



MSc thesis project in Cancer Biology on ADP-ribosylation Signaling

Hottiger lab, Irchel Campus, University of Zurich

Our international team is looking for a motivated M.Sc. student to join the lab.

Description: The research in our group aims to understand how human cells use ADP-ribosylation signaling and biology, as well as how these mechanisms are subverted in highly proliferative cancer cells. We recently discovered that some human tumors express a specific ADP-ribosyltransferase that ADP-ribosylates proteins that are known to regulate cellular senescence and cytokine expression. Cell viability was also drastically reduced when this enzyme was inhibited with a specific inhibitor.

This master's thesis aims to identify the cellular signaling mechanisms that are responsible for the expression of the ADP-ribosyltransferase and to investigate the regulatory aspects of the induced cellular ADP-ribosylation in human tumor cells. The project includes biochemical, molecular, and cell biology technologies, such as cloning, cell transfection, immunofluorescence, and immunoblotting.

Work environment: You will be part of a dynamic worldwide renowned international research group of about 12-14 people embedded in the interactive and supportive environment of our Department, the Department of Molecular Mechanisms of Disease. You will participate in weekly group meetings, one-on-one discussions, progress report seminars and literature sessions and benefit from a comprehensive scientific education in a vibrant research environment.

Qualifications: When working in the lab, you should feel comfortable and confident, have a genuine interest in cell biology and molecular cancer research, and be highly motivated. It is advantageous if you have experience with mammalian cell culture and standard molecular biology techniques. Good communication skills and enthusiasm will help you to interact with our team.

Applications: Interested candidates should send their CV together with a short motivation letter to michael.hottiger@dmmd.uzh.ch.

Starting date: Negotiable.

