

Zoophysiology Seminar

Friday, 11/12, 13.00–14.00, 1130-123

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Location Matters: Glycogen Compartmentalization in Skeletal Muscle

Skeletal muscle depends on glycogen to support contraction, yet glycogen is not stored as a single, uniform fuel reserve. Instead, glycogen particles are distributed across distinct regions within the muscle cell, where they may support different cellular processes. In this seminar, I will present findings from transmission electron microscopy, single-fibre and whole-muscle experiments, and human studies involving skeletal muscle biopsies. Together, these approaches show that subcellular glycogen pools respond differently to exercise and recovery, support specific ATPases, and are associated with distinct cellular functions. I will discuss how glycogen compartmentalization may influence muscle performance, fatigue, and recovery.

