# **POSTDOCTORAL POSITION AVAILABLE!!**

## Role of Immune Cells in Adipose Lipid Metabolism



## Diabetes, Obesity, and Metabolism Institute (DOMI)

### Icahn School of Medicine at Mount Sinai, Manhattan, NYC

#### Rajbhandari Lab

#### The Laboratory

Recently started Rajbhandari Lab uses cell and molecular biology, biochemistry, next-gen sequencing/scRNA-seq, cell culture and animal model to study clinically and basic science relevant questions on 1) Immune cell regulation of lipid homeostasis (*Cell* 2018, *eLife* 2017, *Nat. Med.* 2018), 2) developmental process of brown, beige and white fat (*Cell* 2018, *JCl* 2017, *Nat. Chem. Biol.* 2016, *Mol. Metab.* 2019, *Genes&Dev.* 2019) and 3) crosstalk between adipose and other metabolic tissues (esp. liver and muscle) (*Cell Metab.* 2018, *Mol. Metab.* 2019). Dr. Rajbhandari is a proponent of collaborative interdisciplinary research and strongly committed to scientific and academic career mentorship. The broader significance of the work in Rajbhandari Lab is that obesity is linked to various diseases and by studying the perturbation in the cellular and molecular pathways in metabolic tissues might provide a better understanding of the disease. Dr. Rajbhandari obtained his PhD from the University of Wisconsin-Madison and did his postdoctoral training in the Howard Hughes Medical Institute at UCLA in the lab of Peter Tontonoz MD PhD.

#### <u>The Institute</u>

The Diabetes, Obesity, and Metabolism Institute (DOMI) at the Icahn School of Medicine at Mount Sinai was created to find the cure and to develop better therapeutic and prevention strategies for those who suffer from diabetes, obesity, and metabolic syndromes. Physician and scientists from departments throughout the Mount Sinai Health System–including Endocrinology, Surgery, Genetics and Genomics, Immunology, and Pharmacology and Systems Therapeutics–are conducting groundbreaking research in the hopes of revolutionizing the approach to all metabolic disorders.

#### <u>The position</u>

A postdoctoral position is available starting as soon as possible to dissect the regulation and adipose tissue reactivity of T- and B-cell dependent lipid mobilization and thermogenesis in adipose tissue. The fellow's project will determine how metabolic conditions (temperature and diet stress) shape adaptive immune composition and elucidate T- and B-cell mediated molecular signaling and

gene transcription in adipocytes. This study will be pursued through the use of standard molecular biology, cell culture methods, FACS, qPCR, immunoblotting, RNA-seq, immunofluorescence microscopy, single cell RNA-Sequencing, and mouse model and human samples.

#### **Requirements**

Candidates must have received their PhD in the past 1-2 year or obtain one in the near future and have had experience in the areas of immunology and transcription, as a well as strong publication record with at least 1-2 first authorship in a reputed journal. The candidate must have prior experience in using molecular biology, cell culture, FACS and animal model, preferably also with colony management. Previous experience in adipose biology and Next Gen Sequencing data processing and analysis will be a definitive advantage.

#### **Application**

The Icahn School of Medicine at Mount Sinai is an Equal Opportunity Employer and champions

STRENGTH THROUGH DIVERSITY and CORE VALUES. Interested applicants should send their

resume to Gabrielle Mittleman at gabrielle.mittleman@mssm.edu , cc

prashant.rajbhandari@mssm.edu

#### For more information on research conducted in Rajbhandari Lab please visit:

www.rajbhandarilabsinai.org

https://www.mountsinai.org/profiles/prashant-rajbhandari