

**Monday, November 4, 2019**

**3:30pm 409L LSOM**

Intercellular crosstalk via secreted ligands and membrane receptors is fundamental to organ biology, metabolism and disease. Despite this, the repertoire of secreted ligands and membrane receptors and the global landscape of intercellular signaling remain incompletely delineated. Our studies focus on delineating the biological role and mechanisms of novel endocrine factors released by adipose tissue and the liver. In particular, the new adipokine NRG4 is emerging as a critical regulator of hepatic metabolism and serves as a checkpoint for NASH pathogenesis. The hepatokine TSK gates energy expenditure through its regulation of adipose sympathetic innervation. Using single-cell RNA sequencing, we mapped the landscape of intercellular crosstalk in metabolic tissues and define disease-associated reprogramming of cell properties at the single-cell level.

**Jiandie Lin, Ph.D., Bradley M. Patten Collegiate Professor of Life Sciences**

**Professor, Cell & Developmental Biology**

**University of Michigan Medical School**

**Ann Arbor, Michigan**

**Mapping the landscape of intercellular signaling in health and metabolic disease**

**Presented by:**

sented