Institute for Molecular Medicine

Post-doc position in Immunology

Project:
Role of tubulin-modifying enzymes in regulating myeloid cell function

Immune-mediated inflammatory diseases are caused by a loss of tolerance to self or harmless foreign antigens and are characterized by uncontrolled immune cell migration and cytokine production. Thus, the identification of mechanisms regulating these events is of high clinical relevance. Critical initiators of inflammation are tissue-resident myeloid cells, in particular, macrophages and dendritic cells. Microtubules represent a major constituent of the cytoskeleton and are essential regulators of a variety of cellular processes, including cell migration and the release of soluble factors (i.e. cytokines). Accumulating evidence suggests that specific post-translational modifications of tubulin are important to determine distinct microtubule functions. We have obtained data indicating that tubulin-modifying enzymes exert critical functions in regulating myeloid cell migration and/or cytokine secretion in the steady state and during inflammation. To investigate this hypothesis, this project will analyze unique conditional knockout mice in relevant inflammatory disease models using advanced multi-color flow cytometry, immunohistochemistry, adoptive cell transfer, in vitro cell culture and molecular expression profiling.

Local and international embedding:
The Clausen laboratory is part of the Institute for Molecular Medicine at the University Medical Center of the Johannes Gutenberg-University in Mainz, Germany (http://www.unimedizin-mainz.de/molekulare-medizin/arbeitsgruppen/ag-clausen.html?L=1). We have a long-standing interest in studying the role and molecular control of myeloid cells in regulating immunity and tolerance. Our research is embedded in the interactive Research Center for Immunotherapy (FZI), which provides a stimulating scientific environment and state-of-the-art core facilities (http://www.fzi.uni-mainz.de/index_ENG.php). This project is funded by the German Research Foundation (DFG) and represents an ongoing collaboration with the research team of Dr. Michael Hahne at the multidisciplinary Institut de Génétique Moléculaire de Montpellier (IGMM) in France (http://www.igmm.cnrs.fr/spip.php?rubrique32).

Qualifications and skills:
We are looking for a highly motivated enthusiastic scientist with a strong interest in immunology and translational biomedical research. Applicants should hold a PhD degree (or equivalent) in Life Sciences and enjoy working independently as well as in a competitive research team. Previous experience with murine models, flow cytometry, immunohistochemistry and cell culture is expected. Additional expertise in conducting and analyzing NGS and proteomics experiments would be a plus. Fluent proficiency in written and oral communication in English is a prerequisite.

Terms of employment:
The position is available immediately and initially limited to 2 years. Salary will be according to the German TV-L system (E13). The successful candidate will have the opportunity to perform part of his/her experiments at the IGMM in Montpellier. We offer an interesting and challenging research project, excellent training and support, and working in a young, dynamic, international team.

Information and application:
For further information regarding this vacancy, please contact Prof. Dr. Björn Clausen, E-mail: bclausen@uni-mainz.de, Tel: +49-(0)6131-2204. Interested candidates can send their electronic application in English, including a letter of motivation, Curriculum Vitae, credentials & qualifications, and reference contact information, in a single pdf document to Mrs. Susanne Gahr, E-mail: gahr@uni-mainz.de. Applications will be considered until the position is filled.