



PhD and postdoc positions on 3D genome architecture

Stefan Grob's team - University of Zurich, Switzerland

Tentative starting date: August 1st, 2021

The PhD candidate (funding for 4 years): I am looking for a motivated and talented PhD student, who has the stamina and curiosity to perform excellent research in a novel area. As prerequisites, you have good English communication skills, experience in molecular biology, and basic knowledge on epigenetics. Knowledge on plant biology is a plus but not required.

The postdoc candidate (funding for 2.5 years): I am looking for a skilled postdoc with robust experience in molecular biology and biochemistry and a broad interest in epigenetics and chromatin biology. Knowledge on bioinformatics and plant biology is a plus, however, researchers previously working on other models are also encouraged to apply.

The team: You will become a member of a young and small team, facilitating close discussions and mentoring if needed. I believe in flat hierarchies and put an emphasize on the team effort. Thus, I am seeking for team members, who are willing to get fully involved, scrutinize research plans, and come forth with their own ideas.

The work: Our group is interested in the functional relevance of 3D genome organization and its interactions with genetic and epigenetic processes. We will investigate how 3D genome architecture contributes to the detection and silencing of invasive DNA elements, such as transgenes and transposons. Using *Arabidopsis thaliana* as a model, we will perform experiments involving genetics, biochemistry, many omics techniques (e.g., Hi-C, ChIP-seq, RNA-seq, proteomics), and imaging. We have full access to state-of-the-art equipment (e.g. digital droplet PCR, Tapestation, Covaris, SP8 multiphoton confocal microscope, widefield microscope).

The Institute: The Department of Plant and Microbial Biology is situated in the Botanical Garden, close to the lake of Zurich. It offers an international (English as campus language) and multidisciplinary atmosphere and includes many other groups working on topics, such as plant signaling, phytopathology, chromatin and epigenetics, evolution, biotic interactions, plant cell biology, reproduction and development, and microbiology. Internal seminars and presentations of external scientists are held weekly.

Zurich: Despite its relatively small size, Zurich has a cosmopolitan vibe and offers a wide range activities (hiking, nightlife, museums, swimming in the lake and river), enabling a healthy work-life balance.

Contact: Please contact me by email and attach a CV, a brief motivation letter, and the names(s) of potential referees.

www.botinst.uzh.ch/en/research/development/stefangrob.html

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