BACHELOR / MASTER Thesis position on the topic

"To study the molecular mechanisms of neutrophil activation and tissue invasion after ischemia-induced brain injury"

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 students interested in the field of Medical Biology, Biology, and Immunology. He/she should have a strong interest in learning new research technologies (2-photon imaging, confocal microscopy, flow cytometry, cell culture, PCR) and work on discovering novel molecular mechanisms of neutrophil activation and migration using novel mouse models of $Ly6G^{cre}xVLA4^{flox}$, $LyM^{cre}xVLA4^{flox}$, and $Ly6g^{tdtomato}$. Prior experience with basic molecular and immunological methods would be a plus.

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 the last years, we have developed and utilized novel mouse strains to answer complex scientific questions *(Henneberg et al. 2021 Nature Communications, Merz et al. 2019 Nature Communications, Otto L et al. 2018 J Mol Med, Hasenberg A et al. 2015 Nature Methods*). In the past, we have also discovered a novel microbiota-immune-brain axis using cutting-edge research methods and mouse models *(Singh et al. 2018 JCBFM, Sadler and Singh et al. 2017 BBI, Singh et al. 2016 J Neuroscience)*. Currently, we are bringing our discoveries to the next level of translation for the treatment of critical human diseases (Singh et al. 2021 BBI; Silva de Carvalho, Singh et al., 2022).

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 vikramjeet.singh@uni-due.de

ZMB - Zentrum für Medizinische Biotechnologie

INSTITUT FÜR EXPERIMENTELLE IMMUNOLOGIE & BILDGEBUNG

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Datum 27.04.2022

UNIVERSITÄT DUISBURG ESSEN

Offen im Denken

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Start: A.s.a.p.

The aim of the University of Duisburg-Essen is 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. In accordance with the National Equal Opportunities Act, women are given preferential treatment with equal qualifications. Applications for suitable severely handicapped and equivalent persons pursuant to § 2 para. 3 SGB IX are desired.

We use your data exclusively for application purposes in accordance with the applicable data protection regulations. Further information can be found in the privacy policy on our homepage at www.uk-essen.de.