

## Image analysis expert for high-content image processing and visualization

The laboratory of Prof. Prisca Liberali in quantitative development at the Friedrich Miescher Institute for Biomedical Research (FMI) in Basel, Switzerland provides an outstanding research environment to investigate fundamental cell biological and developmental questions. The group seeks a pro-active individual with leadership capabilities to drive the development of our computational platform, especially our cutting-edge image processing workflows including machine learning tools on large volumes of data and integration with visualization platforms for biomedical image data. The laboratory is world-leading in single-cell image-based methods applied to 3D model systems such as organoids, combining high-content automated imaging with light-sheet, long-term, live-imaging and single-cell genomics tools. The position will be partially funded by the Chan Zuckerberg Initiative (CZI) grants and will be initially for three years, with a perspective for long-term employment.

### Main Responsibilities:

The candidate will be responsible for the development and deployment of image processing and visualization tools for large image volumes in high-performance computing (HPC) environments. The laboratory uses a variety of imaging and genomics methods to address questions in cell biology, developmental biology and organoids. Therefore, tasks will also include handling of various data, including transcriptomics data and their analysis. For these tasks the candidate is expected to support the laboratory with integrating various existing methods. The position will include interactions with external companies for software development. The candidate will be supported by the *Facility for Advanced Imaging and Microscopy (FAIM)* and the *IT group* for high-performance computing.

### Profile:

We are looking for a highly motivated and skilled individual with expertise in image processing, analysis, statistical post-processing and visualization. The candidate should have experience in developing and deploying state-of-the-art software for image analysis and visualization. Additional experience in handling and processing large amounts of data is welcomed. A Master's degree in computer science, applied mathematics, physics or an appropriate engineering discipline is required. Experience with biological microscopy would be beneficial.

The ideal candidate must be fluent in Python, and ideally in at least one additional programming language (R, Java, C++), and can easily adapt to heterogeneous computing environments.

The candidate should have excellent communication and networking skills, should be able to organize tasks in a dynamic social environment and enjoy interacting with a diverse group of researchers.

Language requirement: English

**Please submit your application** including cover letter with a statement on short- and long-term professional goals, CV and three names of referees at <http://www.fmi.ch/opening> by November 15, 2021.

For further information please contact Prisca Liberali ([prisca.liberali@fmi.ch](mailto:prisca.liberali@fmi.ch)).

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