Physiology UNIVERSITY OF TORONTO PhysioLINK

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MESSAGE FROM THE CHAIR



On behalf of the Department, I would like to extend my sincere thanks to Dr. Catherine Dulac for visiting us last week and delivering the annual Macallum and FIP Keynote Lectures. Catherine enjoyed her interactions with the trainees and faculty members immensely. A special thank you goes out to the FIP Co-Chairs, Ankur Bodalia Kirusanthy Kaneshwaran & Hanna Kim, and their Organizing Team for their hard work. They arranged an outstanding day of research and we are very proud of their accomplishments.

Thank you also to the many faculty and post-doctoral fellows who participated as judges. It was great to see everyone in the department come together for a fantastic day of science and fun.

Please join me in congratulating all of the winners below.

Graham L. Collingridge, FRS, FMedSci, FRSB, FBPhS Ernest B. and Leonard B. Smith Chair Department of Physiology

HONOURS & AWARDS

Congratulations to the following students on receipt of an **Undergraduate Award**:

PSL372H1F Mammalian Physiology Laboratory – Imran Al-Karim Ladak



PSL374H1S Advanced Physiology Laboratory – Mandy Kar-Wai Yuen



Colin Bayliss Award (Specialist Student) - Emma Mcllwraith



Christopher Perumalla Award (Major Student) - Stefan Jevtic



CIHR Funding Decisions

Competition Year/Month: 2016/10

Congratulations to the following primary and status-only faculty members on their recent successes in CIHR's Fall 2016 Project Grant competition.

"The Project Grant: Fall 2016 competition has approved 475 research grants, plus an additional 121 bridge grants, for a total investment of approximately \$359 million. The 475 grants approved were awarded to 461 individual nominated principal investigators (14 NPIs were awarded two grants). Of the 475 grants, 108 were awarded to new/early career investigators, and 22 were awarded for Indigenous health research projects. The average grant size/duration is approximately \$729,467 over 4.4 years."

NOTE: The awards are listed under the PI Congratulations to the many coinvestigators awarded grants in this competition. Full list is posted on CIHR's website: <u>http://www.cihr-irsc.gc.ca/e/196.html</u>

| Primary Investigator | Institution Paid | Program | Project Title | CIHR Contribution |
|---------------------------------|--|------------------|---|----------------------|
| Bolz, Steffen S | University of Toronto | Project Grant | Specifically targeting CFTR activity as a therapeutic strategy to normalize cerebral blood flow in heart failure <u>Details</u> | \$466,651 |
| Brubaker, Patricia L | University of Toronto | Project Grant | Mechanisms underlying circadian secretion of the anti-diabetic hormone, glucagon-like peptide-1: therapeutic potential <u>Details</u> | \$765,000 |
| Eubanks, James H | University Health Network (Toronto) | Project Grant | Altered Microtubule Regulation: A Novel Mechanism Underlying Rett Syndrome Pathogenesis? Details | \$390,150 |
| Feng, Zhong- Ping | University of Toronto | Project Grant | Mechanisms underlying novel pro-survival peptides in neuroprotection | \$765,000 |
| Giacca, Adria | University of Toronto | Project Grant | Hepatic signalling of glucose and lipid metabolism in vivo Details | \$761,175 |
| Horner, Richard L | University of Toronto | Project Grant | Control of Breathing during Sleep: Brainstem Mechanisms of Respiratory Control Details | \$948,600 |
| Kavanagh, Brian Patrick W | Hospital for Sick Children (Toronto) | Project Grant | Acute Lung Injury - Directions from Therapeutic Hypercapnia <u>Details</u> | \$688,500 |

