Research Summary:

Our lab is interested in posttranslational modifications (PTMs) of transcription factors in the pathophysiology of diabetes and obesity, and their associated comorbidities, including hepatic steatosis, cancer and cardiovascular diseases. In particular we focus on:

(1) The transcriptional selectivity of PPARγ determined by PTMs in regulating adipose plasticity, including adipogenesis, browning, senescence, adipokine production, lipid and glucose metabolism. We aim to understand the fundamental mechanism in remodeling adipose tissues and provide new strategy to develop the next generation drug for treating Type 2 Diabetes.

(2) The novel connection between obesity and cancer. We have demonstrated that dysregulation of lipid desaturation is a shared mechanism of obesity and tumor progression. The aims of this direction are to identify new targets for treating obesity-associated cancers and to discover novel functions of cancer regulators in metabolic diseases.

Selected Publications:


More about Li Qiang, Ph.D.:

Link to CV