**Job Vacancy**

The University Hospital Essen offers first class medical services in the Ruhr metropolis. Every year, 225.000 patients are treated in 30 clinics, 27 institutes and specialized centers. The over 8.000 employees offer medical care with state-of-the art diagnostics and therapies, which meet highest international standards. Patient care is connected with basic and translational research at an international competitive level.

**PhD student (f/m/d)**

(pay grade: EG 13 TV-L)

**Work Area**: West German Cancer Center (WTZ), Bridge Institute of Experimental Tumor Therapy

**Job ID:** 11709

**Start Date:** 01.01.2025 at the earliest, but no later than 01.04.2025

**Work Scope:** Part-time employment / 25,025 h

**Contract Type:** Temporary

**Contract duration:** 42 month from employment, until 30.09.2028 at the latest; in accordance

with § 2 (1) WissZeitVG

**Your tasks**

**About us**

The advertised position is located at the Bridge Institute of Experimental Tumor Therapy (principle investigator: Prof. Dr. Jens Siveke). The project is linked to the focus area P2 of the GRK 2762 “Radiotherapy-induced tumor and stromal cell state regulation in pancreatic ductal adenocarcinoma”.

Despite decades of active research, pancreatic ductal adenocarcinoma (PDAC) remains one of the deadliest cancers without effective chemo- or targeted therapies. Radiation therapy (RT) has recently shown promising effects in resectable PDAC yet faces heterogenic responses and resistance. Radioresistance development involves metabolic reprogramming of tumors, however, how radiation interferes with tumor and stromal cellular states and metabolism and what may be effective combinatory treatment strategies to suppress resistance is not well understood. This project aims to investigate the potential of radiation therapy as a modulator of interactions among cancer cells and the tumor microenvironment with an emphasis on cancer-associated fibroblasts (CAF).

We will use comprehensive mouse (syngeneic xenografts and genetically engineered mice) as well as human PDAC models (PDAC patient derived primary cells and tissue explants) to investigate (i) tumor and stroma cell interactions in the context of RT; (ii) how this interaction provides radioprotective/sensitizing features to the cancer cells and CAFs; and (iii) explore metabolically driven strategies to achieve better radiosensitivity.

The GRK 2762 “Heterogeneity, plasticity and dynamic in cancer cell, tumor and normal tissue responses to cancer radiotherapy” offers outstanding internationally-oriented interdisciplinary scientific research and training opportunities for graduates of experimental or computational life sciences and (bio)medicine with interest in basic and translational cancer research and computational biology (<http://www.uni-due.de/med/forschung/grk2762/index.shtml>).

**Your profile:**

* Talented and enthusiastic candidates with high interest in the research topic of GRK 2762
* Strong Diploma/Master degree in Cell or Molecular Biology, Biochemistry, Radiation Biology, Experimental Diploma/Master degree Medicine, Computational Biology or related fields
* High motivation and commitment for active cross-disciplinary collaboration
* Abilities for problem-solving and independent work
* Work with laboratory animals may be obligatory (depending on the project)
* Fluent in spoken and written English (knowledge of German is not a requirement)

**Look forward to:**

* Opportunity to conduct high-level interdisciplinary research projects
* Stimulating interdisciplinary and internationally-oriented academic environment
* Innovative cross-disciplinary scientific training for PhD and MD students at the interface between radiation biology and oncology, precision medicine, and computational biology
* Training in transferable academic and soft skills
* Funding for active participation in workshops and conferences and international visits to collaboration partners
* Regular supervision and mentoring
* Excellent career opportunities
* A secure job in the public service of the state of NRW
* Fair payment in accordance with the collective wage agreement (TV-L) incl. annual bonus payment and supplementary company pension scheme
* 30 days of vacation per calendar year (for a full-time position)
* Interdisciplinary work with colleagues from other departments
* Working with modern equipment and certified quality standards
* Family-friendly corporate culture, e.g. company daycare center, vacation program for school-age children, advice and support from the Employee Service Office in all life situations
* Wide range of training and continuing education opportunities, e.g. at the Training Academy of UK Essen
* Health Management, e.g. company integration management, vaccinations, promotion of sports activities
* Attractive fringe benefits, e.g. reduced-price canteen meals, community events, accommodation in student residences

**General conditions:**

* The pay grade classification depends on the personal and collective legal prerequisites.
* The University Hospital Essen is an equal opportunity employer. Female scientists are particularly encouraged to apply
* The participation in secondary employment depends on the „Hochschulnebentätigkeitsverordnung“ of North-Rhine Westphalia.
* Disabled applicants will be preferentially considered in case of equivalent qualification.
* The position is also available as part-time employment.”

**Contact person and further information about the position:**

You will find detailed information on the job advertisement and contact persons behind the

button - Apply now:

<https://bewerbung-karriere.ume.de/Vacancies/11709/Application/CheckLogin/1>

We use your data exclusively for application purposes in accordance with the applicable data protection regulations. Further information can be found in the privacy statement on our homepage at: [www.uk-essen.de](http://www.uk-essen.de).