Department of Biomedical **Sciences Newsletter**

Congratulations and thank you all for an unforgettable and yet very successful academic year. We all should be proud that we were able to provide our students with an excellent first experience/education, year as well as continuing to submit grants and publish scholarly work, despite the many restrictions due to COVID-19.

Congratulations to Lindsey Fitzsimons and Dr. Kerry Tucker (her mentor)!

Lindsey A. Fitzsimons, MS and a PhD Candidate in the UNE COM laboratory of Dr. Kerry Tucker, was recently awarded the Thomas Maciag Award for Excellence in Basic & Translational Science, for her collaborative project entitled "Primary cilia of mammalian cardiomyocytes: potential role in development of the ventricular myocardium?" Ms. Fitzsimons delivered a scientific talk detailing this project at the 2021 Costas T. Lambrew Research Retreat, a local, collaborative research symposium combining clinical and basic science research and made possible by Maine Medical Center, Maine Medical Center Research Institute, and the Northern New England Clinical and Translational Research Network.

In her talk, Ms. Fitzsimons described the characterization of the presence and potential function of primary cilia in developing heart muscle cells. Her project also involved a unique clinical/translational perspective that included an analysis of primary cilia in human heart samples from pediatric patients with congenital heart disease with and without damage to the ventricular heart muscle.

Faculty meeting dates:

- July 27; 9:30-11; Pickus 214
- Aug. 24; 9:30-11; Pickus 214
- Sept. 28; 9:30-11; Pickus 214

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

2021 UNE COM Seminars:

All seminars hosted by the department will be posted on our new seminar link on our site. which can be found here: https://sites.une.edu/biomedicals ciences/seminar-series/

Summer 2021 Shared Governance:

UFA

Wednesday, July 21 Via Zoom, 12-2pm

Wednesday, August 18 Via Zoom, 12-2pm

Wednesday, September 15 Via Zoom, 12-2pm

COMFA

Thursday, July 15

12-1pm

Wednesday, August 25 12-1pm

Thursday, September 16 12-1pm

Spring, 2021

*** Reminder of the re-instated 2021 UNE Fall Mini-Grant program. Proposals are due **August 31st, 2021** by 11:59 PM (submitted to ORS@une.edu) ***

Faculty / Student / Staff Highlights:

New Publications (from PubMed (links in blue are enabled))

Lacrimal gland excision in male and female mice causes ocular pain and anxiety-like behaviors.

Mecum NE, Demers D, Sullivan CE, Denis TE, Kalliel JR, Meng ID.

Sci Rep. 2020 Oct 14;10(1):17225. doi: 10.1038/s41598-020-73945-w.

The Transition Zone Protein AHI1 Regulates Neuronal Ciliary Trafficking of MCHR1 and Its Downstream Signaling Pathway.

Hsiao YC, Muñoz-Estrada J, Tuz K, Ferland RJ.

J Neurosci. 2021 Apr 28;41(17):3932-3943.

doi: 10.1523/JNEUROSCI.2993-20.2021.

Featured Article in Issue 41(17) in "This Week in The Journal"

<u>Effects of Vancomycin on Persistent Pain-Stimulated and Pain-Depressed Behaviors in Female Fischer</u> Rats With or Without Voluntary Access to Running Wheels.

Payne E, Harrington K, Richard P, Brackin R, Davis R, Couture S, Liff J, Asmus F, Mutina E, Fisher A, Giuvelis D, Sannajust S, Rostama B, **King T**, Mattei LM, Lee JJ, Friedman ES, Bittinger K, **May M**, Stevenson GW.

J Pain. 2021 May 21:S1526-5900(21)00234-0.

doi: 10.1016/j.jpain.2021.05.003.

Physician Beliefs Concerning Structural and Institutional Racism in Health Care.

Ciurylo W, Brenner CA, Thieme VS.

Osteopathic Family Physician. 2021 May/June; Volume 13, Issue 3.

Primary Small Cell Carcinoma of the Bladder.

Kassas JM, Fiuk JV, Brenner CA.

Cureus. 2021 May 21;13(5):e15146.

doi: 10.7759/cureus.15146.

USMLE Step-1 is Going to Pass/Fail, Now What Do We Do?

