



THE UNIVERSITY OF ARIZONA
COLLEGE OF MEDICINE TUCSON
Pharmacology

Presents

“Direct links between TGF-beta signaling and mitochondrial diseases”

By



Nam Lee, Ph.D.
Associate Professor
Department of Pharmacology
College of Medicine
University of Arizona

Host: Dr. John Streicher

Synopsis: TGF-beta is expressed in all cell types and affects nearly every aspect of mammalian physiology starting from embryogenesis and tissue differentiation to adult homeostasis. TGF-beta signaling is also critically involved in cell metabolism although there have been incremental advances in deciphering how it exerts highly differential and often dichotomous effects that can range from enhancing or inhibiting respiration to mitochondrial biogenesis or its destruction during apoptosis. To this end, our recent body of work has uncovered two powerfully opposing pathways through which TGF-beta modulates mitochondrial fusion/fission- a dynamic new remodeling mechanism that proves critical in determining mitochondrial shape, respiratory capacity and stress response in a variety of cell and tissue types. We will discuss how these molecular mechanisms are closely linked to mitochondrial dysfunction in malignant, inflammatory and metabolic diseases.

Wednesday, January 26, 2022

11:00 am – Noon - AHSC 8403

Or by Zoom: <https://arizona.zoom.us/j/84524481802>

Meeting ID 845 2448 1802