

DEPARTMENT OF PHARMACOLOGY & THERAPEUTICS LIST OF PUBLICATIONS 2018

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BERNARD, DANIEL

- Brown JL, Xie J, Sones J, Angulo C, Boehm U, Miller A, Toufaily C, Wang Y, Bernard DJ, Roberson MS (2018) Sex- and age-specific impact of ERK loss within the pituitary gonadotrope in mice. *Endocrinology* 159(3):1264-1276.
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BOWIE, DEREK

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- Alexander, RPD, Mitry, J, Sareen, V., Khadra, A. and Bowie D. (2019) Cerebellar stellate cell excitability is coordinated by shifts in the gating behavior of voltage-gated Na⁺ and A-type K⁺ channels (Journal of Neuroscience, under review since Dec 2018)
- Dawe, GB, Venskutonyte, R., Arousseau MR, Kastrup, J. and Bowie D. (2019) Nanoscale mobility of the apo state predetermines channel gating of alternatively-spliced AMPA receptors (Neuron, under review since Dec 2018)
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- Lin YQC, Zhao LL, Clarke PB Effects of acute morphine withdrawal on ultrasonic vocalizations in adult rats: unchanged 50-kHz call rate and altered subtype profile. Psychopharmacology 235:1945-1953 <https://doi:10.1007/s00213-018-4891-y>

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- Hales BF, Robaire B. The Male Germ Cell as a Target for Toxicants. In: McQueen CA, ed. *Comprehensive Toxicology*, 3rd ed. Oxford: Elsevier, 2018. Vol 4, pp. 82-95.
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HÉBERT, TERRY

Published:

- Martin, R.D., Sun, Y., Bourque, K., Audet, N., Tanny, J.C. and Hébert, T.E. (2018) Receptor- and cellular compartment-specific activation of the cAMP/PKA pathway by α -1-adrenergic and ETA endothelin receptors *Cellular Signalling* 44:43-50
- Audet, N., Dabouz, R., Allen, B.G., and Hébert, T.E. (2018) Nucleoligands- repurposing GPCR ligands to modulate nuclear-localized GPCRs in the cardiovascular system *J. Cardiovascular Pharmacol.* 71:193-204
- Sleno, R. and Hébert, T.E. (2018) The dynamics of GPCR oligomerization and their functional consequences. *Int. Rev. Cell Mol. Biol.* 338:141-171
- Poujol de Molliens, M., Létour, M., Devost, D., Hébert, T.E., Fournier, A., and Chatenet D. (2018) New insights into the peculiar role in PACAP signaling and neuroprotection of the 28-38 C-terminal segment and some selected residues *Biochem. Pharmacol.* 154:193-202
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- Bourque, K., Jones-Tabah, J., Mnasri, N., Martin, R.M. and Hébert, T.E. (2018) Combining optical approaches with human inducible pluripotent stem cells in GPCR drug screening and development *Biomolecules* 8:180; doi:10.3390/biom8040180

In press or accepted:

- Martin, R., Hébert, T.E. and Tanny, J.C. (2018) Therapeutic targeting of the general RNA polymerase II transcription machinery. (in press, Chapter in "Epigenetic Inhibitors", Eric Campeau, editor, Wiley Press)
- Martin, R.M., Bouzza, C. and Hébert, T.E. (2018) Organellar G α signalling- GPCR signalling beyond the cell surface (in press, Chapter in "Structure, Function, and Drug Discovery in G Protein-Coupled Receptors", Paul Park and Beat Jastrzebska, editors, Elsevier Press)
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- Powlowski, P., Bourque, K., Jones-Tabah, J., Sleno, R., Devost, D. and Hébert, T. E. (2018) Conformational profiling of the 5-HT_{2A} receptor using FIAsh-BRET (in press *NeuroMethods*)
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- Sleno, R. and Hébert, T.E. (2018) Shaky ground- the nature of metastable GPCR signalling complexes (in press *Neuropharmacol.*)

Submitted articles:

- Khan, S.M., Martin, R.D., Bouazza, C., Jones-Tabaj, J., Zhang, A., MacKinnon, S., Trieu, P., Gora, S., Clarke, P.B.S, Tanny, J.C., and Hébert, T.E. (2018) A novel interaction between G $\beta\gamma$ and RNA polymerase II regulates cardiac fibrosis (in preparation for Cell submitted to bioRxiv-

<https://www.biorxiv.org/content/early/2018/09/13/415935>)

- Poujol de Molliens, M., Jamadagni, P., Létour, M., Devost, D., Hébert, T.E., Patten, S.A., Fournier, A., and Chatenet D. (2018) Design of membrane-tethering peptides derived from the pituitary adenylate cyclase-activating polypeptide receptor 1 and characterization of their neuroprotective properties in neurodegenerative disease models. (submitted to Neurotherapeutics)
- Hoang, T.A., Nassour, H., Martin, R.M., Billard, E., Létour, M., Novellino, E., Caratenuto, A., Tanny, J.C., Fournier, A., Hébert, T.E. and Chatenet D. (2018) Membrane-tethered peptides derived from intracellular loops 2 and 3 of the urotensin II receptor act as allosteric biased agonists. (submitted to J. Biol. Chem.)
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- Fillion, D., Devost, D., Sleno, R., Inoue, A. and Hébert, T.E. (2018) Asymmetric Recruitment of β -Arrestin1/2 by the Angiotensin II Type I and Prostaglandin F₂ α Receptor Dimer (submitted to Frontiers in Endocrinology)

