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 internationally competitive level. State-of-the-art core facilities, including imaging, cell sorting and sequencing are available on site. The oncological research of our faculty was rated #2 nationally and #18 worldwide in the most recent „U.S. News Best Global Universities Ranking".

The **Research Division** (Head: Professor Sven Brandau) **of Department of Otorhinolaryngology** is currently seeking a

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**Post-Doctoral Researcher (m/f/d) –
Immuno-Oncology, Bioinformatics**

(pay grade: 13 TV-L 100% - 24 months), starting as soon as possible

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within the Else Kröner-Fresenius-Stiftung-funded **University Medicine Essen Medical Scientist Academy (UMESciA)**

The position offers a unique opportunity to

- perform translational research that is associated with a clinical immunotherapy trial
- link bioinformatics work with translational life science
- start a scientific career up to the group leader and professorship level in Germany

The position and the project work will be linked to two recently established networks:

UMESCIA: A program that is run by the Medical Faculty of the University of Duisburg-Essen, Germany. It supports careers for PhDs in medical and clinical research (Medical Scientist Program; Chairman Prof. Sven Brandau). https://www.uni-due.de/med/umescia/

Mye-InfoBank (Action Chair Prof. Sven Brandau): A network funded by COST (Cooperation in Science and Technology) that brings together experts from the areas of bioinformatics, transcriptomics, immunology, and biobanking. https://www.mye-infobank.eu/home.html

Job description

- Analyze blood and tissue samples to examine the immunologic efficacy and mechanism of the immunotherapy as translational researcher in a clinical trial of a neoadjuvant immunotherapy of cancer patients.
- Identify and re-analyse published and proprietary data sets on immune cells in solid tumors and inflammatory disease.
- Analysis of bulk and single cell RNA-Seq/transcriptomic data.
- Identify novel biomarkers and generate new insight into the role of myeloid cells in cancer and inflammation.

- Validation by functional assays and on patient tissue material in collaborations with European Partners of the Mye-InfoBank network.

Your profile

- Applicants must be eligible for a Post-Doc Position according to German payment scale TV-L 13.
- Experience with Python (for bioinformatics and deep learning) and/or R programming (for statistical analyses and bioinformatics, incl CRAN), Bash scripting, usage of high-performance computing (HPC).
- Experience analyzing single-cell and bulk RNA sequencing data (data pre-processing and curation, data integration, cell type annotation, differential gene expression, clustering, …) as well as deconvolution tools is a plus.
- Background knowledge in immunooncology, and immuno-monitoring
- Practical knowledge of cell culture, myeloid cells and flow cytometry
- Accuracy and sense of responsibility, reliability in data documentation
- Cooperation skills to work in a large collaborative team
- Solid English skills

Our group

In our group, you can expect a good working atmosphere and a lively research environment at the interface of basic science and clinical medicine. We offer a wide spectrum of methods ranging from molecular biology, immunology and experimental animal models to patient material and high-end imaging.

The research themes of our group are: immunological tumor-host interaction with a focus on myeloid cells, tumor immunotherapy and the immunobiology of mesenchymal stromal cells (MSCs).

https://hno.uk-essen.de/forschung/ag-brandau/

We offer:

Multi-disciplinary team & clinically relevant research

Integration into local and international networks

Initial funding is for two years, possibility to qualify for second funding period exists, candidates will be selected based on scientific achievements and overall fit to the program.

Possibility to qualify for academic leadership position up to the professor (W) level – funded by medical faculty; University of Duisburg-Essen

Social security benefits, full health insurance and company pension scheme according to TV-L, payment level E13, and VBL

TV-L E13 is in the range of EURO 4000,-- to 5000,-- per month (before taxes), depending on personal qualification, prior positions and experience.

Relocation to Essen is a prerequisite for the position, but mobile work may be possible for agreed time periods.

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 temporary for 2 years in accordance with the laws regarding scientific fixed-term contracts in compliance with the maximum employment periods after the doctorate (Wissenschaftszeitvertragsgesetz) or the Teilzeit- und Befristungsgesetz. In accordance with the Teilzeit- und Befristungsgesetz (§ 14 Abs. 2 TzBfG) it is not possible to hire employees with fixed-term contracts according to § 14 Abs. 1 TzBfG or former employees of the University Duisburg-Essen in these positions.

Please send applications (CV, two letters of recommendation or the contact details of two referees, proof/certificate of PhD, Master Degree or Diploma, presentations/publications, summary of training/experience, spectrum of methods and an English abstract/summary of your PhD thesis) by **email in ONE single pdf** file to the tender number **9580** bewerbung@uk-essen.de **and** UMESCIA@uk-essen.de

Contact:

Prof. Dr. Sven Brandau (UMESCIA Chairman), sven.brandau@uk-essen.de (for scientific inquiries)

Dr. Tanja Hardt-Knechtli (UMESCIA Coordination), UMESCIA@uk-essen.de (for applications)

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: http://www.uk-essen.de