



HR EXCELLENCE IN RESEARCH

## **IPHYS Laboratory of Molecular Physiology of Bone**

Czech Academy of Sciences  
Biomedical Research Campus in Prague, Krč

**IPHYS** is a leading research institute in the field of normal and pathological physiology. It consists of a number of scientific and service departments and shared equipment for the research (<http://www.fgu.cas.cz/en/>).

The **Laboratory of Molecular Physiology of Bone** led by Dr. Michaela Tencerova is focused on studying the physiological role of bone marrow adipose tissue in relation to bone and fat metabolism in metabolic complications (<https://www.fgu.cas.cz/en/departments/laboratory-of-molecular-physiology-of-bone>).

The research continues our previous studies identifying the unique metabolic phenotype of bone marrow adipocytes compared to peripheral adipose tissue in obesity, with a focus on specific targets involved in the regulation of bone marrow homeostasis (Tencerova et al., Cell Reports, 2019; Tencerova et al., Bone Res, 2019; Tencerova et al., JBMR, 2018). The successful applicant will work in an international and friendly environment. The research project will involve work with murine and human cellular systems (bone marrow stromal stem cells) and animal transgenic models, applying high-throughput methods such as RNA sequencing, metabolomics, lipidomics, and bioenergetics. The research will be conducted in collaboration with prestigious national and international laboratories in the USA and Europe, and supported by the EFSD NovoNordisk grant.

We are recruiting a highly motivated scientist for a:

### **Postdoctoral position in Molecular Physiology of Bone**

#### **Responsibilities:**

- Leading independent project
- Designing experiments and interpreting results
- Analysing data
- Learning new methods
- Teamwork and assisting colleagues with other projects

#### **Position Requirements:**

- PhD degree (up to 8 years post-PhD) in molecular biology, biochemistry, physiology, medicine, or related disciplines
- Strong motivation for scientific research, curiosity, and the ability to think outside the box
- Advanced experience with molecular biology techniques, in vitro cell culture methods, cloning, CRISPR technology, animal work (including metabolic assays, bone analysis, drug administration etc.).
- Basic command of English, PC literacy, proficiency in statistical programs, working in R is advantage
- Track record of scientific publications, ability to work in an international team and excellent written and spoken English skills



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**We Offer:**

- A creative, international working environment
- Competitive salary based on the Institute's internal policies, as well as the candidate's skills and experience
- Access to state-of-the-art laboratory facilities and resources
- Opportunity to collaborate with diverse international research teams
- Professional development opportunities and career mentorship
- Employee benefits (e.g. health insurance, language courses, meal allowance, childcare, institutional lodging house)
- Full-time position (1.0 FTE)
- 5 weeks of holiday, plus 1 additional week of holiday, and 3 sick days

**Expected Appointment Start Date:** Negotiable

**Required Documents:**

- Cover letter
- CV (including a list of publications)
- References

To apply for this position, send the above documents to Katerina Rozsypalova at [personalni@fgu.cas.cz](mailto:personalni@fgu.cas.cz) by **31.12.2024** or **until the right candidate is found**.