Department of Biomedical Sciences Newsletter

Congratulations to **Dr. Kin Ly** as the 2024 recipient of the Center to Advance Interprofessional Education and Practice's (CAIEP) <u>Pagnucco Interprofessional Service</u> <u>Award</u>. This award recognizes a faculty member for their outstanding commitment to interprofessional education, training, mentorship, and practice.

Congratulations to **Dr. Tyler Redway** on winning the COM OMS1 Faculty of the Year award. Congratulations also to **Drs. Eliza Grlickova-Duzevik, Geoffrey McCullen, Rebecca Rowe, Peter Morganelli, and Kin Ly** on being nominated for this award.

Congratulations to **Dr. Kyle Scully** on being selected as the Biomedical Science Faculty Designated Hooder at COM's graduation ceremony in May.

Congratulations to **Dr. Tyler Redway** on being selected as the New Hooder Marshal at COM's graduation ceremony in May.

Congratulations to **Drs. D Molliver** (PI), **L Cao** (Core Director), **K Becker** (Research Project Leader), **H Filippakis** (Research Project Leader), and **L Queme Cobar** (Research Project Leader) on the awarding of the new COBRE: Center for Cell Signaling.

Congratulations to **Dr. Harry Filippakis** on receiving a one-year Department of Defense, U.S. Army Medical Research and Development Command, Congressionally Directed Medical Research Programs, Kidney Cancer Research Program Concept Award titled "<u>Spatial CRISPR: A Novel Approach to Identify Novel</u> <u>Therapeutic Targets for TFE3-RCC</u>".

Faculty meeting dates:

- April 24, 2024; 1-2 pm
- May 22, 2024; 1-2 pm
- June 26, 2024; 1-2 pm

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

2024 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, May 15 via Zoom, 12-2pm

Wednesday, June 19 via Zoom, 12-2pm

Wednesday, July 17 via Zoom, 12-2pm

<u>COMFA</u>

Wednesday, May 22 12-1pm

Thursday, June 20 12-1pm

Wednesday, July 24 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:

New Peer-Reviewed Publications (from PubMed (links enabled below))

Expression of MHC II in DRG neurons attenuates paclitaxel-induced cold hypersensitivity in male and female mice. Whitaker EE, Mecum NE, Cott RC, **Goode DJ**. PLoS One. 2024 Feb 8;19(2):e0298396. doi: 10.1371/journal.pone.

Investigation of the anatomical course of articular branches to the thoracic zygapophysial joints.

Talsma JM, Maus TP, Chitneni A, Hao D. Interventional Pain Medicine. 2024 Mar;3(1):100399. doi.org/10.1016/j.inpm.2024.100399

Widening the Road to Health Professions Education: Expanding Access for Diverse and Underserved Populations.

Belovich AN, Taylor TAH, Bahner I, Bonaminio G, Brenneman A, Brooks WS, Chinn C, El-Sawi N, Habal S, Haight M, Haudek SB, Ikonne U, McAuley RJ, McKell D, Porter R, **Rowe R**, Thesen T. Med Sci Educ. 2023 Nov 16;34(1):273-276. doi: 10.1007/s40670-023-01943-4.

Editorial: Insights in neuroenergetics, nutrition and brain health: 2023. Schurr A, **Mokler DJ**, Lee HG, Tasca CI. Front Neurosci. 2023 Dec 13;17:1331872. doi: 10.3389/fnins.2023.1331872.

Regional/National/International Presentations

Maine Research Symposium on Biomedical Science and Engineering March 27-28, 2024 https://umaine.edu/medicine/2023-symposium/2023-symposium-schedule/

Benjamin Harrison, PhD

Oral Presentation: Targeting RNA-Protein Interactions for Treatment of Persistent Pain

Kathleen Becker, PhD

Oral Presentation: Saphenous Nerve Transection Results in Sensory and Sympathetic Denervation of the Mouse Tibia

Association of Military Osteopathic Physicians and Surgeons Annual meeting in Tulsa, Oklahoma

