



Master's Thesis Project - Impact of different tumour entities on fibroblasts and their susceptibility to NK Cell-mediated Cytotoxicity

Project Overview: The Künzel group invites a motivated master's (m/f/d) student to explore the dynamic interactions between tumor cells and surrounding fibroblasts, with a focus on the tumor microenvironment (TME). This project will delve into how different tumor cell lines influence fibroblast behavior, with particular emphasis on their susceptibility to natural killer (NK) cell-mediated cytotoxicity. Both antibody-dependent and chimeric antigen receptor (CAR)-mediated NK cell mechanisms will be studied. The work aims to identify novel strategies and targets for modulating the TME, offering innovative pathways to enhance cellular tumor therapies.

Location: Our lab is located in the German Red Cross Blood Donation Center (DRK Blutspendedienst Nord-Ost gGmbH, Blasewitzer Straße 68/70, 01307 Dresden).

Skills the Applicant Will Learn or Refine:

- Cell culture techniques for maintaining and experimenting with tumor cell lines, NK cells and fibroblasts.
- Flow cytometry (FACS) for assessing cellular phenotypes and immune cell cytotoxicity.
- Molecular biology techniques such as qPCR and Western blotting
- Immunological assays (e.g., ELISA, cytotoxicity assays) to evaluate NK cell activity.
- Microscopy techniques
- Data Analysis and Interpretation
- Knowledge of CAR-NK cell technology and its applications in cellular therapies.

Contact Information

We are looking forward to meeting you! For further information or to apply for this exciting opportunity, please contact:

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