example: https://journal.lib.uoguelph.ca/index.php/surg/article/view/6870

Neuropharmacological analysis of the anti-addictive and therapeutic effects of psilocybin

Anthony A. E. Principe
Department of Biomedical Sciences, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada. Faculty supervisor: Neil J. MacLusky.
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Abstract

This review presents a general background of psilocybin pharmacology and discusses its uses as a treatment for various mental health disorders such as depression, anxiety, obsessive-compulsive disorder, and addiction. A summary of preliminary clinical trials utilizing psilocybin in treating each disorder is presented, along with an analysis of the underlying neurobiological mechanisms that may explain the results of these trials. The purpose of this review is to collect and analyze neuropharmacological data and form an understanding of the possible mechanisms underlying psilocybin's long-term positive effects on those suffering from various mental health disorders. Psilocybin may be a crucial tool in altering the neurofunctional anatomy and pathology of various mental health disorders. A 'reset' of these neurological connections could be the basis of psilocybin treatment and may perhaps inspire a novel foundation of neuropsychiatric medical intervention in mental health disorders.

Keywords: psilocybin, depression, anxiety, addiction, neuroplasticity, neurobiological

Well done Neil!
Charly and Ann's Clinical Trials

Charly McKenna (PhD candidate, LaMarre lab) and Ann Ram (PhD candidate, Petrik lab) are involved in an innovative “seek and destroy” alternative to cancer surgery for people and pets that is being tested for the first time this year at the University of Guelph’s Ontario Veterinary College (OVC).

The treatment combines light-activated nanoparticles called porphysomes along with photodynamic therapy (PDT). “This is a great model to understand how porphysomes and PDT work,” said Charly McKenna, research manager for OVC’s veterinary clinical trials and the Veterinary Medical Innovation Program. Watch the CTV news coverage here:

[https://kitchener.ctvnews.ca/dogs-with-cancer-needed-for-new-therapy-treatment-at-u-of-g-1.5946620](https://kitchener.ctvnews.ca/dogs-with-cancer-needed-for-new-therapy-treatment-at-u-of-g-1.5946620)

Get more on this exciting trial being conducted here:

[OVC Researchers Test ‘Seek and Destroy’ Cancer Treatment - U of G News (uoguelph.ca)](http://uoguelph.ca)
Giannina Presents at UofG Animal Tribute

UofG held its 4th Annual Animal Tribute at Peter Clark Hall and our own Dr. Giannina Descalzi was asked to present her research and how animals have contributed to her success as well as advancing medicine in the field of chronic pain research.
Dr. Viloria-Petit visited the National Polytechnic Institute (NPI) in Mexico to exchange techniques with the laboratory of Dr. Eva Ramon-Gallegos. This exchange is expected to advance greatly the current collaborative research between the two researchers, aimed to test the anti-cancer effects of photodynamic therapy (PDT) combined with a nanovaccine developed at the NPI. Ana Valeria Cells, a MSc student in the laboratory of Dr. Ramon-Gallegos at the IPN, is currently visiting the laboratory of Dr. Viloria-Petit to develop this project. Ana Valeria was awarded the prestigious Emerging Leaders of America Program (ELAP) Scholarship from Global Affairs Canada to come to Guelph as a Visiting Research Student. Congratulations to Ana Valeria and Welcome to Guelph!!!

Dr. Ramon-Gallegos (left) and Viloria-Petit doing calculations to apply PDT to tumours in mice

Ana Valeria and Dr. Viloria-Petit prepared to apply PDT to tumours in mice

The Ramon-Gallegos lab with Dr. Viloria-Petit in Taxco, Mexico.

The Viloria-Petit lab at the Bread Bar celebrating Vanessa Huntley’s MSc degree and welcoming another woman to the team: Ana Valeria Cells

Ana Valeria inaugurates her first month at Guelph by biking 100 Kms in the Tour de Guelph on June 26th. Together, all cyclists raised over $115,000 to benefit Guelph General Hospital. Way to go!!


Please do not hesitate to knock on my door (with your mask!) or contact me by email if you have ANY questions/concerns at tsaleh@uoguelph.ca

Stay safe, stay well

#biomedstrong