



Open PhD position

Transcriptome analysis of acute and neurodegenerative CNS disorders

The [Laboratory of Gene Expression](#) (Institute of Biotechnology CAS) is a well-funded research laboratory with excellent publication track record, comprised of researchers with unique scientific expertise. We focus on gene expression analysis using cutting-edge technologies such as [single-cell and spatial transcriptomics](#). We have research projects in the field of neurobiology and we are active in the development of new methods for nucleic acids analyses.

We offer PhD position in the following areas:

- Single-cell profiling of glial cells in the progression of amyotrophic lateral sclerosis
- Transcriptomic analysis of ischemic brain injury
- Monitoring of serum biomarkers in patients with acute spinal cord injury

The [successful candidate](#) will be responsible for complete gene expression analysis (including sample preparation, quality control, RT-qPCR and RNA-seq profiling with single-cell or spatial resolution) and data analysis. The candidate should have good background in genetics, molecular and cell biology. Basic knowledge or interest in scientific programming (e.g. R, Python, Unix) is advantageous. Previous experience in neurobiology or RT-qPCR and RNA-Seq are appreciated, although not necessary. As the majority of projects is performed in collaborations with national as well as international partners (Sweden and Netherlands), good communication skills are mandatory. The candidate should show willingness to learn, proactive attitude and certain level of independence. The positions are suitable for wet-lab as well as dry-lab scientists; based on candidate's preferences (the interdisciplinary skills are welcomed).

We offer friendly and supportive environment, secured financing, possibility to work with cutting-edge techniques and good chance for high-impact publications. The laboratory is located in new state-of-the-art BIOCEV research center in Vestec ([biocev.eu](#)).

Interested applicants contact Lukas Valihrach (lukas.valihrach@ibt.cas.cz) and include their CV and cover letter. For more details, visit www.labgenexp.eu.

Join us and work with the technologies that will shape life science in the 2020s ^{1,2,3,4}