



Childhood Leukemia Investigation Prague, Second Faculty of Medicine, Department of Pediatric Hematology and Oncology, Charles University and University Hospital Motol, Prague, Czech Republic

CLIP – metabolic study group HIRING

Post-doctoral candidate

CLIP Laboratories are integral part of the Department of Pediatric Hematology and Oncology at the Second Faculty of Medicine, Charles University in Prague. It is the largest pediatric oncology center in the Czech Republic with about 250 newly diagnosed patients per year. CLIP Laboratories are responsible for diagnostics and monitoring of disease progression and treatment efficacy of hematological malignancies. Besides diagnostics, CLIP conducts also internationally recognised research in the field of haematological diseases.

One particular interest in CLIP is to elucidate the role of cancer metabolism in leukemogenesis, progression of the disease and treatment. Previous work led by Dr. Starková underlined the significance of new findings in this area (Hermanova et al, Leukemia 2016; Hlozkova et al. BMC Cancer 2020; Hlozkova et al. Sci Rep 2022). Current project is focused on deciphering the metabolic processes of resistant cells responsible for adverse effect to currently used treatment. In this study we are using PDX models, single-cell RNA sequencing, mass cytometry, bulk and spatial metabolic and proteomic tools and *ex vivo* drug testing.

We are looking for a highly motivated, pro-active and skilled post-doctoral candidate interested in leukemia research.

Your tasks:

- Plan and conduct research projects
- Employ, optimize and troubleshoot state-of-the-art techniques to explore metabolic processes on transcriptome, metabolome and proteome level in *in vitro* and *in vivo* models
- Validation of the findings using gene editing (CRISPR/Cas9) and *ex vivo* drug testing

Your profile:

- Ph.D. in Life Sciences
- Expertise in molecular, cell biology and biochemistry
- Experience and willingness to work with mouse models required
- Team player within our research group as well as with collaborators
- Advanced English communication and writing skills

We offer:

- Workplace with well-established infrastructure and friendly environment
- Top quality research in a very productive and internationally recognized organization
- Financial support for the projects from diverse grant agencies
- Participation in international conferences

Candidates should send CV and one page motivation letter (English) to Júlia Starková. Ph.D. (julia.starkova@lfmotol.cuni.cz).

Starting date: January 2023, Duration: 3 years