Master Thesis / Internship

Single cell sequencing and CRISPR analysis of mixed adenoneuroendocrine carcinoma (MANEC) mouse models

14.06.2020, Internship, Diplomarbeiten, Bachelor- und Masterarbeiten

We are looking for a highly motivated student with biology, biotechnology or molecular biology background for a master thesis in the Institute of Molecular Oncology and Functional Genomics group (Prof. Roland Rad group) in TranslaTUM Cancer Center, Klinikum rechts der Isar, Technical University of Munich.

Background

Mixed adenoneuroendocrine carcinoma (MANEC) is defined as a neoplasm composed of both exocrine and endocrine carcinomas, each comprising at least 30% of the tumor. MANEC can occur in various organs of the gastrointestinal tract, including the esophagus, stomach, and colon. We would like to elucidate molecular mechanisms using mouse models, genetic studies and high throughput methods such as single cell sequencing, CRISPR-CAS9 and so on.

Requirements

- Previous experience of handling mice will be a plus but not mandatory.
- Experience in cell culture or molecular biology techniques will be helpful.

What we offer

- Candidate will learn molecular biology and cell culture techniques during this project.
- We will implement high throughput next generation sequencing as well as Single cell sequencing technologies in this project and the candidate will have first-hand experience in these techniques
- Hands on experience working with in-vivo mouse models

Please send application including a short CV to ashish.rajput@tum.de

Early application will be preferred.

For additional information please visit these websites:

https://www.translatum.tum.de/
https://www.translatum.tum.de/forschungsgruppen/experimentelle-krebsgenetik/
https://imo.med.tum.de/en