

**The Institute of Biotechnology of the Czech Academy of Sciences announces in accordance with the Act No. 283/1992 Coll. on the Czech Academy of Sciences, and the Statutes of the Czech Academy of Sciences open**

## **PhD positions in Cytoskeleton Biophysics**

**The group:** Cytoskeletal networks form the internal dynamic scaffold of living cells essential for key cellular processes, such as cell division, cell motility or morphogenesis. Our aim is to understand how the individual structural elements of the cytoskeleton mechanically cooperate to drive these cellular processes. We use reconstituted cytoskeletal systems to study the system's self-assembly and dynamics. Central to our approach are imaging, manipulation and force measurement techniques with single molecule resolution.

**More info:** <http://www.lanskybraun.eu>, <http://www.ibt.cas.cz>

**The project:** Modulating the accessibility of the cytoskeletal filaments for filament-associated proteins is one of the fundamental regulatory mechanisms in the cytoskeleton. Unstructured microtubule-associated proteins, such as the Alzheimer's disease-associated protein tau, can form cohesive envelopes around microtubules, selectively modulating the microtubule accessibility by locally excluding specific proteins from the microtubule surface while recruiting others. The aim of the project is to explain the envelope formation and its regulatory and (patho)physiological roles.

**Candidate profile:** We are looking for enthusiastic PhD students motivated to work on cross-disciplinary projects, with background in (bio)chemistry, (bio)physics, molecular/cellular biology or an equivalent field.

**We offer:** The work with a top laboratory facilities in the Center of Excellence BIOCEV and to be a part of a young international team.

**The institute:** Institute of Biotechnology of the Czech Academy of Sciences is located at the BIOCEV research center, a newly established biomedical research facility in Prague, providing a creative research environment and high-end technology platforms.

**To apply, please, contact Zdenek Lansky** ([zdenek.lansky@ibt.cas.cz](mailto:zdenek.lansky@ibt.cas.cz))

**Deadline for applications: 31 March 2020**

*We hereby inform you that the Institute of Biotechnology of the Czech Academy of Sciences shall process your personal data only to the extent for the purposes of selection of a suitable employee and closure of a contract of employment in accordance with the General Data Protection Regulation 2016/679 (GDPR).*

*More details on the processing of personal data of an applicant for open position are available at web site: <http://www.ibt.cas.cz/o-ustavu/GDPR.html>*