

Postdoctoral researcher

in the Laboratory of Structural Biology (<http://lsb.avcr.cz/>), with the focus on understanding
Physiological functions of histone deacetylases

Job description:

The successful candidate will co-lead a project aimed at structure-function and physiological studies of zinc-dependent histone deacetylases (HDACs), including HDAC6 and HDAC11. You will express and purify target HDACs from various organisms profile their substrate specificity using peptidic combinatorial libraries. Mutagenesis, biophysical approaches, structural biology techniques, and genetic code expansion technology will be used to understand recognition of substrates at the protein level. The acquired knowledge will be further used for the development of isoform- as well organism-specific HDAC inhibitors. Metabolomics and lipidomics will complement *in vitro* findings in our search for unknown physiological substrates and roles of HDACs. The candidate will also contribute to supervision of junior colleagues, manuscript writing, and present her/his results at international meetings.

Basic education, experience, and skills required for consideration:

- PhD in molecular biology, biochemistry, biology, biophysics or related subjects
- Publication record in peer-reviewed international journals
- Excellent communication skills and teamwork, ability to plan and work independently
- Good English command (oral and written)
- Prior experience with heterologous protein expression and purification, biophysics, structural methods, and enzyme kinetics is a plus

We offer:

- Successful candidates will lead or co-lead one or more key projects in the lab
- A dynamic, multidisciplinary and highly collaborative international team
- Access to state-of-the-art technologies in structural biology, biophysics, and omics
- Excellent training conditions in preparation for your future career
- Extensive network of collaborators

Institute and workplace:

The Institute of Biotechnology (IBT, www.ibt.cas.cz), a constituent of the BIOCEV center of excellence (www.biocev.eu), is a multi-disciplinary research center focused on cancer and developmental biology, metabolism, gene expression, and structural biology & protein engineering. IBT/BIOCEV brings together >500 international scientists and students in >50 research groups. Research is supported by state-of-the-art core facilities (gene core, molecular structure and biophysics, animal clinic, flow cytometry & imaging, and omics). Located in Vestec, approximately 30 minutes (public transport) from the Prague center.

Additional information:

- **Application deadline: January 31, 2023. Fully funded position is available immediately.**
- For more information, please, contact Dr. Cyril Bařinka (cyril.barinka@ibt.cas.cz).
- To apply please submit your CV, motivation letter, and 2 references 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/>.