

Department of Biomedical Sciences Newsletter

Welcome to the Dept. of Biomedical Sciences newest faculty member, **Dr. Eben Estell**.



Congratulations to **Dr. Kin Ly** on being awarded the Pagnucco Interprofessional Service Award. This is an award for outstanding commitment to interprofessional education and signifies the faculty member's impact on collaborative practice and mentorship within UNE.

Congratulations to:

Diana Goode: Promotion to Associate Professor with tenure

Harry Filippakis: Successful 3-year reappointment

Luis Queme: Successful 3-year reappointment

Congratulations to **Dr. Eliza Grlickova-Duzevik** and **Dr. Doug Spicer**, co-investigators on *Dr. Stacey Pierce-Talsma's* AACOM grant titled "Food as Medicine in Maine (FaMM): A University of New England College of Osteopathic Medicine Initiative"

DBMS Faculty meeting dates:

- May 28, 2025; 1-2 pm
- June 25, 2025; 1-2 pm
- July, 2025 – TBD given the move to Portland

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

2025 UNE COM Seminars:

All seminars hosted by the department will be posted on our seminar link on our site:

<https://sites.une.edu/biomedicalsciences/seminar-series/>

Shared Governance Meetings:

COMFA

Thursday, May 15
10-11am

Thursday, June 19
12-1pm

July, 2025 – TBD given the move to Portland

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

Faculty / Student / Staff Highlights:

Dr. Kin Ly received the Pagnucco Interprofessional Service Award. She received this award for outstanding commitment to interprofessional education and signifying her impact on collaborative practice and mentorship within UNE.

Dr. Kerry Tucker served on the NIH study section, Cardiovascular Differentiation and Development, on 11/06/2024.

Dr. Kathleen Becker was accepted to participate in the ASBMR Leadership Education for Advancement program for 2025.

Dr. Harry Filippakis was invited to join The LAM Foundation's Scientific Advisory Board.

Update on **Dr. Tyler Redway's** AORTA program:

During the fall semester, the AORTA program hosted 12 outreach sessions and 281 students, an average of 23.4 students per session, from 10 high schools and the UNE Pre-SOMA (Pre-Med) Club. AORTA will host 12 more groups in the spring semester, forecasting 275 participants. They are finalizing a few events with RSAS and Undergraduate Admissions, and they are looking to attend and present at the Maine Science Festival (Bangor).

This academic year, he has received IRB approval to conduct a research project with his AORTA participants; for the fall semester, he received administrative approval to conduct his survey with 10 of the 11 high school groups that visited UNE.

2024 was an excellent year for the AORTA program, with resounding feedback from participants and teachers. Dr. Redway is looking forward to the program's continued growth in 2025 with a new cohort of facilitators and the move to Portland!

Below is a picture from one of the events with COM facilitators and attendees from Falmouth High School.



Photo courtesy of Dr. Tyler Redway

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

Ceramide toxicity in cardiomyocytes: from Farber disease to cardiovascular diseases. **Fitzsimons LA, Filippakis H.** Am J Physiol Heart Circ Physiol. 2025 Feb 1;328(2):H323-H326.
doi: 10.1152/ajpheart.00843.2024.

T3 endoscopic thoracic ganglionectomy using cutting mode cautery for palmar hyperhidrosis. **Talsma J,** Peirce CC, Tarfusser I, Kim S, Idowu O, Kim S. Ann Thorac Surg Short Reports. 2024.
doi.org/10.1016/j.atssr.2024.12.004

Characterization of Cannabis usage in individuals with non-cancer chronic pain in the state of Maine using the Behavioral Risk Factor Surveillance System (BRFSS). Bordonaro R, Bean EN, **Cao L.** Discov Public Health 22, 23 (2025). <https://doi.org/10.1186/s12982-025-00406-y>

Long-term Outcomes of Persistent Postoperative Opioid Use: A Retrospective Cohort Study. Aalberg JJ, Kimball MD, McIntire TR, **McCullen GM.** Ann Surg. 2025 Jan 1;281(1):116-123.
doi: 10.1097/SLA.0000000000005372.

Book Chapters

Dr. Frank Willard was an author on 6 chapters in the upcoming new version of “Foundations of Osteopathic Medicine: Philosophy, Science, Clinical Applications, and Research”.

Chapter 7: The Fascial System of the Body

Chapter 10: The Autonomic Nervous System

Chapter 11: Nociception and Pain

Chapter 13: The Physiology of Touch

Chapter 14: The Anatomy and Physiology of the Lymphatic System

Chapter 15: Anatomy, Mechanics and Physiology of Pulmonary Respiration

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

A Transcriptomic Comparison of the HD10.6 Human Sensory Neuron-Derived Cell Line with Primary and iPSC Sensory Neurons.

Zaid Al-Abbasi, Shamsuddin A. Bhuiyan, William Renthall, **Derek C. Molliver**

bioRxiv 2025.04.03.643725; doi: <https://doi.org/10.1101/2025.04.03.643725>

Microfluidic Co-Culture for Modeling Human Joint Inflammation in Osteoarthritis Research.

Hosein Mirazi, **Scott T. Wood**

bioRxiv 2025.01.27.635089; doi: <https://doi.org/10.1101/2025.01.27.635089>

Tissue damage-induced axon injury-associated responses in sensory neurons: requirements, prevention, and potential role in persistent post-surgical pain.

Kristofer K Rau, **Ben J Harrison**, Gayathri Venkat, Sara E Petruska, Bradley Taylor, Caitlin E Hill, Jeffrey C Petruska

bioRxiv 2025.02.11.637320; doi: <https://doi.org/10.1101/2025.02.11.637320>

Regional/National/International Presentations

Research Talks:

Dr. Kathleen Becker presented a research talk titled "The Saphenous Nerve: A Key Player in Tibial Innervation" at MaineHealth Institute for Research on February 27, 2025.

Dr. Ling Cao presented the initial results of her team's Pain Registry for ME during a webinar on January 9th, 2025 for the New England Public Health Training Center (NEPHTC), a designated provider of continuing education contact hours in health education by the National Commission for Health Education Credentialing, Inc. The title of her presentation was "Identification of gaps in care for patients with chronic pain through the establishment of a state-wide pain registry in Maine – Pain Registry for ME"

Dr. Karen Houseknecht presented a poster titled "Metabolic Associated Steatotic Liver Disease and Mental Illness: Role of FGF-21" at the European

Association for the Study of the Liver SLD Summit in January, 2025 in Estoril, Portugal.

New Funding

Dr. Eliza Grlickova-Duzevik and **Dr. Doug Spicer** (co-investigators) and *Dr. Stacey Pierce-Talsma (PI)* received funding from AACOM for a grant titled “Food as Medicine in Maine (FaMM): A University of New England College of Osteopathic Medicine Initiative”.