



Hamilton Institute

Biochemical Analysis of Supramolecular Muscle Protein Complexes

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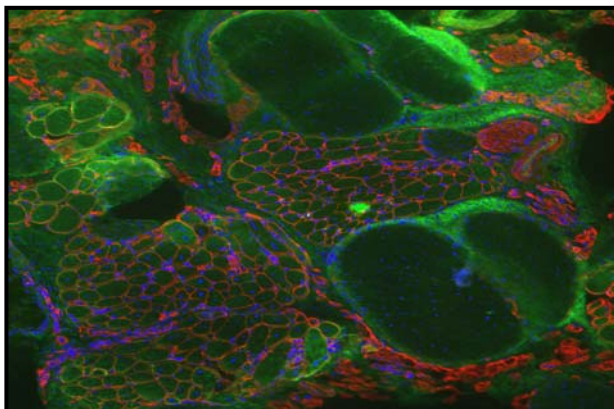


Abstract

Results from recent biochemical studies indicate that many skeletal muscle proteins exist in large complexes, exhibit multi-functionality and are regulated by direct protein-protein interactions. Hence, not individual peptides or proteins, but high-molecular-mass protein assemblies often represent the native configuration that performs biological functions in muscle tissues.

The sarcolemmal dystrophin-associated glycoprotein complex and the ryanodine receptor calcium release channel complex of the triad junctions are well-established examples of supramolecular complexes from skeletal muscle fibres.

This seminar will describe some of the biochemical techniques used by the NUIM Muscle Biology Laboratory for analysing the structure and function of protein complexes and outline their pathophysiological role in neuromuscular disorders. The potential future application of a systems biology approach in the analysis of intra-proteomics data will be discussed.



Venue: PCT Lecture Theatre, 1st Floor, Science Building,
NUI Maynooth

Time: 2.00 - 3.00pm (followed by tea/coffee)

Travel directions are available at www.hamilton.ie