MAYSINGER, DUSICA

- Moquin A, Ji J, Neibert K, Winnik FM, Maysinger D. Encapsulation and Delivery of Neutrophic Proteins and Hydrophobic Agents Using PMOXA-PDMS-PMOXA Triblock Polymersomes. ACS Omega. 2018 Oct 31;3(10):13882-13893. doi: 10.1021/acsomega.8b02311. Epub 2018 Oct 23. PubMed PMID: 30411053; PubMed Central PMCID: PMC6217674.
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- Beus M, Rajić Z, Maysinger D, Mlinarić Z, Antunović M, Marijanović I, Fontinha D, Prudêncio M, Held J, Olgen S, Zorc B. SAHAquines, Novel Hybrids Based on SAHA and Primaquine Motifs, as Potential Cytostatic and Antiplasmodial Agents. ChemistryOpen. 2018 Aug 21;7(8):624-638. doi: 10.1002/open.201800117. eCollection 2018 Aug. PubMed PMID: 30151334; PubMed Central PMCID: PMC6104433.
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G. Dendritic Polyglycerol Sulfates in the Prevention of Synaptic Loss and Mechanism of Action on Glia. *ACS Chem Neurosci*. 2018 Feb 21;9(2):260-271. doi: 10.1021/acchemneuro.7b00301. Epub 2017 Nov 10. PubMed PMID: 29078046

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- Type 2 diabetes is associated with suppression of autophagy and lipid accumulation in β -cells, Jeff Ji, Maria Petropavlovskaja, Armen Khatchadourian, Jason Patapas, Julia Makhlin, Lawrence Rosenberg, Dusica Maysinger*, *J Cell Mol Biol*, Dec 2018.
- Organotypic and primary neural cultures as models to assess effects of different gold nanostructures on glia and neurons. Jeff Jia, Alexandre Moquina, Franck Bertorellob, Philip KY Changa, Rodolphe Antoineb, Julia Luoa, R. Anne McKinneya, and Dusica Maysinger,* *Nanotoxicology*, in press, Dec 2018.

MCKEAGUE, MAUREEN

- Kraus A*, McKeague M*, Seiwert N, Geisen SM, Ziegler N, Trantakis IA, Nagel G, Dörsam B, Kaina B, Thomas AD, Sturla SJ, Fahrner J. 2018. Immunological and mass spectrometry-based approaches for sensitive and quantitative monitoring of the mutagenic DNA adduct O6-methylguanine. *Archives of Toxicology*: 1-14. <https://doi.org/10.1007/s00204-018-2355-0>
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*equal authorship; ‡corresponding author
- Lam J, McKeague M‡. 2019. Dietary modulation of mitochondrial DNA damage: Implications in ageing and associated diseases. *The Journal of Nutritional Biochemistry*. 63: 1–10.
- Awwad AM, McKeague M‡. 2018. Riboswitches and synthetic aptamers: a head-to-head comparison. *Aptamers*. 2.
- DeGirolamo A, McKeague M, Pascale M, Cortese M, DeRosa MC. 2018. Chapter 3: Immobilization of aptamers on substrates. *Aptamers for Analytical Applications: Affinity Optimization and Method Design*. Wiley-VCH Verlag GmbH & Co. (Ed).

MCKINNEY, ANNE

Published:

- Jeff Ji, Phil KY Chang*, Rodolphe Antonine, Julia Luo*, R. Anne McKinney, Dusica Maysinger Impact of gold nanostructures on neuroglia and synaptic remodeling in organotypic cultures *Nanotoxicology* In press
- Ilie A, Gao AYL*, Boucher A, Park J, Berghuis AM, Hoffer MJV, Hilhorst-Hofstee Y, McKinney RA, Orłowski J. A potential gain-of-function variant of SLC9A6 leads to endosomal alkalinization and neuronal atrophy associated with Christianson Syndrome. *Neurobiol Dis.* 2019 Jan;121:187-204
- Glasgow, S. D., Beamish, I. V., Labrecque, S., Wong, E., Trigiani, L. J., Gibon, J., Han, D., Guido, F*, Hamel, E., McKinney, R. A., de Koninck, P., Séguéla, P., Ruthazer, E. S., & Kennedy, T. E. Activity-Dependent Netrin-1 Secretion Drives Synaptic Insertion of GluA1-Containing AMPA Receptors in the Hippocampus. *Cell Rep.* 2018 Oct 2;25(1):168-182
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- Visou Ady, Brenda Toscano Márquez, Moushumi Nath, Philip K. Chang*, Jeanette Hui, François Charron* , Roxanne Larivière, Bernard Brais, R. Anne McKinney#, and Alanna J. Watt# (# joint senior) Altered Synaptic and Intrinsic properties of cerebellar Purkinje cells in a mouse model of ARSACS *J Physiology (Lond)* 2018 Sep;596(17):4253-4267

Non-peer-reviewed publications:

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