

# Control of lipid storage and secretion by Cide proteins



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**Date: Friday, 24 July 2009**

**Time: 4pm**

**Venue: LT20**

**Host: Prof Hew Choy Leong**

Obesity develops as a result of energy intake exceeding energy expenditure and is a major risk factor for many metabolic diseases such as diabetes, hypertension, stroke, liver steatosis, cancer and inflammatory diseases. The development of obesity involves functional interactions among various tissues such as brain, adipose tissue, skeletal muscle, liver and intestine and mostly regulated by the balance of lipid storage and secretion in adipose tissue and liver. Lipid storage and secretion are controlled by the formation of lipid droplets and their functional interaction with other organelles in adipocytes and hepatocytes. Cide proteins, including Cidea, Cideb and Fsp27 (Cidec in human) were expressed in adipose tissue and liver and localized to ER and lipid droplets. Our research in the last few years suggests that Cide proteins play important roles in controlling lipid storage and secretion. I will discuss the detail phenotype of mice *deficient* in Cide protein and analyze the underlying mechanism of Cide proteins in the regulation of lipid storage and secretion.

**Department of Biological Sciences  
Seminar Announcement**

