PhD Thesis in Dermatology/Immunology

Dr. Sandra Franz and PD Dr. Anja Saalbach offer a doctoral thesis project on:

**Pathomechanisms of disturbed wound healing**

**About the project**

Our group is interested in skin wound healing and the pathogenesis of chronic wounds. Dermal wound healing is a complex process that requires temporally and spatially coordinated interactions of immune cells and tissue-resident cells. Macrophages play a central role in the coordination of these interactions through phase-adapted expression of pro-inflammatory, anti-inflammatory, and pro-repair activities. In chronic wounds, this differential activation of macrophages is disturbed. Pro-inflammatory macrophage activities persists and impede inflammatory resolution and subsequent tissue repair. This research project aims on a better understanding of underlying mechanisms of the dysregulated macrophage activation in chronic wounds particular in conditions of diabetes and obesity. Effect of inflammatory signals and metabolic factors on macrophage activation and consequences for their interaction with skin cells will analysed in complex co-culture systems, in *ex vivo* skin culture models, in animal models of impaired skin wound healing and in human samples from patients with non-healing wounds. For further information, please contact Dr. Sandra Franz (email: sandra.franz@medizin.uni-leipzig.de).

**Candidate Requirements**

The candidate (m/f/d) must hold a very good Master’s degree in biology, biochemistry, molecular medicine, or a similar discipline, and have profound English skills. The successful candidate will have team spirit and be creative, ambitious, and highly motivated with commitment to basic and clinical research and interest in immunology and dermatology. Strong skills in primary human cell culture as well as in experimental animal studies are highly desirable. Experiences in immunoassays, flow cytometry, fluorescent microscopy and image analysis, signal transduction multiplex (e.g. Luminex) are a benefit.

**We offer**

We offer an inspiring environment with modern laboratories, cutting-edge resources (multi-parameter flow cytometry, confocal microscopy, core units for RNA deep sequencing and FACS) and high-profile interdisciplinary collaborations. PhD candidates have access to the doctoral program of the Research Academy Leipzig (RAL), which offers excellent training possibilities in scientific skills as well as soft skills.

The position is available from September 2020 and financed for three years according to the German public wage law (TV-L 13/65%). 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.

**Application**

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.

**Deadline: 30. August 2020**