



The Odyssey Digital Pathology Research Group at the Institute of Tissue Medicine and Pathology at the University of Bern, Switzer-land is announcing a

100% PhD position in Digital Pathology

Who are we?

The Odyssey Digital Pathology Research Group at the University of Bern (Group Prof. I. Zlobec) takes a deep dive into the morphomolecular aspects and spatial biology of colorectal cancer using various computational, bioinformatics and tissue visualization techniques to gain insights into colorectal cancer biology, metastatic dissemination as well as to identify new predictive and prognostic (spatial) biomarkers. We use digital pathology and artificial intelligence (AI) to investigate the multi-faceted phenomenon of "tumor budding" and the tumor microenvironment. Our group is enriched by the multi-disciplinary background of our students, our numerous industry partners as well as national and international academic collaborators spanning the areas of pathology, immunology, oncology, machine learning and computer vision. For more information, please visit our website here: www.digitalpathologybern.com.

Who are we looking for:

We are looking for a 100% PhD student to work on a Swiss National Science Foundation funded project for 4-years focusing on novel morphological patterns in colorectal cancer tissue images. This project lies at the intersection of image analysis (deep learning) and biology and will focus heavily on histomorphology of colorectal cancer.

Your profile:

- MSc or equivalent in computer science, medical imaging, engineering; or MSc in biomedical sciences or MD degree with experience in medical image analysis, computer vision.
- Interest in histology, cancer biology / biological mechanisms
- Programming skills in Python and R
- Knowledge in pytorch or tensorflow
- Ability to solve problems by taking own initiative and working independently
- Passion for science and interest in contributing to discoveries in medicine & pathology
- Eager to be part of a group and contribute positively to team dynamic
- Previous experience in digital pathology or histology is an asset
- Background or experience in biostatistics/bioinformatics is an asset
- Excellent communication skills (written and spoken) in English; German is an asset
- Willing to help supervise future Master students and contribute to lectures or workshops

Start: October 1st 2024 (negotiable)

Application: Please send your application before **15.07.2024** including a short letter of interest outlining reasons for the application to our group, curriculum vitae including names of 2 references, a list of publications, and copies of the certificates of academic qualifications as a <u>single</u> pdf-file by Email to: <u>cornelia.mileto@unibe.ch</u>, University of Bern, Institute of Tissue Medicine and Pathology, Human Resources, Murtenstrasse 31, CH-3008 Bern.

https://www.igmp.unibe.ch/index_eng.html



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