

Sustaining Power: Building Energy Networks in Striated Muscle

Dr Brian Glancy, Senior Investigator – National Institute of Health – BETHESDA MD USA



Skeletal muscle is the most abundant tissue in humans and faces near instantaneous changes in demand for force production lasting from seconds to minutes to hours. Initiating and maintaining muscle contraction requires rapid, coordinated movement of signals and material within and among various structures located throughout the relatively large muscle cell. This seminar will focus on how energy is distributed throughout striated muscle cells to sustain muscle contractions, deficits in which have been implicated in many pathologies including diabetes and muscular dystrophy as well as aging. In particular, I will discuss how the structure and function of the cellular energy distribution system are optimized as part of the integrated muscle cell to maintain energy homeostasis during the large change in energy demand caused by the onset of muscle contraction.

Bio

Brian Glancy graduated with a B.A. in Sport Science from the University of the Pacific prior to receiving a Master's degree in Kinesiology and a Ph.D. in Exercise Science from Arizona State University working with Wayne Willis. He was a postdoctoral fellow with Robert Balaban at the National Heart, Lung, and Blood Institute from 2009 to 2016. Dr. Glancy became an Earl Stadtman Investigator at the NIH with a dual appointment between NHLBI and NIAMS in 2016 and became a tenured Senior Investigator in 2023. He is a member of the American College of Sports Medicine and the American Physiological Society.



EVENT DETAILS

DATE:

24 September 2024

TIME:

2:00pm

VENUE:

Room G19 15 Innovation Walk Monash University Clayton Campus

HOST:

Dr William Roman



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