University of Zurich[UZH]

department of molecular mechanisms of disease

Department of Molecular Mechanisms of Disease

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MSc thesis project in "**Regulation of nucleic acid signaling by ADP-ribosylation in cancer cells**"
Hottiger laboratory, Irchel Campus, University of Zurich
Our international team is looking for a motivated M.Sc. student to join the lab.

**Description**: Research in our group aims to understand how the innate immune response, in particular nucleic acid-induced signaling, in human cells is regulated by protein ADP-ribosylation and how these mechanisms are subverted in highly proliferative cancer cells. This MSc project focuses on a recently identified ADP-ribosyltransferase (ART) that modulates this process. The aim of this project is to investigate the underlying mechanisms of this regulation using a range of techniques including immunoblotting, immunofluorescence, cloning, and potentially mass spectrometry and RNA sequencing. By elucidating how this ART affects nucleic acid signaling, the project aims to shed light on its potential role in health and disease, including viral infection and tumorigenesis.

**Working environment**: You will be part of a dynamic international research group of approximately 6-8 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, individual discussions, progress report seminars and literature sessions and will benefit from a comprehensive scientific training in a vibrant research environment.

**Qualifications**: You should be enrolled in a MSc program of the UZH and comfortable as well as confident working in the laboratory, have a genuine interest in cell biology and molecular cancer research, and be highly motivated. Experience of mammalian cell culture and standard molecular biology techniques would be an advantage. Good communication skills and enthusiasm are essential for working 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.