We are seeking highly motivated candidates to fill a postdoctoral and a PhD position in the framework of the recently funded Excellence Program “Stem cell modulation in neural development and regeneration” (FWF SFB F 7801).

The successful applicants will support experimental efforts to map out intrinsic and extrinsic factors in human neural stem cell (NSC) development over time. They will contribute new methods and analysis pipelines to reconstruct differentiation trajectories from high-dimensional multi-omics data from well-controlled inducible stem cell models.

To investigate the rejuvenation/regeneration pathways in the mammalian CNS, the successful candidates will apply state-of-the-art cell reprogramming technology (iPSC, INSC and IN) and monitor the outcome by single cell genome-wide approaches (Thier et al., Cell Stem Cell 2019; Erharter et al FEBS L 2019).

Two positions are open:
A) for the Post-Doc position we are looking for candidates with expertise in cultivating human iPSCs and NSCs and their subsequent neural differentiation in 2D and 3D. Previous experience with single cell RNAseq and CRISPR/Cas-mediated genetic screening will be highly valued. Moreover, experience with Programming (Python, R, or MATLAB) would be beneficial. Candidates should hold a Ph.D. in either (Neuro-)Biology, Cell Biology, or related subjects, and have excellent written and verbal English communication skills. Applicants are expected to have a strong research track record and to be highly independent.

B) the ideal PhD candidate is motivated and self-driven and has a background in Bioinformatics, Computational Biology, Statistics, Physics, Data Science, or in Molecular Biology with documented training in statistics and prior experience with multi-omics data analysis. We will give particular preference to candidates with demonstrated previous experience with either of the following topics: High-throughput experiments (including but not limited to scRNAseq and metabolic profiling), Programming (Python, R, or MATLAB), Machine Learning

The candidate will be integrated into the Department of Molecular Biology within the group of Prof. Dr. Frank Edenhofer. The Leopold-Franzens University of Innsbruck is the largest research and education institution in western Austria, with more than 28,000 students and 4,500 staff and faculty members. Located in the heart of the Alps, the University of Innsbruck offers excellent facilities for research and teaching in a spectacular environment.

Salary will be commensurate to qualifications and experience and in line with international standards.

Applications, including a letter of motivation, curriculum vitae including a list of academic publications (if any), contributions to open software (if any), documented specific coursework with grade relevant to the position (copies of transcripts), and name and contacts of 2 referees, should be submitted in a single PDF document to “frank.edenhofer@uibk.ac.at”