

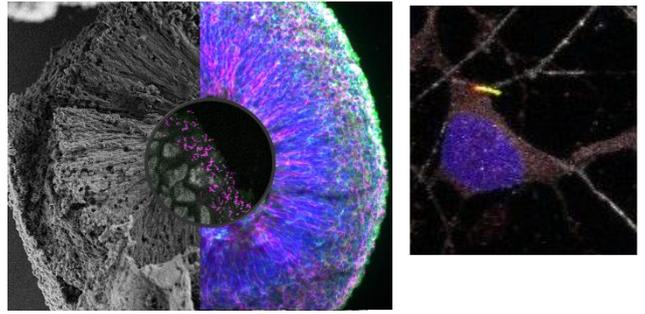
Post-doctoral position in cilia biology 100%

Institute, Department, Clinic

Department of Molecular Life Sciences

Description of the topic and lab

Primary cilia are key cellular organelles involved in transduction of a variety of signals that influence cell behavior during development and cell homeostasis. Their dysfunction is associated with a group of human disorders collectively termed “ciliopathies”, that can affect most organ systems, with predominant retinal, renal and CNS involvement. Our research group «ciliopathies» focuses on understanding the role of this organelle during development and disease pathomechanisms using a combination of human genetic studies, zebrafish animal and human iPSC-derived models. The group is based at the Department of Molecular Life Sciences of the University of Zurich and interacts closely with groups within the department, the university and internationally.



Responsibilities

The successful candidate will study the consequences of ciliary gene dysfunction in iPSC-derived models for ciliopathies. Currently established models in the lab include renal and neuronal models. We are particularly interested in studying the ciliary protein content in these various cell types to investigate the tissue-specificity of this organelle. We routinely apply CRISPR genome editing, transgenesis techniques with live imaging as well as genomic experiments (RNA-sequencing, proteomic analysis).

Qualifications

This position is ideal for advanced post-doctoral fellows who aim to establish their career using iPSC-derived models. Applicants should hold a good PhD degree in a relevant discipline (e.g. molecular biology, cell biology, development, etc) and have published work using human cell culture methods. Ideally, they should have acquired previous post-doctoral experience and feel ready to independently lead not only their own project but also other group members (PhD and master students). **Experience with iPSCs and derived models is a pre-requisite for this position.** Experience in genome engineering using CRISPR/Cas9 would be advantageous. Coding skills for enhancing existing data analysis pipelines in the lab and experience with -omics experiments would be an appreciated plus. The candidate should have an interest in developing novel approaches to explore the molecular basis underlying ciliopathies. An ability to work independently allied with a strong team spirit, scientific creativity, and high motivation are expected.

We offer: The University of Zürich offers optimal working conditions in a rich scientific environment with a large and active community and excellent core imaging and genomics facilities. The group has a functional stem cell laboratory and the successful candidate will collaborate closely with members from other groups studying hiPSC-derived models for different projects. This position is available immediately and is funded for up to three years (yearly rolling renewal). Acquisition of additional personal funding will be supported and highly encouraged.

Application

Applications will be accepted until the position is filled. Applications should be sent electronically and include a CV (incl. full publication list), copies of all relevant degrees, a statement of interest, and the names and email addresses of two referees. Please send these materials to Ruxandra Bachmann-Gagescu at ruxandra.bachmann@mls.uzh.ch.