mtARC
The ARC with the highest (membrane) potential

Orian Shirihai & Anthony Molina
Nutrients Cause Changes in Mitochondrial Architecture

Low fatty acid concentration

Long term High fatty acid concentration
Deficiency of MFN2 in the beta cell causes weight gain and diabetes
Scientific interest of the mtARC

A. Mitochondrial Dynamics: Fusion and Fission

B. Mitochondrial bioenergetics: Oxidative phosphorylation

C. Mitochondrial turnover

D. Mitochondrial damage and repair mechanisms: ROS and anti-ROS
Activities of the mtARC

Monthly members and guest seminars

Monthly workshops on methodologies
  Mt membrane potential
  Oxygen consumption
  Mt Isolation & purification

Project: Mitochondrial dynamics in the pathophysiology of disease

  Kidney
  Pancreatic islet
  Vascular endothelial cell (3 labs)
  Brain
  Adipose tissue