



The Cancer Drug Resistance laboratory (www.utu.fi/kurppalab) is looking for two doctoral candidates to join a new and exciting research group in the University of Turku, Turku, Finland.

The Cancer Drug Resistance laboratory, led by the principal investigator Kari J. Kurppa, PhD, aims to understand the means cancer cells use to develop resistance to cancer therapies. Our special interest lies in the mechanisms that enable the establishment of minimal residual disease, or govern the maintenance of residual tumors following targeted cancer therapy. The overarching goal of our research is to develop rational combination strategies that will extend the long-term efficacy of clinically used cancer therapies.

Clinical drug resistance is often preceded by the minimal residual disease state, where residual tumors stay dormant for an extended period of time. It is becoming increasingly evident that the establishment of minimal residual disease is mainly regulated by non-genetic mechanisms, as cancer cells adapt to treatment by acquiring new phenotypic states that no longer depend on the targeted oncogene. Recent research by the principal investigator demonstrated that the transcriptional co-activator YAP is a central mediator of adaptation to targeted cancer therapy, and orchestrates the reprogramming of cancer cells into senescence-like, dormant residual cells (Kurppa KJ, et al. *Cancer Cell* 2020). The doctoral candidates' research will build upon these findings and address the specific mechanisms of YAP activation upon targeted therapy as well as the consequences of the senescence-like state on residual tumor cell vulnerabilities and tumor immunity.

Successful applicants will have a MSc or equivalent degree in a relevant field, solid experience in working with *in vitro* cancer model systems and in basic laboratory methodology in the field of biomedicine (eg. from MSc thesis work). Knowledge on omics analyses and animal work will be considered an asset. In addition, as the research environment is highly international, good communication skills in English are valued.

The research of the doctoral candidates will be initially funded for a period of three years by Finnish cultural Foundation and Sigrid Jusélius Foundation by monthly personal grants.

The Cancer Drug Resistance laboratory is located in the MediCity research laboratory in the heart of BioCity research campus and is affiliated to the Institute of Biomedicine, Faculty of Medicine, University of Turku. This environment offers a broad community of internationally renowned research groups and excellent research infrastructure. Turku is a beautiful, historic university city in the South-West coast of Finland with an intriguing mix of history, culture and activities, as well as good connections.

The deadline for applications is June 30, 2020 (11:59 PM UTC+3). Preferable starting date is in September 2020, but due to the COVID-19 situation, the starting date is negotiable. Applications can be sent using this link (<https://link.webropol-surveys.com/S/A90E96400B78B5A8>). Include in your application a motivation letter and a CV with at least two references. For any inquiries, please contact Kari Kurppa (kjkurp@utu.fi).