



Master Thesis Project

“Cancer Genomics of Adrenocortical Carcinoma”

at **Hantel lab, Klinik für Endokrinologie, Diabetologie und Klinische Ernährung,
Universitätsspital Zürich**

Background:

Adrenocortical carcinoma (ACC) is a rare and highly metastatic malignancy. Even though recent molecular and diagnostic advancements have been achieved, novel therapeutic strategies are still not in sight.

Project description

Research in our group aims at developing tumor models (in vitro and in vivo), and establishing new therapeutic approaches in endocrine tumors. Our research group has been successful in developing a novel patient-derived tumor model (MUC-1), that has the potential to improve clinical prediction for ACC. As part of this project, we would now like to analyze the whole genome sequencing profiles of two adrenocortical carcinoma cell lines. These tumor models display varied molecular, biochemical and mutational signatures that closely mimics the clinical situation. Co-supervised by an experienced postdoc in the lab you will apply various bioinformatics tools and pipelines to characterize the mutations that drive cancer progression, gene amplifications, SNPs, and identify potential causative variants.

Our group:

You will be part of a young and dynamic international research group (http://www.endokrinologie.usz.ch/forschung/seiten/endocrine_tumors_hantel.aspx) embedded in the interactive and supportive research environment of our Department of Endocrinology, Diabetology and Clinical Nutrition (<http://www.endokrinologie.usz.ch/forschung/Seiten/default.aspx>). 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.

Requirements

You should have a high level of motivation and a genuine interest in Genomics and molecular cancer research. Prior experience with Bioinformatics and Sequencing techniques is a plus.

Applications: Interested candidates should contact us, or directly send their CV together with a short motivation letter (***Starting date: Negotiable***).

Contact:

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