

We are one of the youngest universities in Germany and think in terms of possibilities, not limitations. In the heart of the Ruhrregion, we develop ideas of the future at our 11 faculties. We are strong in research and teaching, live diversity, support potential and are highly committed to an educational equality that has earned this name.

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.

The **University of Duisburg-Essen** offers within the  
German Research Council (DFG)-funded Research Training Group GRK 2762

**1 PhD position (f/m/d) – E 13 TV-L, 65%**

in a project on

**“Identification of subtype-specific metabolic vulnerabilities in *KRAS*-driven non-small cell lung cancer (NSCLC)”**

**Starting 1 October 2022**

The pay grade classification depends on the personal and collective legal requirements. The salary is in accordance with the German public service salary scale. The positions are third-party funded until September 30<sup>th</sup>, 2026.

#### **About us**

The advertised position is located at the Institute of Cell Biology (Cancer Research) at the university hospital Essen. Principle investigator: Dr. Johann Matschke. The project is linked to the focus area “Role of molecular heterogeneity of non-small lung cancer (NSCLC) in Radiotherapy (RT) outcome” of the GRK.

Radiotherapy (RT) is a mainstay treatment for non-small cell lung cancer. Several studies have shown a benefit in local control and survival increasing biological equivalent doses. However, RT failure by locoregional recurrence and metastasis remain important clinical challenges after RT. Thus, finding optimal combinations of RT with radiosensitizing drugs and development of prognostic markers of response, are of great importance. The proposed project aims to define the impact of the molecular background defined by clinically relevant co-occurring somatic mutations on the capacity of *KRAS*-driven lung cancer cells to dynamically adapt their transcriptional programs and metabolic phenotypes in support of DSB repair and survival upon exposure to IR and perturbation by distinct environmental conditions.

The GRK 2762 on “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>)

**We offer**

- 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

**Qualification 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 is obligatory
- Fluent in spoken and written English (knowledge of German is not a requirement)

**Applications**

Interested candidates should fill in the application form available at <http://www.uni-due.de/med/forschung/grk2762/index.shtml> and send it together with a curriculum vitae, a copy of all university degrees and other certificates (e.g., on English language skills, FELASA B qualification) and the indication of two referees (University professors) in **a single** pdf-file to the tender number **1231** Application GRK 2762/ Project L2 to [bewerbung@uk-essen.de](mailto:bewerbung@uk-essen.de) or to Universitätsklinikum Essen, Personaldezernat, Hufelandstraße 55, 45147 Essen, Germany.

Application deadline: **30.06.2022**

The University Duisburg-Essen aims at promoting the diversity of its members (see <http://www.uni-due.de/diversity/international.shtml>). Applications from disabled or equivalents according to § 2 Abs. 3 SGB IX are encouraged. The participation in secondary employment depends on the "Hochschulnebenbeschäftigungsverordnung" of North-Rhine Westphalia. The University Duisburg-Essen aims at increasing the share of women in the scientific personnel and therefore explicitly encourages women to apply. Women will be preferentially considered when equally qualified according to the state equality law.

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).