Mouse Metabolic Phenotyping Center for Metabolic Research

한국마우스대사질환특화센터, 가천의대

최 철 수

Characterization of metabolic phenotype of genetically modified mouse models is necessary to investigate the mechanism of development of human metabolic disorders such as diabetes, dyslipidemia, and related metabolic diseases. Metabolic disorders are caused by extremely complex interactions and integrations among organs responsible for controlling metabolic fluxes. The complexity of metabolic pathways necessitates the real time quantification of metabolic fluxes under physiologic conditions in vivo. Integrative mouse metabolic phenotyping system is designed to conduct comprehensive in vivo experiments to study whole body and tissue-specific glucose and lipid metabolism in mice with minimizing stress. Understanding of metabolic disruption will also provide the rationale for identification and validation of novel therapeutic drug targets. In this presentation, more details about function and efficiency of Korea Mouse Metabolic Phenotyping Center (KMMPC) on metabolic research including in vivo flux measurements will be discussed.