

Spring 2025 PMI Symposium & Retreat
From Molecules to Movement: Cytoskeletal Insights into Muscle Function and Neuronal Health

Thursday, April 17, 2025
BRB Gaulton Auditorium & Lobby, Biomedical Research Building (BRB II/III)
421 Curie Blvd., Philadelphia, PA 19104

Symposium Schedule

8:15am - 9:00am: Breakfast, Registration Check-in, Posters Setup [table seating – 14th floor LOUNGE]

9:00am – 9:15am: Welcome

- **Erika Holzbaur, PhD**, Director, Pennsylvania Muscle Institute
- **E. Michael Ostap, PhD**, Senior Vice Dean and Chief Scientific Officer, Perelman School of Medicine

9:15am - 10:15am: Session 1 - Tracks and Traffic: Microtubules in Polarity, Transport, and Cellular Function

- Introduction: Andrew P. Somlyo Honorary Lecture - **Jayne Aiken, PhD**
- **Andrew P. Somlyo Honorary Lecture: Lukas Kapitein, PhD (Utrecht University)** - "Navigating microtubule diversity in neurons "
- **Emily Scarborough, PhD (Prosser Lab)** - "Microtubule dynamics control directional growth in the heart"

10:15am – 11:00am: Poster Session (Odd #s), Coffee Break [table seating – 14th floor LOUNGE]

11:00am - 12:15pm: Session 2 – Clinical Connections: Mechanisms of Disease

- Introduction: Andrew P. Somlyo Honorary Lecture - **Nick Marotta**
- **Andrew P. Somlyo Honorary Lecture: Charlotte Sumner, MD (Johns Hopkins University)** - "The role of the mechanosensitive TRPV4 channel in motor neuron disease"
- **Carris Borland (Holzbaur Lab)** - "Investigating the novel role of KIF1A trafficking in autophagy"
- **Elizabeth Nunn (Titchenell Lab)** - "Skeletal muscle and adipose tissue-specific roles of ActRIIA/B in regulating body composition and metabolic homeostasis during obesity"

12:15pm – 1:30pm: Lunch, Networking, Poster Session [table seating – 14th floor LOUNGE and Rm. 1412]

1:30pm - 2:30pm: Session 3 - New Perspectives

- Introduction: New Perspectives Session - **Nick Palmer**
- **New Perspectives Lecture: Ewa Bomba-Warczak, PhD (Penn)** - "Long-lived mitochondrial cristae proteins in mammalian brains and hearts"
- **Elana Baltrusaitis (Dominguez Lab)** - "Structural-functional characterization of the MIRO1-TRAK1 complex"
- **Mengqi Xu, PhD (Ostap Lab)** - "Myosin-I Synergizes with Arp2/3 Complex to Enhance Pushing Forces of Branched Actin Networks"

2:30pm – 3:15pm: Poster Session (Even #s), Coffee Break [BRB Lobby]

3:15pm - 4:30pm: Session 4 – Muscle Physiology in Aging and Disease

- **Ronan Lordan, PhD (Fitzgerald Lab)** - "Endurance exercise training partially rescues aged metabolic phenotypes and improves healthspan in mice lacking a functional circadian clock"
- Introduction: Joseph and Jean Sanger Honorary Lecture in Muscle Biology - **Kaya Matson, PhD**
- **Joseph and Jean Sanger Honorary Lecture in Muscle Biology: Rachelle Crosbie, PhD (University of California, Los Angeles)** - "Targeting Cell-Matrix Interactions for the Muscular Dystrophies"
- Closing Remarks and Awards - **Erika Holzbaur, PhD**

4:30pm – 5:45pm: Poster Session, Reception [BRB Lobby]