MGH Cardiovascular Research Center (CVRC)/Broad Institute Cardiovascular Disease Initiative (CVDi)

2022-2023 Seminar Series

Tuesday, October 25, 2022

Seminar: 4 pm-5 pm, Social Hour: 5 pm-6 pm



Pere Puigserver

Cell Biology of Mitochondria and Metabolic Diseases

Pere Puigserver, PhD
Professor of Cell Biology
Department of Cancer Biology, Dana-Farber Cancer Institute
Department of Cell Biology, Harvard Medical School

Abstract

Mitochondrial-dependent bioenergetic function controls energy balance that is implicated in obesity and type 2 diabetes and cardiovascular diseases. Mitochondrial respiratory activity in specialized adipose cells depends on the integrity and fitness of mitochondrial organelles carrying respiration and futile reactions that dissipate energy as heat. Similar, but coupled respiratory processes function in other tissues to maintain cellular integrity and energetics. Active mitochondrial respiration occurs in organized structures called cristae, tubular or lamellar invaginations of the inner mitochondrial membrane that function as battery-like devices generating and dissipating energy. Formation of these mitochondrial energetic structures is disrupted in metabolic diseases, and impact normal function that contribute to clinical pathologies.

Biography

Pere Puigserver, PhD is Professor of Cell Biology at Harvard Medical School and Dana-Farber Cancer Institute. He received his PhD in Biochemistry from UIB (Spain) that included research at Stockholm University, following postdoctoral work at the Dana-Farber Cancer Institute. He joined the faculty of Cell Biology at Johns Hopkins University School of Medicine in 2002 and subsequently returned in 2006 to the Department of Cell Biology (Harvard Medical School) and Cancer Biology (Dana-Farber Cancer Institute).

Location

In-person: 149 13th Street, 2nd floor, Room 2204, Charlestown, MA 02129

Parking is located directly across the street.

Remote/Zoom Meeting ID: 834 3737 6110

Seminar: 4 pm-5 pm

Social Hour (Food/Refreshments): 5 pm-6 pm



