

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

## BIOINFORMATICIAN (m/f) postdoc



Are you driven by the desire to decode the intricacies of life using cutting-edge bioinformatics technologies? If you are passionate about Python, Docker, nginx, and proficient in natural sciences, we have an exciting opportunity for you! Take your career to the next level, focusing on mass spectrometry, metabolomics, lipidomics, and fluxomics, and help us generate visually compelling data from clinical trials.

### Job Description:

- Processing, analysis, integration and interpretation of lipidomic, metabolomic, and fluxomic data from targeted and untargeted LC-MS platforms.
- Development of analysis workflows using Python, Matlab, C#.
- Development of metabolic flux models, metabolic engineering.
- Writing grant proposals, reports and participating in collaborative projects in clinical research.
- Writing scientific papers and presenting results at international conferences.

### Please refer to our [website](#) and papers to familiarize yourself with our research.

Vondrackova et al., Anal Chem. 2023, [10.1021/acs.analchem.3c02039](https://doi.org/10.1021/acs.analchem.3c02039)

Brejchova et al., Food Chem. 2022, [10.1016/j.foodchem.2022.132983](https://doi.org/10.1016/j.foodchem.2022.132983)

Lopes et al., Cell Rep. 2021, [10.1016/j.celrep.2021.109833](https://doi.org/10.1016/j.celrep.2021.109833)

Brejchova et al., PNAS 2021, [10.1073/pnas.2020999118](https://doi.org/10.1073/pnas.2020999118)

GitHub: <https://github.com/IPHYS-Bioinformatics>

### We offer:

- Highly interdisciplinary work in a creative academic environment. Everyone can contribute ideas to move the project forward.
- Projects balanced between basic and translational science.
- Opportunities for training (data processing workshops, courses, etc.).



- Fixed-term employment with the possibility of extension, starting upon agreement.
- Full time job (1.0 FTE), home office based on the nature of the work.
- Competitive salary based on the internal rules of the institute, skills and experience of the candidate.
- Language courses, meal allowance, on-site parking, bike room, campus hostel, home office, support for international colleagues, etc.
- 5 weeks vacation + 1 additional week of vacation, three sick days.



#### **Our requirements:**

- ✓ PhD degree with a focus on bioinformatics, engineering or natural sciences, or related science disciplines.
- ✓ Very good knowledge in the analysis of metabolome and / or lipidome data from mass spectrometry, common open source software, as well as approaches for data integration of multi-omics data
- ✓ Proficiency in Python, including data analysis and visualization packages (e.g., pandas, matplotlib/seaborn/plotly, flask/dash).
- ✓ Independence, diligence, analytical thinking, and ability to solve complex problems.
- ✓ Enthusiasm and motivation to learn new things outside of your comfort zone (basic biology, chemistry, programming languages) from more experienced colleagues.
- ✓ Fluency in written and spoken English.

#### **Additional skills** (would be considered an advantage)

- Knowledge of C#, R, or Matlab; Linux server administration, docker, nginx, Git



#### **Location:**

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

Lab: <https://fgu.cas.cz/en/research-and-laboratories/research-departments/laboratory-of-metabolism-of-bioactive-lipids/>

The IPHYS researches normal and pathological physiology, focusing on studying the mechanisms of severe human diseases.

#### **Duration:**

12 – 36 months, starting date is negotiable

#### **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 ([personalni@fgu.cas.cz](mailto:personalni@fgu.cas.cz)) by February 28, 2025, at the latest. The candidates will be enrolled in the internal competition for salary support for postdoctoral researchers with international experience.