Belovich AN, Bahner I, Bonaminio G, Brenneman A, Brooks WS, Chinn C, El-Sawi N, Haight M, Haudek SB, Ikonne U, McAuley RJ, McKell D, **Rowe R**, Taylor TAH, Vari RC.

Med Sci Educ. 2021 Jun 4:1-6.

doi: 10.1007/s40670-021-01337-4.

Spring, 2021

New Publications (from bioRχiv (links enabled in blue)) – not peer-reviewed but under peer review

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

Grlickova-Duzevik E, Michael M, McGrath- Convell A, Neufeld PK, Reimonn TM, Molliver DC, Harrison

bioRxiv 2021.07.05.451166

doi: https://doi.org/10.1101/2021.07.05.451166

Regional/National/International Presentations

Presentation at the 48th Maine Biological and Medical Sciences Symposium on April 29, 2021 (virtual):

E. Grlickova-Duzevik, M. Michael, T. Reimonn, A. McGrathconwell, P. Neufeld, S. Dinsdale, B. Harrison. "Populations of sensory neurons express different members of the CUGBP ELAV-like family (Celf) of neural excitability proteins." Poster presentation.

Presentation at the AACOM Annual Conference, April 20-22 (virtual):

S Sunny, AM Quintero, E Bainbridge, CA Brenner, M Henshaw. "Specialty Choice Amongst Osteopathic Medical Students During the COVID-19 Pandemic." Poster presentation.

Association of Biochemistry Educators/Association of Professors of Human and Medical Genetics (ABE/APHMG) joint conference. May 3rd-7th (virtual):

Dr. Doug Spicer helped organize and run 3 workshops during the conference:

- Creating a Clinical-Biochemistry Thread Map Across Pre-clerkship and Clerkship Curriculum
- Update and Review Submissions to ABE Question Bank
- Finding the Clinical Relevance in the ABE Learning Objectives

Presentation at the American Society for Neurochemistry Annual Meeting, June 27 – July 1 (virtual):

JW Nalwalk, CS Wilson, P Dohare, S Orbeta, R Sah, Y Huang, RJ Ferland, AA Mongin. "Conditional deletion of the anion channel subunit LRRC8A in the mouse brain leads to spontaneous seizures and mortality." Poster presentation.

New Funding (Congratulations):

Karen Houseknecht, PhD was part of a team awarded an NIH R01 award:

1R01AR076349 - 01A1 (NIH/NIAMS) (6/1/2021-5/31/2026)

PI Name: Motyl, Katherine J (MMCRI)

A novel cell-autonomous role for beta-adrenergic receptor signaling in osteoclasts

Co-Investigator: Houseknecht, Karen L (UNE)

Karen Houseknecht, PhD was part of a team awarded an NIH R01 award:

1R01DA052340-01A1 (NIH/NIDA) (7/1/2021-6/30/2026)

PI Name: Streicher, John (U Arizona)

Development of Hsp90 Isoform-Selective Inhibitors as a Novel Opioid Dose-Reduction

Therapy

Co-Investigator: Houseknecht, Karen L (UNE)

Meghan May, PhD was part of a team awarded an NIH P20 award:

P20GM139745 (NIGMS) (2/10/2021-1/31/2024)

PI Name: Sawyer, Douglas (MMCRI)

COBRE in Acute Care Research and Rural Disparities

Project 2 Co-Investigator: May, Meghan (UNE)

Kathy Thompson, PhD and Doug Spicer, PhD were part of a team awarded an IAMSE Educational Scholarship Grant:

Using Hands on Culinary Medicine Modules to Improve Nutrition Education in Medical Students

PI Name: Thompson, Kathy (UNE) Co-Investigator: Spicer, Doug (UNE)

Kathy Thompson, PhD and Doug Spicer, PhD were part of a team awarded an AACOM Grant:

Using hands-on interprofessional culinary medicine education to increase the confidence and ability of medical and dietetic students to address lifestyle and nutrition related disease

PI Name: Thompson, Kathy (UNE) Co-Investigator: Spicer, Doug (UNE)

Other News:

Dr. Ling Cao was recently accepted into both Tufts' and Johns Hopkins' MPH programs. Congratulations Ling!

Faculty Development:

Asynchronous opportunities for faculty development now exist on the UNECOM Faculty and Professional Staff Development SharePoint Site:

https://une1.sharepoint.com/teams/COM/AcademicAffairs/Office/FSDev/SitePages/Home.aspx