

## **Institute of Physiology of the Czech Academy of Sciences (IPHYS)**

is a leading research institute in the field of normal and pathological physiology. Main goal of the research is to characterize mechanisms of the development of serious human diseases, such as vascular and cerebrovascular events, ischemic heart disease, diabetes, hereditary metabolic disorders and neurodegenerative diseases. (<http://www.fgu.cas.cz/en/>)

### **Energy Metabolism Unit of the Laboratory of Adipose Tissue Biology at IPHYS**

(<https://www.fgu.cas.cz/en/departments/biologie-tukove-tkane>)

is studying physiological regulations of metabolism and their disturbances in obesity and associated diseases (i.e. metabolic syndrome). In order to help treat these disorders we explore the influence of drugs, diet and natural substances. We investigate mechanisms that regulate metabolism in health and disease by combining experiments on mice and cell models with clinical studies, and we try to apply new knowledge in clinical medicine.

We are recruiting a highly motivated scientist on

### **Postdoctoral position in adipose tissue and heart (patho)physiology**

The aim of the proposed project is to elucidate the role of adipose tissue in heart function under normal and diseased conditions, including atrial fibrillation, heart failure, cardiac cachexia, etc. Your work will include 1) multi-omics analyses of human and animal tissues and plasma samples; 2) *in vivo* silencing of candidate genes using adeno-associated viruses in a mouse model; 3) confirmatory experiments involving cell cultures of primary adipocytes and differentiated myocyte cell lines; and other approaches. The project is enabled by close collaboration between IPHYS and the [Institute of Clinical and Experimental Medicine \(IKEM\) in Prague](#) within a newly funded [consortium](#) of five centres of scientific, research and clinical excellence in the Czech Republic.

**Duration:** 12 – 36 months, starting as soon as possible.

**To familiarize yourself with our research advances in this respect, we refer you to the following**

**publication:** Janovská P. 2020. doi: [10.1002/jcsm.12631](https://doi.org/10.1002/jcsm.12631).

#### **We require:**

- PhD degree (up to 2 years after receiving the degree, except for periods of parental leave, military service and international research stays, in which case up to 5 years after receiving the degree)
- Experience of working in a research laboratory outside the Czech Republic (at least 1 year continuously) and no current employment in the Czech Republic
- Experience in handling laboratory mice, *in vitro* cell cultures, biostatistics and bioinformatics is considered an advantage.

#### **We offer:**

- Working in a creative international environment
- Competitive salary
- Working benefits (e.g. health insurance, language courses, meal allowance, kindergarten, institutional lodging house)
- 6 weeks holiday + 3 sick days

#### **How to apply:**

Send your **CV** (including a list of publications), contact details for 2-3 **referees** and a **motivation letter** to [katerina.rozsypalova@fgu.cas.cz](mailto:katerina.rozsypalova@fgu.cas.cz) by **May 3, 2023** at the latest.