

Seminar general

The Role of Mitochondrial Quality Control and Stress Signalling in Parkinson's Disease



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Parkinson's Disease (PD) has a multifactorial ethiopathology. Aging, genetic susceptibility and environmental factors are recognised as key factors contributing to its occurrence. Two main signaling pathways are involved in PD pathogenesis, namely, mitochondrial quality control (MQC) and protein aggregation. Components of these signaling cascades have been found mutated in PD and by studying them we aim to understand disease mechanisms and to uncover novel pharmacological approaches to tackle disease progression.

Reinforcement of specialised mechanisms that maintain mitochondrial homeostasy is thus critical particularly in Parkinson's. Here I will present characteristics of molecular and organellar MQC signaling pathways and their role in PD ethiopathogenesis. Moreover I will present the possibility to activate MQC genetically and pharmacologically to compensate for PD related mitochondrial dysfunction.

Tuesday, November 22th, 2016 at 11:00
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