

慶應医学会例会

下記により例会を開催いたしますので、多数ご来聴ください。

記

日時 2015年12月21日(月) 13:00

場所 総合医科学研究棟1階ラウンジ

演題 **Engineering Fat Cell Fate to Fight Obesity and Metabolic Diseases**

Shingo Kajimura Ph.D.

UCSF Diabetes Center and Department of Cell Tissue Biology

All mammals harbor two types of adipose tissues that serve distinct physiological functions: white adipose tissue (WAT) and brown adipose tissue (BAT). WAT functions mainly in the storage of excess energy, while BAT specializes in dissipating energy in the form of heat and functions as a defense against hypothermia and obesity. Since adult humans possess significant amounts of active BAT depots and its mass inversely correlates with adiposity, BAT plays an important role in human obesity and energy homeostasis. New evidence suggests two types of thermogenic adipocytes with distinct developmental and anatomical features: classical brown adipocytes and beige adipocytes. Classical brown adipocytes are located mainly in dedicated BAT depots of rodents and infants. Beige adipocytes, on the other hand, reside mainly in subcutaneous WAT where they arise postnatally in response to certain external cues, such as chronic cold exposure and long-term treatment with PPAR- agonists, a process often referred to as the "browning" of WAT. Importantly, adult human BAT appears to be mainly composed of beige-like adipocytes, making this cell type an attractive therapeutic target for obesity and obesity-related diseases, such as insulin resistance and type2 diabetes. I will review recent progress in the molecular control of brown and beige adipocyte development and discuss emerging questions.

担当 微生物学・免疫学教室 教室

責任者: 本田賢也 教授

担当者:

(内線 61202)

以上

主催 慶應医学会

共催 慶應医師会

The Keio Journal of Medicine