

## POSTDOCTORAL POSITIONS IN TRANSLATIONAL CANCER RESEARCH (MOLECULAR BIOLOGISTS, IMMUNOLOGISTS, BIOINFORMATICISTS)

For a European Union-funded project on translational cancer research, headed by Professor Kari Hemminki, several postdoctoral positions with different areas of expertize are currently sought to work in Biomedical Center, Faculty of Medicine, Charles University in Pilsen, Czech Republic.

The focus will be initially on colorectal cancer. The aims are to assess genetic and cellular changes taking place in the progression of colorectal cancer from precursor tumors (adenomas) to single or multiple colorectal cancers and lastly to metastases. The results will help to understand the role of genetic and cellular events at different phases of tumor development with possible clues about therapeutic targets. While the evidence shows that majority of colorectal carcinomas evolve from adenomatous polyps it is also believed that most neoplastic adenomas may not evolve to cancer. Immune system plays a key role in trying to suppress malignant transformation. Under the pressure of immune surveillance, surviving tumor cells tend to selectively accumulate traits that help them evade immune destruction

METHODS: Studies are carried out in close collaboration with clinical departments allowing access to human samples, genomic, transcriptomic, epigenomic and immunological analyses will focus on use of pathological slides and frozen tissue samples from polyps of early adenomas, colorectal tumors and adjacent gut epithelial samples and tumor metastases. The analysis will include DNA and mRNA targeted and next generation sequencing, copy number analyses, epigenomic profiling immunohistochemistry. The laboratory is well equipped with RT-PCR, Illumina Miseq, PacBio Sequel, capillary sequencer, Agilent SureScan microarray scanner, cell culture, proteomics but also for animal surgery.

## QUALIFICATIONS

- PhD or equivalent in molecular biology, genetics, immunology, medicine or bioinformatics
- Scientific and technical skills shown in publications
- Motivation and ability to conduct collaborative work
- · Communication skills in oral and written English

## **TO APPLY BY JUNE 30, 2020**

- Cover letter with short explanation of prior research and experience
- Curriculum vitae with publication list
- Copies of diplomas and PhD thesis (applicants close to completion are eligible to apply)

## SEND APPLICATIONS/INQUERIES BY E-MAIL TO

personalista@lfp.cuni.cz

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