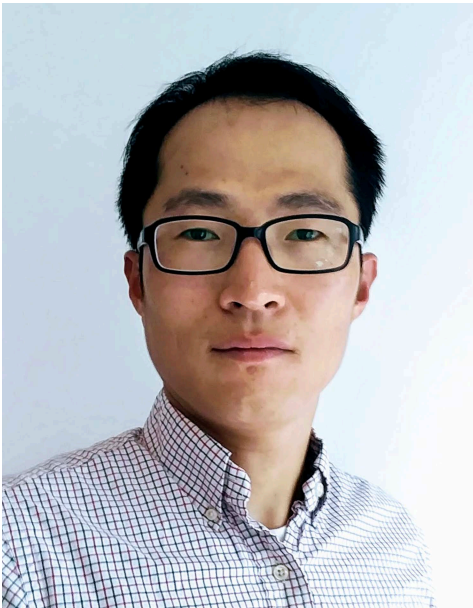




a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

Department of Cellular and Physiological Sciences



Hyun Cheol Roh, Ph.D

Instructor, Evan Rosen Lab

Candidate for CPS Faculty Position

**Division of Endocrinology, Diabetes and Metabolism
Beth Israel Deaconess Medical Center**

****CPS SPECIAL SEMINAR TIME****

12:30 PM Monday, Jan. 14, 2019

Location: LSC3

Hosted by Dr. Timothy Kieffer

Adipocyte cellular plasticity in physiology and disease

All somatic cell types have the same genome, but each has a distinct identity manifested by a unique gene expression program established via epigenetic mechanisms. While cellular identity has been considered to be immutable, it is now clear that differentiated cells can be reprogrammed to switch identity in experimental settings. Such cellular plasticity has been a topic of intense investigation for years. However, it is poorly understood how plasticity of mature cell types contributes to normal physiology and human disease. To address the questions, my research uses adipocytes as a model system because they have a high degree of plasticity although they are a terminally differentiated post-mitotic cell type. Adipocytes alter cellular identity in response to physiological stimulation and dysregulation of this process is implicated in metabolic disorders. In my talk, I will present a new method that I developed for cell type-specific molecular profiling in vivo and its application to understand how adipocyte cellular plasticity is implicated in physiology and the pathology of obesity.

Refreshments will be available outside LSC3!!!