DukeNUS Medical School

Signature Seminar Series

Role of the Thrombospondin Gene Family in Regulating Membrane Repair in Heart and Skeletal Muscle Disease

ABOUT THE LECTURE

The laboratory investigates how protein production through the ER stress response is regulated in the heart, and more specifically, the action of thrombospondin proteins. We have shown that thrombospondin 4 underlies a protective response in the ER that supports greater processing of membrane attachment complexes with better membrane stability, while thrombospondin 3 causes membrane instability and loss of integrin complexes which impacts heart failure and muscle disease. Thrombospondin 1 is uniquely involved in regulating the secretory pathway output through autophagy and lysosomal function in controlling protein degradation and cardiac and skeletal muscle atrophy.

Speaker: **Prof Jeffery D. Molkentin**
Director, Division of Molecular Cardiovascular Biology
Cincinnati Children's Hospital Medical Center
Professor of Pediatrics
University of Cincinnati



Host: **Prof Wang Yibin**
Programme Director
Cardiovascular & Metabolic Disorders Programme
Duke-NUS Medical School

Date: **Wednesday, 25 October 2023**

Time: **12.00 PM - 1.00 PM**
(Light refreshments will be served at 11.30AM)

Venue: **Duke-NUS Medical School**
Amphitheatre, Level 2

Contact Person: **Ms Kathleen Chan (kathleen.chan@duke-nus.edu.sg)**
Duke-NUS Research Affairs Department

ABOUT THE SPEAKER

Jeffery D. Molkentin, PhD is a Professor in the Department of Pediatrics, University of Cincinnati and Cincinnati Children's Hospital. He received his BS from Marquette University in Milwaukee Wisconsin (USA) in 1989. He then received his PhD from the Medical College of Wisconsin in 1994, after which he performed postdoctoral training with Dr. Eric Olson in Texas (USA) from 1994-1997, followed by his first faculty appointment in 1997 at the Cincinnati Children's Hospital Medical Center of the University of Cincinnati (USA). Dr. Molkentin has published over 430 great publications and, he has a Scopus H-index of 128.

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