

## ISMRM Workshop on MRI of Obesity & Metabolic Disorders

In Association With


 Singapore  
 Bioimaging  
 Consortium


Singapore • 21-24 July 2019

Abstract &amp; Stipend Deadline: 29 April 2019

### OVERVIEW

Magnetic resonance imaging and spectroscopy have become widely used to quantify not only fat accumulation in adipose tissue depots, organs, and muscles, but also the molecular substrates, products, and dynamic rates of metabolism and biochemical pathways. As a follow-up to the 2012 ISMRM workshop held in Long Beach, California, on water-fat MRI, the purpose of this proposed workshop is to bring together and reunite internationally recognized scientists and clinicians who are currently developing and applying advanced MRI and MRS techniques to investigate the causes and consequences of obesity and metabolic dysfunctions.

### EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be able to:

- Identify the basic mechanisms of insulin signaling pathways that drive insulin resistance/energy balance and body composition;
- Describe the current state of magnetic resonance imaging and spectroscopy methods for assessing obesity and metabolic disorders, including applications in body adiposity, organ fat, and muscle fat;
- List recent advances in MRI and MRS technology, including water-fat MRI and X-nuclei methods, for studying obesity and metabolic disorders;
- Describe the imaging applications and of obesity and metabolic disorders in fetal, pediatric, and adult populations;
- Summarize the current multi-parametric imaging of white and brown adipose tissue; and much more.

### TARGET AUDIENCE

The program will be designed for both senior investigators and junior scientists. The organizing committee will also emphasize attendance by student members of ISMRM and engage the Asian research community.

### ORGANIZING COMMITTEE

Committee Co-Chairs: Houchun Harry Hu, Ph.D. • Sambasivam Sendhil Velan, Ph.D.

Committee: Rosa Tamara Branca, Ph.D. • Diego Hernando, Ph.D. • Dimitrios Karampinos, Ph.D. • Jürgen Machann, Ph.D. •

Charles McKenzie, Ph.D. • Holden Wu, Ph.D. • Takeshi Yokoo, M.D., Ph.D.

Local Organizing Committee: Patrick Cozzzone, Ph.D., M.B.A. • Venkatesh Gopalan, Ph.D. • Kuan Jin Lee, Ph.D. •

C.C. Tchoyoson Lim, M.D., MBBS, FRCR • Bhanu Prakash KN, Ph.D. • Suresh Anand Sadanathan, Ph.D. • Jadegoud Yaligar, Ph.D. •

Trainee Observers: Navin Michael, Ph.D. • Sanjay Kumar Verma, Ph.D.

For More Information Including Housing & Registration,  
 Please Visit: [www.ismrm.org](http://www.ismrm.org) or Call + 1 510 841 1899

This workshop does not offer CME credits.