Physiology and Pharmacology Newsletter

February 2018

Welcome to the February edition of the Physiology and Pharmacology Newsletter. If you have items for future newsletters, please let me know – fbeier@uwo.ca. Awards, grants, invited lectures, new lab members...

The Graduate Program Review took place and we are awaiting the final report. Thanks to everyone who participated! We will now prepare for the Undergraduate Program Review on April 10. Workload and teaching assignments are currently under development and meetings have been scheduled – feel free to contact me if you have any comments or suggestions.

The London Health Research Day will be held on May 10th. Faculty members are encouraged to sign up as judges. More details can be found here: http://www.londonhealthresearchday.ca

Congratulations!!!

- To Andrew Pruszynski for the inaugural Early Career Award from the Society for the Neural Control of Movement (NCM).
- Shinthujah Arulanantham for successful defense of her M.Sc. degree (Supervisor Dr. Lina Dagnino).

Welcome

- Whitney Froese, Vet Tech, in Andrew Pruszynski's lab.
- Dr. Manuela Miranda Rodrigues from Brazil, post doc in Frank Beier's lab.

Graduate Studies News

The School of Graduate and Postdoctoral Students is establishing graduate student representatives to be "Wellness Ambassadors" for every graduate program. These ambassadors will be a contact for graduate students in the program who are looking for advice on the health and wellness resources that are available to students. If there is a graduate student that is interested in taking on the "Ambassador" role for the Physiology & Pharmacology Graduate Program, please contact Tom Drysdale for more information (tadrysda@uwo.ca). There will be new "Ambassador" training sessions by the Wellness Education Centre in May.

Updates from the Research Committee

The Research Committee will be hosting an outreach session aiming to attract undergraduate students to explore research and graduate studies opportunities in physiology and pharmacology. Interactive displays will be set up in the following areas of research: Musculoskeletal, Cardiovascular, Reproductive and Developmental Biology, Clinical and Molecular Pharmacology, and Neuroscience.

Date and time: Tuesday, March 6, 2018 @12:00-4:00 pm

Place: Dental Science Building, DSB 2005

A light Pizza Lunch will be served.

Interested undergraduate students should RSVP to psim@uwo.ca

Calendar

- March 4: 2nd Biennial Inspiring Young Women in STEM Conference, Great Hall; 9:00 a.m. to 5:00 p.m. https://www.eventbrite.ca/e/2nd-biennial-inspiring-young-women-in-stem-conference-tickets-36606931317
- March 27: Department Meeting
- April 2 Physiology and Pharmacology 4th Year Student Poster Day, DSB 2005

- April 10 Undergraduate Review
- November 6 Stevenson Lecture and Research Day

Please try to attend our Seminars on Monday afternoons (3:30 pm in MSB 384, with video broadcast to Victoria Hospital). This month will feature Dr. Peter Rogan (Department of Biochemistry at Western) on March 5; Dr. Seema Bhatnagar from the Children's Hospital of Pennsylvania on March 12; and Dr. Christophe Altier from the University of Calgary on March 19.

On March 26, our graduate students will host the annual Opening Doors event: "Graduate Degrees: Opening Doors To Exciting Careers!". Speakers: Dr. Jason Moreau, Medical Science Liaison, Ferring Pharmaceuticals; Dr. Andrew Collop, Professor and Academic Coordinator, Seneca College.

The full list of seminars and events can be found here: http://www.schulich.uwo.ca/physpharm/about_us/seminar%20and%20events/index.html

Departmental Publications

Blom JN, Feng Q (2018) <u>Cardiac repair by epicardial EMT: Current targets and a potential role for the primary cilium.</u> Pharmacol Ther. [Epub ahead of print]

Cooper TT, Sherman SE, Kuljanin M, Bell GI, Lajoie GA, Hess DA (2018) Inhibition of Aldehyde Dehydrogenase-Activity Expands Multipotent Myeloid Progenitor Cells with Vascular Regenerative Function. Stem Cells. [Epub ahead of print]

Gold N, Frasch MG, Herry CL, <u>Richardson BS</u>, Wang X (2018) <u>A Doubly Stochastic Change Point Detection Algorithm for Noisy Biological Signals.</u> Front Physiol. 8: 1112

Hill DJ (2018) <u>Placental control of metabolic adaptations in the mother for an optimal pregnancy outcome. What goes wrong in gestational diabetes?</u> Placenta. [Epub ahead of print]

