

PHD STUDENT POSITION (M, F, D) IN EXPERIMENTAL SURGERY

The Institute for Clinical & Experimental Surgery, Saarland University, Homburg, in close cooperation with the INM is looking for an enthusiastic *PhD student* with experience in biomaterial characterization and animal models. The INM develops **Living Materials for stimuli-responsive drug delivery** using genetically engineered living bacteria encapsulated within hydrogels. The Institute for Clinical & Experimental Surgery analyzes the biocompatibility of these materials and evaluates the interactions between the host and the encapsulated microorganisms. For this purpose, we are seeking to fill a 3-year funded position for a PhD student, who performs in-vitro assays as well as animal models in combination with in-vivo imaging technologies at the Institute for Clinical & Experimental Surgery and the INM.

Major duties/responsibilities

- **In-vitro assays** to investigate the cytotoxicity of materials as well as the angiogenic, proliferative and inflammatory activity of incorporated cells and microvessels
- **In-vivo models** to study the acute and chronic host tissue response to implanted materials
- **In-vivo imaging techniques** (e.g. intravital fluorescence microscopy)
- **Active participation** in the research activities of both the Institute for Clinical & Experimental Surgery in Homburg and the INM in Saarbrücken
- **Publish** scientific papers resulting from this research and present results at international meetings

To propel training in this new field, the student will also be provided access to the activities and resources of the **Leibniz Science Campus on Living Therapeutic Materials** (<https://www.lsclifemat.de/>) - a multidisciplinary consortium of research groups within the campuses of the Saarland University, working together on this topic.

We are seeking a person with a degree in human or veterinary medicine, biology, biotechnology or related fields **with interest in in-vitro and in-vivo models**. Candidates should be self-motivated, have good interpersonal communication and presentation skills, and a demonstrated ability to interact effectively with staff at all levels. The ability to work as a member of an international, multi-disciplinary team is a critical asset, and proficiency in English is mandatory.

Interested candidates should submit their complete application by email to Prof. Dr. Matthias Laschke / Prof. Dr. Michael Menger (sekretariat.exch@uks.eu) with the following:

- Motivation letter (included in the text of the email - max. 1 page)
- CV (max 2 pages)
- Publication list
- Academic transcripts

The deadline for submission is **February 27th, 2021**.

Saarland University and the INM are equal-opportunity employers with a family-friendly policy. We promote professional opportunities for women and strongly encourage them to apply.

The Institute for Clinical & Experimental Surgery, Saarland University, is specialized on experiments in small and large animal models to study the pathophysiological mechanisms of various diseases, the therapeutic efficiency of drugs and the in vivo performance of novel biomaterials. As partner of the Leibniz Science Campus on Living Therapeutic Materials it closely cooperates with the INM – Leibniz Institute for New Materials, an internationally leading center for materials research.



CONTACT

Institute for Clinical & Experimental Surgery
Saarland University
66421 Homburg/Saar
Germany

Email: sekretariat.exch@uks.eu
Phone: +49 6841 162 6550
Fax: +49 6841 162 6553