

POST-DOC POSITIONS: MICROENVIRONMENTAL INTERACTIONS AND NON-CODING RNAs IN CHRONIC LYMPHOCYTIC LEUKEMIA AND B-CELL LYMPHOMAS

We are looking for motivated Post-Docs for a project funded by the ERC (European Research Council) Grant (laboratory of Assoc. Prof. Marek Mraz [www.ceitec.cz/mrazlab], CEITEC Masaryk University, Czech Republic). The laboratory is focused on the basic and translational biology of microenvironmental interactions and B-cell Receptor (BCR) signaling in B cell leukemias and lymphomas. Targeting microenvironmental interactions is a promising therapeutic strategy in B cell neoplasms, and we mainly use chronic lymphocytic leukemia (CLL) and follicular lymphoma/DLBCL as model diseases. Our overall goal is to understand the microenvironmental interactions in B cell malignancies, and also based on this knowledge to develop a novel mouse model for patient-derived xenografts. We are deciphering novel mechanisms of BCR signalling regulation mediated by microenvironmental signals, CD20, p53, and the signals from T cells (Pavlasova et al. *Blood*, 2016; Pavlasova et al. *Leukemia*, 2018). We showed for the first time that non-coding RNAs, namely microRNAs (miRNAs), regulate the BCR signaling which opens an interesting field of research (Musilova et al. *Blood*, 2018; Mraz et al. *Blood*, 2014; Cerna et al. *Leukemia*, 2018). We have identified candidate miRNAs, lncRNAs and protein-coding genes that might act as novel regulators of the crosstalk of BCR signalling/T-cell interactions/adhesion in B cell malignancies. This will be further investigated by the post-doctoral researcher using techniques such as NGS miRNA/RNA sequencing, genome editing (Crispr/Cas9), functional studies with various in vitro models and co-culture systems. The research is also relevant for pre-clinical development of novel miRNA-based therapeutic trials, and resistance mechanisms to BCR inhibitors.

WHAT DO WE OFFER:

- project funded by the prestigious ERC grant = high risk and high gain, state-of-the-art instruments, stable funding, competitive salary, collaboration with top experts in the field
- You will work in a team of young investigators that challenge some long-standing problems in hematology (we have access to a large biobank of primary samples).

Your profile:

- Motivated smart people that have the “drive” to work independently, but also willing to learn from other people in the lab and collaborate.
- Candidates should have PhD degree (or expected within 6 months of applying) in Molecular biology, Oncology, Biochemistry, or similar field and have deep interest in molecular biology and cancer cell biology (preferentially experience with Non-coding RNAs/CLL/lymphoma/immune-cell biology).
- The Post-Doc position is for 2-5 years. Post-Doc position will start January-June 2019 (later dates are negotiable). Apply as soon as possible.
- The position is NOT associated with any teaching obligations.

TO APPLY:

- To apply please send CV with two references and a full list of publications to the PI Marek Mraz: marek.mraz@email.cz (**Subject: Post-Doc position**).
- Information about the laboratory at: <http://mrazlab.ceitec.cz/positions.html>

OTHER INFO: The research is funded by ERC Starting grant, and will be conducted at CEITEC MASARYK UNIVERSITY. Our laboratory extensively collaborates with the University Hospital Brno in the same campus to obtain primary samples from patients. The campus provides a vibrant, multidisciplinary and highly collaborative scientific environment. The lab is located in Brno, the second-largest city in Czech Republic that has the biggest concentration of biomedical research in the region. Brno is one of the major cultural hubs, with a vibrant and lively atmosphere housing ~60.000 students. The city has a very good public transport and plenty of interesting places to visit within the reach of trains (within small distance of several major cities such as Prague, Vienna, Bratislava, Budapest) and close to international airports.