ADIPOSIGN

Center for Adipocyte Signaling

Postdoctoral Positions and PhD stipends to Study Adipocyte Signaling using Advanced Functional Genomics

*The **Center for Adipocyte Signaling – ADIPOSIGN** at the Functional Genomics & Metabolism Research Unit, Department of Biochemistry and Molecular Biology, University of Southern Denmark, invites applications from outstanding candidates who are interested in joining our team as PhD student or Postdoc. The positions in the **Mandrup Group** and **Kornfeld Group** are available from May 1, 2019 or as soon as possible thereafter.* ***Application deadline: 1 April 2019.***

Please read more about the all open positions and how to apply via the ADIPOSIGN homepage.

ADIPOSIGN

ADIPOSIGN is a new center established for a six-year period through a 60 mill DKK grant from the Novo Nordisk Foundation. We combine experimental and computational systems approaches to obtain unprecedented insights into how fat cells receive and respond to signals at the level of the (epi)-genome and the cell membrane. Our goal is to understand how the signaling states of adipocytes depend on depot, gender and genetic variation, and how changes in these signaling states during development of obesity contribute to the pathophysiological consequences of human obesity.

The center involves the following PIs:

- *Susanne Mandrup, Professor, Department of Biochemistry and Molecular Biology, University of Southern Denmark (Director), DK*
- *Jan-Wilhelm Kornfeld, Professor, Department of Biochemistry and Molecular Biology, University of Southern Denmark, DK*
- *M. Madan Babu, Program leader, MRC Laboratory of Molecular Biology, Cambridge, UK*
- *Zach Gerhart-Hines, Associate Professor, Center for Basic Metabolic Research, University of Copenhagen, DK*

ADIPOSIGN is closely associated with the **Center for Functional Genomics and Tissue Plasticity (ATLAS)** recently supported by a center of excellence grant from the Danish National Research Foundation and directed by Susanne Mandrup.

The Functional Genomics & metabolism Research Unit

The Mandrup and Kornfeld groups as well as the center administration of ATLAS and ADIPOSIGN are located in the Functional Genomics & Metabolism Research Unit at the Department of Biochemistry and Molecular Biology, SDU. The research unit currently hosts 5 (soon 7) independent research groups focusing on various aspects of functional genomics as it pertains to the regulation of cellular differentiation, organ homeostasis, and development of metabolic diseases. The Research Unit constitutes an international, ambitious, highly dynamic, and well-equipped working environment. The unit and the department have state-of-the-art facilities for next generation sequencing, single-cell transcriptomics, flow cytometry, mass spectrometry, metabolomics, bioimaging and transgenic mouse work. Strategic research alliances exist with the Odense University Hospital (OUH).

Research Project and Role

As a Postdoc or PhD student in ADIPOSIGN you will be one of the main drivers of this highly ambitious and interdisciplinary project. You will interact and collaborate closely with other researchers in the Mandrup and Kornfeld groups as well as with members of the groups of Zach Gerhart-Hines (Copenhagen) and M. Madan Babu (Cambridge). You will investigate adipocyte signaling states in isolated murine and human adipocytes using an array of functional genomics, proteomics and computational approaches. Some of these findings will be translated into functional studies in transgenic mouse models. You will also implement other experimental methods for analysis of adipocytes. You are expected to provide substantial general input to research projects in our groups, and will have the opportunity to develop your own ideas within our research frame.