Department of Biomedical Sciences Newsletter

Congratulations to **Dr. Katie Becker** on her 4year NIH R16 award titled "<u>The Impact of</u> <u>Disrupting Sensory Innervation on Tibial Bone</u> <u>Mass</u>" (1R16GM150784-01 PI: Kathleen Becker).

Congratulations to **Dr. Ling Cao** on her 5-year NIH R01 award titled "<u>HIV Tat-associated</u> <u>Sensory Neuropathy and the Contribution of Toll-</u> <u>like Receptor Pathway</u>" (1R01NS132674-01A1 PI: Ling Cao).

Congratulations to **Dr. Doug Spicer** on the publishing of the first edition of his new textbook titled "<u>Biochemistry Behind the Symptoms</u>."



Faculty meeting dates:

- September 27, 2023; 1-2 pm
- October 25, 2023; 1-2 pm
- November 22, 2023; 1-2 pm

Feel free to send any agenda items for discussion at our faculty meeting to Angela Morse.

2023 UNE COM Seminars:

All seminars hosted by the department will be posted on our seminar link on our site: <u>https://sites.une.edu/biomedicals</u>ciences/seminar-series/

Shared Governance Meetings:

<u>UFA</u>

Wednesday, October 18 via Zoom, 12-2pm

Wednesday, November 15 via Zoom, 12-2pm

Wednesday, December 20 via Zoom, 12-2pm

<u>COMFA</u>

Wednesday, October 19 12-1pm

Thursday, November 22 12-1pm

Wednesday, December 21 12-1pm

NOTE: Publication costs for papers which have COM students as authors are eligible to be considered for up to \$250/student by the <u>SGA's educational enhancement fund</u> (link enabled). These requests are vetted by the finance committee of the SGA and processed by RSAS.

Faculty / Student / Staff Highlights:

<u>New Peer-Reviewed Publications (from PubMed (links enabled below))</u>

Effects of Morphine on Gp120-induced Neuroinflammation Under Immunocompetent Vs. Immunodeficient Conditions. Canonico D, Casale S, Look T, **Cao L**. J Neuroimmune Pharmacol. 2023 Jun;18(1-2):24-40. doi: 10.1007/s11481-021-10040-5

Members of the CUGBP Elav-like family of RNA-binding proteins are expressed in distinct populations of primary sensory neurons.

Grlickova-Duzevik E, Reimonn TM, Michael M, Tian T, Owyoung J, McGrath-Conwell A, Neufeld P, Mueth M, **Molliver DC**, Ward PJ, **Harrison BJ.** J Comp Neurol. 2023 Oct;531(14):1425-1442. doi: 10.1002/cne.25520.

Invited Commentary (link enabled below)

A novel potential strategy for the treatment of inflammatory and neuropathic pain. Queme, Luis F.

PAIN ():10.1097/j.pain.000000000000003007, July 28, 2023. doi: 10.1097/j.pain.0000000000000000007

<u>New Publications (from bioRxiv (links enabled in blue below))</u> – a preprint, a preliminary version of a manuscript that has not completed peer review at a journal.

Sex specific role of RNA-binding protein, AUF1, on prolonged hypersensitivity after repetitive ischemia with reperfusion injury.

Quijas MM, **Queme LF**, Weyler AA, Butterfield A, Joshi DP, Mitxelena-Balerdi I, Jankowski MP.

bioRxiv. 2023 Jun 9:2023.06.08.544080. doi: 10.1101/2023.06.08.544080.

Macrophage epigenetic memories of early life injury drive neonatal nociceptive priming. Dourson AJ, Fadaka AO, Warshak AM, Paranjpe A, Weinhaus B, **Queme LF**, Hofmann MC, Evans HM, Donmez OA, Forney C, Weirauch MT, Kottyan LC, Lucas D, Deepe GS, Jankowski MP. bioRxiv. 2023 Feb 14:2023.02.13.528015. doi: 10.1101/2023.02.13.528015.

Textbook Publication (link enabled below)

Biochemistry Behind the Symptoms. (first edition) Emine E. Abali, Roy Carman, **Douglas Spicer**. Wolters Kluwer ISBN/ISSN: 9781975191474

Biochemistry Behind the Symptoms takes a problem-based approach to understanding and applying biochemistry for superior clinical outcomes. Organized around the common symptoms encountered by clinicians, this engaging text clarifies the connections between foundational science and clinical manifestations to help users form confident diagnoses throughout their clerkship and beyond.



Regional/National/International Presentations

Oral Presentations:

Joel Talsma, MS was an <u>invited instructor</u> at the International Pain and Spine Intervention Society course in Bethlehem, Pennsylvania on July 23-34. The topic was: Lumbosacral Radiofrequency BioSkills (Lab). **Harry Filippakis, PhD** gave an <u>invited talk</u> at the 2023 International Tuberous Sclerosis: Fueling the Future conference in Washington D.C. on September 7, 2023. The title of his talk was "Tryptophan-mediated macropinocytosis is a metabolic vulnerability in tuberous sclerosis complex."

Harry Filippakis, PhD was a <u>panel member</u> for a breakout session titled "Cellular Energetics and Metabolism (Core Cell Biology)" at the International Tuberous Sclerosis: Fueling the Future conference in Washington D.C. on September 8 2023.

Poster Presentations:

Al-Abbasi Z and Molliver DC.

Use of a human sensory neuron-derived cell line to interrogate pain-related signal transduction pathways.

BIO-SENS Industry-Academic Biotechnology Symposium, July 26, 2023.

Lafleur S, Cox W, McGrath-Conwell A, Henske EP, **Filippakis H.** Tryptophan-mediated macropinocytosis is a metabolic vulnerability in tuberous sclerosis complex.

International Tuberous Sclerosis: Fueling the Future conference in Washington D.C. on September 9, 2023.

New Funding

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Other News

Dr. Diana Goode served as an ad hoc member of the NIH NV-14 Small Business Panel: Drug Discovery Involving the Nervous System (June 2023).

Dr. Ian Meng (and his lab) were featured on News Center Maine, Morning Report, on August 9, 2023 discussing his research program seeking to find a cause and treatment for ocular pain. <u>LINK</u>