

Molecular basis for exercise-induced mitochondrial biogenesis

Henriette Pilegaard, Department of Molecular Biology, University of Copenhagen, Denmark

Experiments examining the role of PGC-1 α in exercise training and resveratrol mediated mitochondrial adaptations in skeletal muscle and adipose tissue in mice will be presented. Potential signaling factors involved in these adaptations will be discussed. In addition, the impact of short-term physical inactivity and life-long physical activity on skeletal muscle oxidative capacity and exercise-induced gene responses in human skeletal muscle will be included.