



Master thesis position on "To establish a new method for highly sensitive MALDI imaging".

The Institute for Experimental Immunology & Imaging (http://experimental-immunology.de) focuses on basic and applied immunology research at the University Duisburg-Essen. The institute constitutes a wide range of modern research technologies on the University campus and at the Medical Research Institute of the University Hospital Essen. Among them is the Imaging Center Essen, which harbors an array of state-of-the-art microscopy techniques (https://imces.uk-essen.de).

What we are looking for:

The position is open for senior students interested in a master thesis in Medical Biology, Biology, or Immunology (Starting November/December 2024). He/she should be strongly interested in learning new research technologies (immune cell isolation, flow cytometry, immunofluorescence, cytospin, MALDI imaging) and working on developing new technologies for molecular imaging. Previous experience with immunological and cell biological methods would be an advantage. A willingness to work with laboratory animals is essential.

Who we are:

In our research team, we are focused on understanding the host's immune functions in infectious and sterile inflammation including brain injuries during stroke. In recent years, we have developed and utilized novel mouse strains and state-of-the-art technologies to answer complex scientific questions (e.g. Henneberg et al. 2021 Nature Communications, Merz et al. 2019 Nature Communications, Otto L et al. 2018 J Mol Med, Cibir et al. 2023, Nature Communications). Recently, we discovered that neutrophil-released DNA (namely NETs) is the major contributor to post-stroke lymphocyte loss and immunosuppression (Tuz et al. 2024 Nature Cardiovascular Research). We are constantly seeking to improve our methodological base. This project aims at making molecular imaging via MALDI much more sensitive, thus opening up the discovery of novel molecular phenomena around our established disease models.

How to Apply:

If you are very enthusiastic about science and biomedical technologies and want to join our research team, please send your application with a short CV and motivation letter to matthias.gunzer@uk-essen.de



Offen im Denken

Address:

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 $\underline{\text{https://www.uni-due.de/experimental-immunology/}}$

https://twitter.com/GunzerLab

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The University of Duisburg-Essen aims to promote the diversity of its members (see http://www.uni-due.de/diversity). It aims to increase the proportion of women in scientific staff and therefore urges qualified women to apply. According to the Land Equal Opportunities Act, women are given preferential consideration if they have the same qualifications. Applications of suitable severely disabled persons and persons of equal status within the meaning of § 2 para. 3 SGB IX are welcome.