Novel mitochondrial protein modification regulated by SIRT5 controls mitochondrial biology

ABOUT THE LECTURE

Mitochondrial proteins are decorated with a suite of chemical modifications, which regulate their activity and overall mitochondrial function. The most well-studied modification in the mitochondria is acetylation; more recently, new chemical modifications that regulate mitochondrial protein activity have emerged, including succinylation and malonylation. We recently discovered a new protein modification present in the mitochondria called glutarylation that is regulated by SIRT5, which provides important insight into the mitochondrial regulatory role of the sirtuins.

Speaker: **Dr Matthew Hirschey**
Assistant Professor in the Department of Medicine and in the Department of Pharmacology & Cancer Biology
Duke University Medical Center

Host: **Prof Shirish Shenolikar**
Senior Associate Dean of Research, Duke-NUS Graduate Medical School

Date: **Thursday, 18 July 2013**

Time: **4:00 PM — 5:00 PM**

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

Contact Person: **Ms Shanti Rajaram, Office of Research**
Tel: 6516 7266 or Email: shanti.rajaram@duke-nus.edu.sg

ABOUT THE SPEAKER

Matthew Hirschey is an Assistant Professor in the Department of Medicine and in the Department of Pharmacology & Cancer Biology at Duke University Medical Center, and is a faculty member of the Duke Institute of Molecular Physiology. His research focuses on mitochondria and how cells integrate metabolic signals to maintain energy homeostasis. He has received several awards including an Innovator Award from the American Heart Association and a New Scholar in Aging Award from the Ellison Medical Foundation. His work is supported by grants from the Mallinckrodt Foundation, FARA, and the NIH.