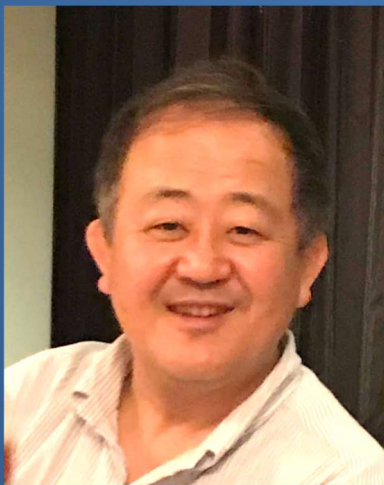


166th WPI-IIIS Seminar

A Concerted Thermogenic Response via a Phosphor-Switch of an Epigenetic Modifier

How cells sense and respond to environmental cues remains a central question of biological research. Recent evidence suggests that chromatin organization called epigenetics regulates cell fate. Fat cells play important roles in protecting organisms against starvation and cold environment. While brown fat cells burn fat to produce heat in acute cold exposure, under chronic cold environment, brown-like fat cells called “beige fat cells” are recruited in subcutaneous white adipose tissue (scWAT) and actively burn fat for heat production. This adaptive change is called scWAT “beige-ing” and contributes to chronic adaptation. In the present talk, I will present how β -adrenergic signaling, implicated in acute stress response, downstream of sympathetic nerve stimulation, regulates concerted thermogenic response in brown adipose tissue and scWAT via the epigenetic mechanism.



Dr. Juro Sakai

Tohoku University School of Medicine /
The University of Tokyo, Research Center of
Advanced Science and Technology (RCAST)

Date: **Wednesday, January 22, 2020**

Time: **12:00 – 13:00**

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



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