Master student Open Position

Functional Cancer Genomics Lab
Institute of Oncology Research
Via Pometta 1 Bellinzona

Send your CV or questions to:
anna.rinaldi@ior.iosi.ch

IOR Institute of Oncology Research

Lab Members
Hana Janouskova, PhD
Sagar Uttarkar, PhD
Jean-Philippe Theurillat, MD Group Leader
Geniver El Tekle, PhD student
Anna Rinaldi, PhD
Tiziano Bernasocchi, PhD student

Overview

Cancer is driven by cardinal genetic alterations that activate driver genes. Driver mutations are not only essential to initiate tumorigenesis, but are also required for tumor growth and maintenance. This raises the possibility to target these mutations, opening more specific, therapeutic opportunities to treat cancer patients.

Our research group focuses on new drivers of prostate cancer with emphasis on advanced, castration-resistant disease. We aim to explore the roles of these genes in tumorigenesis with the ultimate goal to develop new therapeutic avenues for patients suffering from prostate cancer (exemplified in Fig. 1).

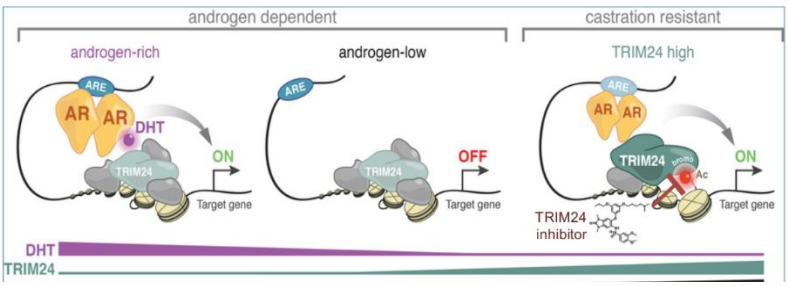
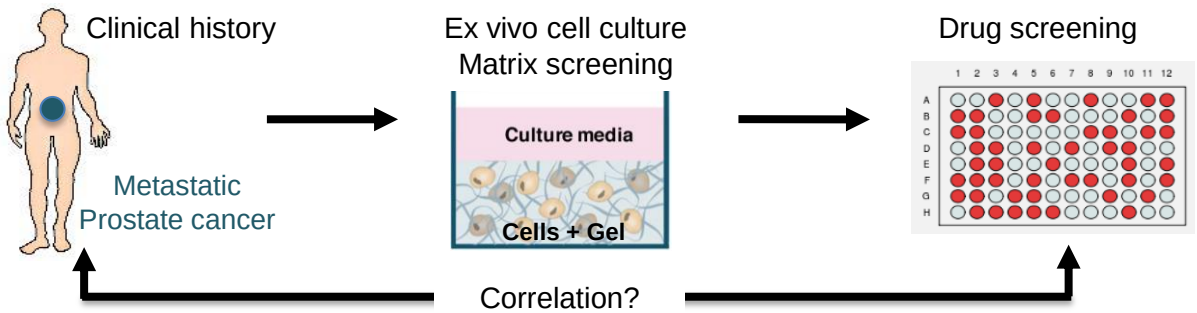


Fig 1. TRIM24 is a druggable co-activator of the androgen receptor (AR) and a driver of castration-resistant prostate cancer

In addition, our group develops new strategies to empirically tailor cancer therapy in the clinic. Patient-derived tumor cells will be used to test drug responses prior treating the patient. This approach may guide decision-making in the clinic in an individualized manner



Current projects

- Functional characterization of new prostate cancer drivers implicated in chromatin remodeling and protein ubiquitylation
- Engineering of small molecules against prostate cancer targets
- Generation and engineering of patient-derived cell line models

Duration of the thesis: at least 8 months

Travel costs during the thesis will be reimbursed from the laboratory