

## PhD students - Laboratory of Molecular Therapy

Laboratory of Molecular Therapy of the Institute of Biotechnology of the Czech Academy of Sciences located in the BIOCEV research centre in Vestec by Prague 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 PhD student positions to contribute to projects focused on cancer cell metabolism and the development of novel antitumor strategies.

### About us:

Located in the Institute of Biotechnology of the Czech Academy of Sciences within the BIOCEV research center near Prague, our laboratory conducts high-quality research bridging basic and applied studies in cancer biology and mitochondrial physiology. We were among the pioneers in discovering that cancer cells can “hijack” mitochondria from surrounding stromal cells to enhance their fitness and promote tumorigenesis. Additionally, we have developed a novel anti-cancer drug targeting mitochondria, with successful phase I clinical testing in the Czech Republic. Furthermore, we investigate the molecular intricacies of mitochondrial complex II assembly and its role in cancer. We publish in top-tier journals and collaborate with leading laboratories worldwide.

### The Projects:

We are seeking talented individuals to join our team to contribute to ongoing projects funded by national research agencies. These projects involve developing of novel antitumor strategies, which exploit altered mitochondrial physiology in glioblastoma, neuroendocrine tumors, and renal cancers. Another project aims to characterize the pro-tumorigenic role of mutations in the Krebs cycle enzyme SUCLG2, recently discovered by us in patients with neuroendocrine tumors. Additionally, candidates can explore the molecular details of mitochondrial complex II assembly, benefiting from our extensive expertise in this field. Another project of the laboratory is understanding signalling and metabolism during liver regeneration as well as metabolic pathways in liver malignant transformation.

### Candidate profile:

We seek highly motivated PhD students with a keen interest in clinically relevant research projects. Candidates should be proactive, reliable, organized, and capable of both independent work and teamwork. A background in biology, biochemistry, or medicine is preferred, and experience in cell culture techniques, molecular biology, imaging methods, work with laboratory mice, or metabolic profiling is advantageous.

### We offer:

- A friendly team environment and top-quality research opportunities
- Involvement in interesting projects funded by the Czech Science Foundation or Czech Health Research Council
- Above-standard salary
- The chance to learn state-of-the-art techniques
- Good opportunities for publications
- Participation at international conferences
- Research career development

**Location:**

The laboratory is located in the new state-of-the-art BIOCEV research centre ([www.biocev.eu](http://www.biocev.eu))

**Deadline for applications: 12.5.2024****For more information contact:**

prof. Jiří Neužil

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Please send copy of your inquiry to Štěpána Boukalová ([stepana.boukalova@ibt.cas.cz](mailto:stepana.boukalova@ibt.cas.cz))

**In case you are interested in**, please, send your application with a structured CV, cover letter describing your background and research interests and two contacts for reference to [jiri.neuzil@ibt.cas.cz](mailto:jiri.neuzil@ibt.cas.cz) and [hr@ibt.cas.cz](mailto:hr@ibt.cas.cz).

**For further reading:**

<https://www.biocev.eu/cs/o-nas/aktuality/patogenni-variace-genu-suc1g2-zvysuje-riziko-vzniku-vzacnych-neuroendokrinnich-tumoru.292>

<https://cesky.radio.cz/cesti-vedci-pripravuji-druhou-fazi-testovani-leku-proti-rakovine-mitotam-8716165>

<https://www.biocev.eu/cs/o-nas/aktuality/nove-vysledky-o-klicovem-komplexu-regulujicim-krebsuv-cyklus-a-oxidativni-fosforylaci.399>

<https://pubmed.ncbi.nlm.nih.gov/30449682/>

<https://pubmed.ncbi.nlm.nih.gov/34415331/>

<https://pubmed.ncbi.nlm.nih.gov/38212624/>

<https://pubmed.ncbi.nlm.nih.gov/37064512/>

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

<https://www.ibt.cas.cz/cs/o-ustavu/uredni-deska/gdpr/>