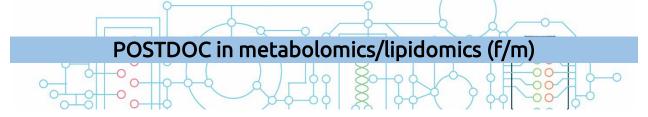The Institute of Physiology of the Academy of Sciences of the Czech Republic conducts research in the field of normal and pathological physiology, focusing on the study of the mechanisms of serious human diseases.

Laboratory of Metabolism of Bioactive Lipids is looking for a new team member.

POSTDOC in metabolomics/lipidomics (f/m)

Location:

Laboratory of Metabolism of Bioactive Lipids of Dr. Ondrej Kuda, Institute of Physiology, Czech Academy of Sciences, Prague, Czech Republic

Lab: https://www.fgu.cas.cz/en/departments/laboratory-of-metabolism-of-bioactive-lipids

Duration:

12 – 36 months, starting as soon as possible

Job Description:

Your work will be varied. You will study the molecular mechanisms of metabolic diseases related to adipose tissue and the heart, in particular glucose intolerance and heart failure. The position is supported by the CarDia consortium, which combines basic and clinical research. Primarily, you will process omics data (metabolomics, proteomics, genomics) obtained from clinical projects, mice and cells. You will statistically evaluate differences between healthy and diseased patients and search for the causes of these differences in gene expression, protein and metabolite concentrations. You will not do this alone, but with a team of experts in the field. You will learn to perform metabolomic and lipidomic analyses, bioinformatics and LC/GC-MS method development. You will perform experiments in cells or mice, create new models, extract samples, play with R and Python scripts, and write reports and publications.

To familiarize yourself with our research, please refer to:

Brejchova et al., Food Chem, 10.1016/j.foodchem.2022.132983
Lopes et al., Cell Rep. 2021, 10.1016/j.celrep.2021.109833
Brejchova et al., PNAS 2021, 10.1073/pnas.2020999118
Paluchova et al., Diabetes, 2020, 10.2337/db19-0494

We offer:

o Highly interdisciplinary work in a creative academic environment. Everyone can contribute ideas to move the project forward.
o Projects balanced between basic and translational science and active involvement in clinical trials.
o Opportunities for training (-omics courses, etc.)

- Fixed-term employment with the possibility of extension, starting upon agreement.
- Competitive salary based on the internal rules of the institute and the skills and experience of the candidate.
- Language courses, on-site parking, bike room, campus hostel, home office, support for international colleagues, etc.
- Six weeks vacation + sick days.

Our requirements:

- ✓ Ph.D. degree (up to 2 years after graduation)
- ✓ Ph.D. degree preferably in biochemistry, (bio)analytical chemistry, (bio)informatics, statistics, biomedical engineering, natural sciences, etc. The projects are diverse, so it is not the discipline that is important, but the ability to learn new things.
- ✓ Experience of working in a research laboratory outside the Czech Republic (at least 1 year continuously) and no current employment in the Czech Republic
- ✓ Hands-on experience in metabolomics (sample preparation or data analysis).
- ✓ Independence, reliability (responsible for a funded project).
- ✓ Enthusiasm and motivation to learn new things outside of your comfort zone (basic biology, chemistry, programming languages) from more experienced colleagues.
- ✓ Ambition to lead a project, support the team, and achieve the goals.
- ✓ Excellent communication skills in English (written and spoken).

Additional skills (would be considered an advantage)

- Knowledge of Python or R, MS Excel, and programming skills.
- Expertise in cell culture techniques.
- Complex metabolomics/lipidomics analysis using LC–MS.
- Animal work (mouse physiology, handling, FELASA or national certificate).
- Clinical work (hands-on experience in a clinical trial)

How to apply:

Have we awakened your interest? If you meet the requirements, please write a motivation letter and send it by email along with your CV describing your skills and previous experience to Katerina Rozsypalova (katerina.rozsypalova@fgu.cas.cz) by May 3, 2023 at the latest.