

Institute of Biotechnology of the Czech Academy of Sciences announces an open competition in accordance with the Act No. 283/1992 Coll. on the Czech Academy of Sciences, and the Statutes of the Czech Academy of Sciences for a position:

PhD student in single-cell and spatial transcriptomics

in the **GliaOmics** Lab, located at the Institute of Biotechnology in BIOCEV campus. We are a research group focused on understanding the molecular and cellular mechanisms of glial cell involvement in neurological diseases, particularly **stroke**. Our research integrates cutting-edge **single-cell and spatial transcriptomic technologies**, advanced data analysis, and validation methods. Our goal is to advance the understanding of neurological disorders and contribute to the development of novel glial-oriented therapeutic strategies. More details about the laboratory are at: ibt.cas.cz/en/Glia-Omics-Lab.

Job description:

The position is part of a funded project focused on creating a **cellular and molecular atlas of the human brain after ischemic stroke** using spatial and single-nucleus RNA sequencing, multi-omics integration, and computational modeling. As a PhD student, you will be involved in sample preparation, transcriptomic profiling, and data analysis. You will receive training in advanced techniques and work closely with other team members to contribute to data interpretation, scientific publications, and presentations.

Requirements:

- MSc degree (or equivalent) in molecular biology, neuroscience, bioinformatics, or a related field
- Interest in neurobiology and transcriptomic technologies
- Experience with R/Python programming (required)
- Experience in omics data analysis
- Motivation to work in a multidisciplinary and collaborative research environment
- Proficiency in English, both written and spoken

We offer:

- Up to full-time position (depending on university stipend)
- Work in an international and collaborative environment
- Involvement in a cutting-edge research project
- Competitive salary, 5 weeks of vacation, and meal allowance
- A chance to grow and develop professionally

Institute and workplace location:

The Institute of Biotechnology (IBT, ibt.cas.cz) is a leading research center located in the BIOCEV science and biotechnology campus (biocev.eu), located at the outskirts of Prague, ~30 minutes from the city center by public transport. BIOCEV hosts over 500 researchers across various disciplines and provides access to state-of-the-art core facilities including genomics, imaging, animal research, and computational resources.

Application deadline: 31.8.2025

Starting date: Negotiable

Contract duration: Up to 4 + 1 years, in accordance with PhD study program regulations

For more information, please contact: Lukas Valihrach (lukas.valihrach@ibt.cas.cz)

To apply, please send your: motivation letter, CV and contact for at least 1 referee to hr@ibt.cas.cz.

More details on the processing of personal data are available on the website:

<https://www.ibt.cas.cz/cs/o-ustavu/oficialni-dokumenty/qdpr/>.