<u>Johnston KD</u>, Barker K, Schaeffer L, Schaeffer DJ, <u>Everling S</u> (2018) <u>Methods for chair restraint and training abof the common marmoset on oculomotor tasks.</u> J Neurophysiol. [Epub ahead of print]

Maleki Vareki S, Salim KY, Danter WR, <u>Koropatnick J</u> (2018) <u>Novel anticancer drug COTI-2 synergizes with therapeutic agents and does not induce resistance or exhibit cross-resistance in human cancer cell lines.</u> PLoS One.13(1): e0191766

Medwid S, Guan H, Yang K (2018) <u>Bisphenol A stimulates adrenal</u> cortical cell proliferation via ERβ-mediated activation of the sonic hedgehog signalling pathway. J Steroid Biochem Mol Biol. [Epub ahead of print]

Moszczynski AJ, Strong W, Xu K, McKee A, <u>Brown A</u>, Strong MJ (2018) <u>Pathologic Thr₁₇₅ tau phosphorylation in CTE and CTE with ALS.</u> Neurology. 90(5): e380-e387

Mundinano IC, Fox DM, Kwan WC, Vidaurre D, Teo L, Homman-Ludiye J, <u>Goodale MA</u>, Leopold DA, Bourne JA (2018) <u>Transient visual pathway critical for normal development of primate grasping behavior.</u> Proc Natl Acad Sci U S A. 115: 1364-1369

Nevin CL, Formosa E, Maki Y, Matushewski B, Regnault TRH, Richardson BS (2018) Maternal Nutrient Restriction in Guinea Pigs as an Animal Model for Studying Growth Restricted Offspring with Post-Natal Catch-Up Growth. Am J Physiol Regul Integr Comp Physiol. [Epub ahead of print]

Sinclair KJ, Friesen-Waldner LJ, McCurdy CM, Wiens CN, Wade TP, de Vrijer B, Regnault TRH, McKenzie CA (2018) Quantification of fetal organ volume and fat deposition following in utero exposure to maternal Western Diet using MRI. PLoS One. 13(2): e0192900

Snir JA, Suchy M, Bindseil GA, Kovacs M, Chronik BA, Hudson RHE, <u>Pasternak SH</u>, Bartha R (2018) <u>An Aspartyl Cathepsin Targeted PET Agent: Application in an Alzheimer's Disease Mouse Model.</u> J Alzheimers Dis. 61: 1241-1252

Thompson JL, **Zhao Y**, <u>Stathopulos PB</u>, Grossfield A, Shuttleworth TJ (2018) <u>Phosphorylation-mediated structural changes within the SOAR domain of STIM1 enable specific activation of distinct Orai channels.</u>
J Biol Chem. [Epub ahead of print]

Varaschin RK, Osterstock G, Ducrot C, Leino S, Bourque MJ, <u>Prado MAM</u>, <u>Prado VF</u>, Salminen O, Rannanpää Née Nuutinen S, Trudeau LE (2018) <u>Histamine H₃ Receptors Decrease Dopamine Release in the Ventral Striatum by Reducing the Activity of Striatal Cholinergic Interneurons.</u> Neuroscience. [Epub ahead of print]

Viczko J, Sergeeva V, Ray LB, <u>Owen AM</u>, Fogel SM (2018) <u>Does sleep</u> <u>facilitate the consolidation of allocentric or egocentric representations</u> <u>of implicitly learned visual-motor sequence learning?</u> Learn Mem. 25: 67-77

Whitwell RL, <u>Goodale MA</u>, Merritt KE, Enns JT (2018) <u>The Sander</u> <u>parallelogram illusion dissociates action and perception despite control for the litany of past confounds.</u> Cortex. 98: 163-176

Young SA, **Sherman SE**, **Cooper TT**, Brown C, Anjum F, <u>Hess DA</u>, Flynn LE, Amsden BG (2018) <u>Mechanically resilient injectable scaffolds for intramuscular stem cell delivery and cytokine release.</u> Biomaterials. 159: 146-160

Zhang L, Wang X, Wu Y, Lu X, <u>Chidiac P</u>, Wang G, <u>Feng Q</u> (2018) <u>Maternal diabetes up-regulates NOX2 and enhances myocardial ischaemia/reperfusion injury in adult offspring.</u> J Cell Mol Med. [Epub ahead of print]