



PhD position in the Department of Dermatology at Leipzig University

The project is integrated in the interdisciplinary Coordinated Research Center 67 (TRR67) ***“Functional biomaterials for controlling healing processes in bone and skin”*** (www.trr67.de; subproject B3) funded by the German Research Foundation.

About the project

Our group is interested in the pathogenesis of chronic wounds and the regulation of immune cell activities, inflammatory resolution and activation of tissue cells during dermal wound healing. Deciphering dysregulated processes in chronic wounds allows the development of new therapeutic approaches to improve impaired healing. In this respect, we have recently shown that specifically sulfated GAGs can be used to down-regulate excessive functions of pro-inflammatory immune cells and to regulate tissue regenerating activities in tissue cells. The research topic of our project deals with the development of biomaterials based on sulfated glycosaminoglycans to modulate unrestrained immune cell functions in impaired wound healing and the application of these materials as immunomodulating wound dressing. Mice models of impaired regeneration and chronic skin inflammation as well as complex co-culture systems with human immune cells and human dermal cells will be applied to characterize mechanism and effects of the immunomodulating materials.

The projects will be carried out in collaboration with partners in the field of biochemistry, chemistry, physics, engineering and computational science within the Coordinated Research Centre 67. Methods used will mainly encompass cell and tissue culture, animal models with impaired regeneration, high-throughput analysis. For further information, please contact Dr. Sandra Franz (project B3; email: sandra.franz@medizin.uni-leipzig.de).

We offer

We offer an inspiring environment with cutting-edge resources and high-profile interdisciplinary collaborations. The PhD thesis will be conducted in frame of TRR67-integrated PhD program, which offers excellent training possibilities in scientific as well as soft skills.

The positions are available from November 2017 and are financed until June 30th 2021 according to the German public wage law (TVL-E13, 65%). Leipzig University is an equal opportunity employer, and does not discriminate on gender, race, colour, religion, national origin, disability, or age in its programs and activities.

Candidate Requirements

The candidate must hold a Master's degree in biology, biochemistry, molecular medicine, or related, and have profound English skills. The successful candidate will be creative, ambitious, and highly motivated. Strong skills in primary human cell culture as well as in experimental animal studies are highly desirable. Experience in immunoassays, flow cytometry, fluorescent microscopy and image analysis, signal transduction multiplex (e.g. Luminex) are also an asset.

Applications

Interested applicants are encouraged to send their application documents (cover letter, CV, diploma, description of research experience and motivation, references of at least two academic references) as one pdf document per e-mail to sandra.franz@medizin.uni-leipzig.de.