| Lewis, Gary F | University Health Network (Toronto) | Project Grant | Novel Aspects of the regulation of intestinal lipoprotein particle secretion in humans <u>Details</u> | \$1,101,600 |
|---------------------|--|------------------|--|-------------|
| Prescott, Steven | Hospital for Sick Children (Toronto) | Project Grant | Chloride dysregulation and neuropathic pain: Linking molecular mechanisms with altered pain processing via identification of cellular and circuit level changes <u>Details</u> | \$876,615 |
| Prescott, Steven | Hospital for Sick Children (Toronto) | Project Grant | Probing the spike initiation properties of primary somatosensory neurons using optogenetics <u>Details</u> | \$845,324 |
| Zhen, Mei | Sinai Health System (Toronto) | Project Grant | An Anatomic and Genetic Dissection of Synapse Formation and Synapse Remodelling <u>Details</u> | \$719,100 |

Bridge Grant Recipients

| | University of Toronto | Project Grant | Modulation of cardiac cell signaling with synthetic antibodies, and their characterization as potential therapeutics and probes for basic biological research <u>Details</u> | \$100,000 |
|--|--------------------------|---------------|---|-----------|
|--|--------------------------|---------------|---|-----------|

PHYSIOLOGY SEMINAR SERIES

~ Eligible for PSL1000H/PSL2000H Course Seminar Attendance ~



NEWS FROM GASP

A Thank You, From GASP President



Frontiers in Physiology Research Symposium (FIP) is the annual research day for the department. Although there is support from the faculty and staff, this event is mainly organized by GASP, specifically the three co-Vice Presidents (Ankur Bodalia, Kiru Kaneshwaran, Hanna (Ja Hyun) Kim), and their FIP committee. Many may not be aware, but the planning for this research day began fall 2016, nine months before the event took place.

I would like to congratulate Ankur, Kiru, and Hanna for the outstanding job they did in the planning and execution of FIP. Although they all worked together, Ankur and Kiru headed up procuring a record amount of sponsorship, and Hanna oversaw the logistics, including the great food, logo design, and arranging the FedEx discount. Then, during the day, all three worked non-stop to ensure the success of FIP. Hanna and Kiru managed the day-of logistics, while Ankur was in charge of the auditorium. Although the FIP committee played a pivotal role in planning FIP, without the great leadership from the co-VPs, the day would not have been as successful as it was. Due to their hard work and dedication, FIP 2017 was phenomenal. Thank you Ankur, Kiru, and Hanna, and congratulations for organizing such a great event.

Melanie GASP President

FIP 2017 Surprise



GASP had a secret and it was unveiled at the FIP reception. GASP wants to try and recreate a sense of community within the department. Which isn't easy, since we are spread out over various institutions, and conduct research across four different platforms. But, at the end of the day, we are all students in Physiology, and should feel like we all belong to the department. That is why, **starting September 2017**, **GASP is introducing Physio Cup!** This cup will be awarded annually at FIP to the platform which has demonstrated the greatest involvement and dedication to GASP. This will be determined through the collection of points throughout the academic year. Participating in GASP-run events will earn each person points, which will ultimately go towards their platform, and if PIs participate, they earn double the point value. (*All the rules will be released in the coming months*).

So ultimately, participating in GASP events, where you get to interact and meet fellow physiology students, will earn you points. The platform with the most points will be awarded Physio Cup, and bragging rights for the year. Get ready for the start of Physio Cup, September 2017, and check out the trophy, which is housed in the display case around the corner of the Physiology Seminar Room.

Will your platform have what it takes to be crowned the first winner of Physio Cup?

Melanie GASP president

Message from this year's FIP co-organizers:

On Tuesday May 9th, 2017, 169 members of Department of Physiology, University of Toronto, including faculty, staff, and trainees, came together for the **37th Annual** Frontiers in Physiology (FIP) Research Symposium. Many of the ongoing research stories in the Department of Physiology were showcased by our trainees through 13 oral and 52 poster presentations. We were privileged to have Professor Catherine Dulac, from the Department of Cellular and Molecular Biology at Harvard University, share her lab's outstanding body of work with us as our FIP keynote lecturer. We hope her interdisciplinary work will serve as encouragement for our trainees to pursue cross-platform collaborations within the Department of Physiology. Our inaugural edition of "PI Power Talks" was very well received. A representative from each of our four departmental platforms highlighted the outstanding achievements and innovative technical approaches in their respective platforms. This was a great way to generate interest and awareness of the work being done and research tools available at different institutions and platforms within the department. We hope that this will set the foundation for the exchange of ideas and further collaborations. Overall, FIP 2017 was a great exchange of scientific ideas and inspiration!

