

2017

October 2017

New MOU with Japan's National Institute of Physiological Sciences (NiPS)

Dr. Bowie recently hosted a delegation of researchers from Japan's National Institute of Physiological Sciences (NiPS) who spent two days visiting the McGill campus and participating in a research symposium at McGill's Faculty Club. The visit culminated in the signing of a Memorandum Of Understanding (MOU) in the presence of Mr. Hideaki Kuramitsu, the Consulate General of Japan in Montreal. The MOU permits the neuroscience communities of McGill and NiPS to begin the exchange of student and postdoctoral fellows as well as to establish joint research projects. The event was reported in the McGill Reporter <http://publications.mcgill.ca/reporter/2017/10/mcgill-signs-mou-with-leading-japanese-research-institute>



New research could impact Alzheimer's disease prevention

Researchers move closer to understanding enzymes that play a role in amyloid generation. Amyloids are aggregates of proteins that stick together and have been implicated in various human diseases, including Alzheimer's disease. As the enzyme that initiates amyloid formation in Alzheimer's disease, the beta-secretase (BACE1) enzyme has become a prime target in the efforts to prevent the disease. Until now however, the cellular state of the enzyme has not been well understood. A study led by researchers at McGill University's Faculty of Medicine offers a step forward in understanding the cellular state of BACE1 and identified an unexpected role of the enzyme. The results of the study were published recently in the *Journal of Biological Chemistry*. "In the context of Alzheimer's disease, the ultimate goal is to develop small molecule inhibitors, which could precisely decrease the production of amyloid," says Dr. Gerhard Multhaup, Chair of the Department of Pharmacology and Therapeutics at McGill and the study's senior author. Full Story: <http://publications.mcgill.ca/medenews/2017/10/04/new-research-could-impact-alzheimers-disease-prevention/>

September 2017

McGill Pharmacology & Therapeutics MD/PhD student Tianwei (Ellen) Zhou is the recipient of the 2017 Dr. Robert and Sharon Francis Canadian Medical Hall of Fame (CMHF) Award, one of 16 student awards announced by the CMHF on September 22.

Full Story: <http://publications.mcgill.ca/medenews/2017/09/22/mcgill-medical-student-receives-2017-canadian-medical-hall-of-fame-award/>

July 2017

Congratulations to Dr. Bernard Robaire on being selected to receive the Gabriel L. Plaa Award of Distinction at this year's Canadian Society of Toxicology Meeting. This award recognizes individuals who have made outstanding and sustained contributions to the science of toxicology in Canada and service to the Society of Toxicology of Canada. Full story:

<http://publications.mcgill.ca/medenews/2017/07/12/mcgills-bernard-robaire-awarded-2017-gabriel-l-plaa-award-of-distinction/>

June 2017

Congratulations on your latest research publication in the *Journal of Biological Chemistry*
Filip Liebsch, Mark R. P. Aourousseau, Tobias Bethge, Hugo McGuire, Silvia Scolari, Andreas Herrmann, Rikard Blunck, Derek Bowie, and Gerd Multhaup

BACE1 Trimerizes and Regulates Copper Homeostasis

www.jbc.org/content/early/2017/06/21/jbc.M117.779165.long

The “sheddase” BACE1, a prime target in Alzheimer disease research, forms trimers and regulates cytosolic copper compartmentalization

The “sheddase” beta-secretase (also known as the aspartic acid protease BACE1) catalyzes the first step in the production of amyloid beta (A β) peptides, which are central players in the pathology of Alzheimer disease. BACE1 depletion almost completely abolishes A β production, rendering this protease a prime target to attenuate amyloid production. Importantly, we have found new links between BACE1 and copper homeostasis. Copper is an essential bioactive trace metal and altered copper homeostasis has been implicated in both physiological and pathophysiological aging. In our study by Liebsch et al. we highlight that full-length cellular BACE1, independent of the subcellular localization, exists as trimers. Trimerization in cells creates a potential binding pocket for copper ions in the transmembrane region that is essential for BACE1-mediated regulation of copper homeostasis. Therefore, current therapeutic strategies aimed at decreasing BACE1 protein levels should consider the role of this protease in copper homeostasis.

May 2017

Congratulations to **Han (Aileen) Yan**, PhD trainee in Dr. Barbara Hales’ lab, who won a Certificate for Best Presentation at the 8th International Symposium on Flame Retardants. BFR 2017

Hosted by Fera Science Ltd, May 7, 2017- May 10, 2017 in York, UK.

The 'International Symposium on Flame Retardants' is a series of conferences on safety aspects of flame retardants. It will bring together international experts from industry, governments and academia to exchange latest research results and to propose measures to reduce risk from the use of flame retardants. <https://idm360.com/BFR/2017/>

April 2017

Congratulations to **Jace Tabah-Jones** who was recently awarded a CIHR Frederick Banting and Charles Best Canada Graduate Scholarship

Congratulations to **Marc-Olivier Turgeon**, a recent MSc graduate of Dr. Daniel Bernard's lab, for his paper selected as the featured article in the April issue of Endocrinology

https://academic.oup.com/endo/pages/issue_158_04/

Congratulations to **Gauthier Schang**, a Ph.D student in Dr. Daniel Bernard's lab, for his win of a Presidential Poster Award at ENDO2017 in Orlando

April 5, 2017

PHARMACOLOGY UNDERGRADUATE RESEARCH EXPO

MCGILL UNIVERSITY
Department Pharmacology and Therapeutics



*"Promoting excellence in undergraduate
Pharmacology research at McGill."*

PURE 2017

PHARMACOLOGY UNDERGRADUATE RESEARCH EXPO

DATE AND TIME:
Wednesday, April 5th
1:30-5:30pm

LOCATION:
McIntyre Medical Building
Palmer Theatre (room 522)
and 6th Floor Lobby

  Department of Pharmacology and Therapeutics

1:30pm – 1:55pm	Registration / Poster Set-up: 6 th Floor Lobby
2:00pm – 2:15pm	Opening Remarks: Dr. Gerhard Multhaup, Chair and Professor R. Howard Palmer Amphitheatre, Rm 522
2:15pm – 3:00pm	KEYNOTE ADDRESS: Dr. Jonathan Britt, Assistant Professor Department of Psychology, McGill University R. Howard Palmer Amphitheatre, Rm 522
3:00pm – 3:45pm	ORAL SESSION: Session Moderators Dr. Dusica Maysinger & Dr. Anne McKinney R. Howard Palmer Amphitheatre, Rm 522
3:45pm – 5:00pm	POSTER SESSION: 6 th Floor Lobby
5:00pm – 6:00pm	Closing Remarks / Awards Presentation / Cocktail Reception: 6 th Floor Lobby