February 28-March 2, 2024

<u>Students</u>: M Beaulieu OMS-II, E Corkery OMS-II, K Devkota,, OMS-II, E Griffin OMS-II, D Jozokos, OMS-II, E Pillsbury, OMS-II <u>Faculty advisor</u>: **Geoffrey McCullen, MD**

Poster Presentation: Identifying and quantifying criteria used to determine whether to surgically remove projectile fragments from the injury sites of spinal gunshot wounds

Fellowships Awarded (and Mentors)

2024 Peter Morgane Fellowship Awardees and Mentors

Antoniou Pantelis Optimizing Pediatric Oncology Care: Comprehensive Interventions for Chemotherapy-Induced Peripheral Neuropathy (CIPN) in Pediatric Cancer Patients Mentor: **Dr. Ling Cao**

Dalton Canonico Lumbar spinal cord expression of Tollip and pIRAK1 in iTat mice, a model of HIV-associated peripheral neuropathy Mentor: **Dr. Ling Cao**

Jonathan Chong Utilizing Machine Learning for the Recognition of Patterns in Ongoing and Breakthrough Cancer Pain Mentor: **Dr. Tamara King**

David Karpe Cardiac Neural Crest Cells and Ift88 Mouse Mutants in Myocardial Development Mentor: **Dr. Kerry Tucker**

Penhleakhena Ou Characteristics of chronic pain across demographics and SDOH in Maine Mentor: **Dr. Ling Cao**

Soumya Sabbella Branching Pattern Variations of Intercostal Nerves 8-10: A Cadaveric Dissection Study with Implications for Slipping Rib Syndrome Mentor: **Professor Joel Talsma**

Ashley Walter Investigating the Role of the Saphenous Nerve in Innervating the Proximal Tibia Mentor: **Dr. Katie Becker**

2024 Carmen Pettapiece Fellowship Awardees and Mentors

Muskaan Chhibber; Aishwarya Shrestha; Brandon Swan-Prung; Sai Donepudi; Bhamini Shah 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 Mentor: **Dr. Douglas Spicer**

2024 Kahn Scholars Fellowship Awardees and Mentors

Julia Baracewicz Investigating the Role of the Saphenous Nerve in Tibial Fracture Healing Mentor: **Dr. Kathleen Becker**

Ashley Bartlett CELF4 on Density of Nociceptive Free Nerve Endings in Cutaneous Tissue of Mice Mentor: **Dr. Benjamin Harrison**

Paul Donnelly Multiplex Analysis of Cytokine Expression in Tat-induced Mice Mentor: **Dr. Ling Cao**

SreeLakshmi Gurrala Differences in Synovial Growth Factor Between Sexes Contributing to Pain Mentor: **Dr. Tamara King**

Alison Guzzetti and Peter Giunta Exploring Sex Differences in Osteoarthritis-Induced Changes in Immune Cell Populations within the Synovial Fluid of Rats with Mid-stage or Advanced OA Pain. Mentors: **Dr. Tamara King and Dr. Diane Goode**

Melisa Joseph Unraveling the Molecular Dynamics of Pain by Investigating Mitochondrial Uncouplers' Effects on Human Dorsal Root Ganglion Neurons Mentor: **Dr. Derek Molliver**

Matthew Magyar-Ng Loss of Enrichment Induces Satellite Glial Cell Activation and Macrophage Infiltration in Dorsal Root Ganglia after Ischemia with Reperfusion Injury. Mentor: **Dr. Luis Queme**

New Funding

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Other News

Dr. Derek Molliver served as an ad hoc member of an NIH HEAL Initiative study section SEP ZRG1 ICN-Z (55): Discovery and Validation of Novel Targets for Safe and Effective Pain Treatment in February 2024.

Dr. Kerry Tucker served as a member of an external advisory committee reviewing the University of New Hampshire, College of Life Sciences and Agriculture, Dept. of Biological Sciences and its proposed Graduate Program in Neuroscience and Behavior on March 13-14, 2024.

Dr. Russ Ferland was invited to present at Biddeford High School's Career Day on April 10, 2024.

The new COBRE was featured on the <u>UNE website</u>, in the <u>Portland Press Herald</u>, and on <u>Mainebiz</u>.