We would like to congratulate our award winners for their outstanding oral and poster presentations.

The following students took home top honours:

1st Place Oral Presentation: Sarah Wheeler (Brubaker Lab)
2nd Place Oral Presentation: Josianne Mapplebeck (Salter Lab)
3rd Place Oral Presentation: Jane Wu (Tymianski Lab)

1st Place Poster Presentation: Emily McGaugh (Nostro Lab)
2nd Place Poster Presentation: Tali Farine (Lye Lab)
3rd Place Poster Presentation: Kiru Kaneshwaran (Orser Lab)
4th Place Poster Presentation: Melanie Markovic (Brubaker Lab)
5th Place Poster Presentation: Moushumi Nath (Frankland Lab)

Teaching Assistant Award: Kaori Austin (Brubaker Lab)

Most importantly, FIP 2017 would not have been possible without the efforts of our FIP Organization Committee (FIP COM) and the Graduate Association for Student in Physiology (GASP) council. The 8 members of FIP COM did a fantastic job of tackling everything from raising funds to handling the logistics of the event. With their help we were able to *fundraise over \$9000* from various sponsors and hold a successful event! Thank you FIP COM!

FIP Organization Committee members:

Hima Gohil (M. Wheeler Lab) Bona Kim (Lye Lab) Feiya Li (Sun Lab) Neruja Loganathan (Belsham Lab) Vivian Szeto (Feng Lab) Sami Tabarrah (Monnier Lab) Lucy Yeung (Giacca Lab) Moushumi Nath (Frankland Lab)

Our GASP members were pivotal in executing the event as they helped out with various tasks from set-up to ensuring the comfort of our sponsors and attendees during the day of FIP. Finally, a special thank you to Lina Tran (Frankland Lab) for creating our official FIP 2017 website! This served as an excellent resource for all attendees to get the most out of FIP 2017.

Y'all were a great audience...Stay tuned for more photos!

Ankur Bodalia, Kiru Kaneshwaran, Hanna (Ja Hyun) Kim Frontiers in Physiology Co-Organizers Co-Vice-Presidents, Graduate Association of Students in Physiology

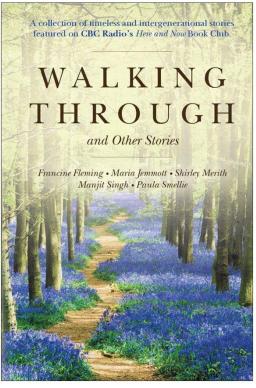
AN AUTHOR AMONGST US

Congratulations to **Paula Smellie** (Business Manager) on publishing her first book! Paula contributed to a work of short fiction that was just published recently entitled **"Walking Through and Other Stories".** The book is now available on Amazon.com and Amazon.ca.

Meet the authors

Come out and chat with the authors and purchase a signed copy at the following great venues:

- *Sunday May 21, 2017*, Chapters Ajax, 11 am-4 pm, Durham Centre, 90 Kingston Rd
- *Saturday May 27, 2017*, Artfest on the Esplanade, 11 am-5 pm, Esplanade Park, Pickering Civic Complex, One The Esplanade, Pickering
- *Saturday June 3, 2017*, Chapters Mississauga, 12 pm-4 pm, Square One, 189 Rathburn Rd. W



www.walkingthroughstories.com

We want to hear about the great things happening in Physiology.

Please share your accomplishments, awards... Send news items to the Chair's Office c/o e.katsoulakos@utoronto.ca