The Institute of Pathology is an institution of the University of Bern, Switzerland with three major tasks: teaching, research and diagnostic service. In total, there are around 190 employees at the Institute.

As of January 2023 or by arrangement, the research group of Perren/Marinoni/Sadowski of the Division of Experimental Pathology is seeking a

**PhD student: Acquired drug resistance in pancreatic neuroendocrine tumours**

**Job description:**

The Perren/Marinoni/Sadowski group’s research focuses on epigenetic and metabolic changes that underpin progression of indolent PanNET to aggressive, metastatic cancer. Treatment of aggressive PanNET is challenging due to the heterogeneity of this disease, the limited number of treatment options and the inevitable development of acquired drug resistance (ADR). In general, ADR is estimated to account for 90% of cancer mortality as it affects standard chemotherapies, targeted therapies and immune therapies. Targeting ADR is a promising strategy to extend the efficacy of existing drugs and decrease cancer-related death.

Our group has an open PhD position for a project focusing on acquired drug resistance in PanNET. The offered project will investigate the transcriptional and metabolic changes associated with ADR in human patients, 2D and 3D PanNET models, identify anti-ADR targets and preclinically assess their therapeutic potential in delaying ADR. The research will use PanNET cell lines and organoids and apply molecular and phenotypic profiling methods such as RNAseq and high content imaging, respectively. The project has a strong emphasis on multidimensional data-driven discovery and multivariate analysis and is supported by an experienced team of bioinformaticians, biologists, clinicians and state-of-the-art instrumentation.

**Requirements:**

We are looking for an enthusiastic and motivated candidate with an academic degree in life sciences or biomedical sciences acceptable for matriculation at a Swiss University (Bologna compatible). The candidate should be proactive, have excellent communication skills and possess an aptitude to work in a team as well as independently. Good knowledge of English is required; German is helpful but not necessary. The ideal candidate has a strong background in cellular and molecular biology and is experienced in microscopy techniques (widefield, fluorescence, confocal). Prior expertise in automated image analysis, machine learning and Python is an advantage.

**Our offer:**

Our group offers a well-funded project in a young and dynamic environment. The Institute of Pathology provides an attractive setting to perform cutting-edge translational research in direct collaboration with pathologists and oncologists treating patients. Bern, the capital of Switzerland, is located near the Swiss Alps and well connected to many European cities (Zurich, Milan, Paris, Munich). The successful applicant will be enrolled in the Graduate School for Cellular and Biomedical Sciences, University of Bern (www.gcb.unibe.ch). The salary will be according to the guidelines of the Swiss National Science Foundation (www.snf.ch).

**Application:**

Review of applications will start in December 2022, though applications will be accepted until a suitable candidate is found. Please send your CV including a list of publications, a motivational letter with statement of your research interests, transcripts of University Diplomas with grades and two references (letters & contact information) as a single PDF-document by email to Ms Cornelia Mileto (cornelia.mileto@unibe.ch).

For further information, please contact Ms Cornelia Mileto (cornelia.mileto@unibe.ch).