

158th WPI-IIIS Seminar

& 54th ARIHHP Human High Performance Seminar

Cold-induced thermogenesis: a cold shoulder for obesity treatment?

Human energy metabolism is highly regulated and adaptive to environmental changes. It has been long appreciated that cold exposures can increase energy expenditure (cold-induced thermogenesis or CIT). The recent rediscovery of brown adipose tissue in adult humans have spurred interests in this potential mechanism to increase energy expenditure to combat obesity. We quantified the CIT response to different environmental temperatures in a whole-room indirect calorimeter, determined the capacity of CIT, lower critical temperatures, muscle shivering activities, and explored factors potentially contributing to the differences in thermal physiology between lean vs. obese healthy young men.



Dr. Kong Y. Chen

Metabolic Clinical Research Unit,
NIH Clinical Center / The National Institute of
Diabetes and Digestive and Kidney Diseases

Date: **Wednesday, September 18, 2019**

Time: **9:00 – 10:00**

Venue: **1F Auditorium, IIIS Building**



IIIS

ARIHHP



INTERNATIONAL INSTITUTE FOR INTEGRATIVE
SLEEP MEDICINE

Contact: International Institute for Integrative Sleep Medicine, University of Tsukuba
029-853-8080 (ext. 8080) | wpi-iiis-alliance@ml.cc.tsukuba.ac.jp