

New Members in the CRC

Again, we are happy to announce new memberships in our growing CRC. The General Assembly approved the applications of the following new members:

Dr. Bernd Baumann, Dr. Jiang Dongsheng, Dr. Kerstin Hartmann, Dr. Sabine Hübner, Dr. Yvonne Hüsecken, Dr. Fabian Müller-Graf, Dr. Miriam Kalbitz, Dr. Oliver Wittekindt, Dr. Meinhard Wlaschek.

We cordially welcome the new members and are looking forward to a fruitful collaboration within our CRC!

GEROK Positions

The CRC grants three "GEROK" rotation positions for clinical scientists per year, which are financed by DFG and Medical Faculty fifty-fifty. The aim of these rotation positions is to exempt clinical scientists from their clinical duties to fully concentrate on a trauma related research project for a variable period of time (usually 6-12 months). The positions can be obtained either directly after the state examination or at a later stage of the clinical career. The guideline for application can be downloaded from the password protected domain of our website.

The CRC Executive Board decided to grant five candidates:



Dr. Fabian Müller-Graf studied medicine at the University of Rostock and performed his doctoral thesis work at the Institute of Experimental Medicine at Rostock University. There, he investigated the role of H₂S in platelet activity using e.g. intravital microscopy. In April 2015 he moved to the Trauma Clinic in Ulm as a resident physician. Since May Fabian Müller-Graf is holding a GEROK position in Anita Ignatius' group at the Institute of Orthopaedic Research and Biomechanics. His current GEROK research project deals with MRT imaging of fracture healing in mice.

Dr. Martina Gatzka received her medical degree from the Hannover Medical School (MHH) and performed her doctoral thesis in part at the Thomas Jefferson Medical School in Philadelphia, USA, and at the MHH to investigate the cooperation of IGF-I receptor signalling and the Ha-Ras oncoprotein in transformation of fibroblasts. Her postdoctoral work focuses on transcriptional and epigenetic regulation in T cells and stem cells in skin inflammation and healing. Since August she is holding a GEROK position in the group of Karin Scharffetter-Kochanek in the Department of Dermatology. Martina Gatzka will follow up on her findings that histone H2A deubiquitination among other processes critically regulates maintenance of specific epidermal stem cell subsets and will investigate how therapeutic modulation of histone modifications may in the future lead to improved wound healing in the skin and other organs.





Dr. Hannes Christow studied Medicine at the Ulm University. In his doctoral thesis he introduced a macrophage-/monocyte-specific transporter based on the clostridial C3-toxin. Since January 2014 he is working as a resident physician in the Agaplesion Bethesda Clinic in Ulm. From November 2015 on he will be holding a GEROK position in Hartmut Geiger's group at the Institute of Molecular Medicine and Stem Cell Aging. The research project deals with the further characterization of circulating stem cells in aged mice with respect to markers of cell youth, which will lay the basis for further insights into stem cell mobilization in trauma.



Dr. Clair Weidgang studied medicine at Ulm University. After several clinical internships in Switzerland and Britain, she started her clinical career at the Clinics for Anaesthesiology in Ulm. Since June she is holding a GEROK position in Peter Radermacher's group at the Institute of Experimental Anaesthesiology.

Konrad Schütze studied Medicine at the University of Greifswald and performed his doctoral thesis work at the Institute of Physiology at the same University. He investigated the consequences of neonatal sympathectomy on the small resistance arteries of rats. After a 2,5 year residency at Ingolstadt Hospital he moved to the trauma clinic in Ulm in June 2015. From January 2016 on he will hold a GEROK position in Marcus Huber-Lang's group at the Trauma Lab.



We warmly welcome the first clinical scientists of our CRC and wish them good luck for their projects!

Gender Equality Funding

The CRC aims to support the career of female young scientists and, therefore, has announced two grants of 15.000 Euros to support innovative trauma research initiatives. The guideline for application can be downloaded from the password protected domain of our website.

Due to the high number of excellent candidates, the CRC Executive Board decided to increase the number of grants. We would like to congratulate:

Dr. Sabine Hübner (Institute of Comparative Molecular Endocrinology, group of Jan Tuckermann)

Project title: Resolution of lung inflammation requires synergistic gene regulation by the glucocorticoid receptor and pro-inflammatory signalling pathways

Dr. Miriam Kalbitz (Trauma Clinic, group of Florian Gebhard)

Project title: Molecular mechanisms of posttraumatic cardiac dysfunction

Dr. Clair Weidgang (Institute for Experimental Anaesthesiology, group of Peter Radermacher)

Project title: H₂S and its role in H₂S-induced suspended animation

Dr. Ivonne Sehring (Institute of Biochemistry and Molecular Biology, group of Gilbert Weidinger)

Project title: Cytoskeletal changes in osteoblasts during bone regeneration in the zebra fish fin

Congratulation and good luck for the exciting projects.

First CRC-Retreat on Friday, 17.07.2015

The first CRC retreat took place on 17th July at the nice meeting facility "ulmer-flieger".



We look back at an inspiring meeting, convincing presentations and fruitful discussions. It was good to realize that all projects have successfully started and have produced many interesting results despite the short time period since our CRC has been established. It became obvious that the groups are growing together. Many participants gave a very positive feedback about the developing spirit of corporate identity.

During our symposium we realized that there is need for further discussions about the trauma models being used within the CRC to obtain a high degree of standardization between the research groups. Therefore, we decided to organize technical meetings, which specifically focus on optimization and improvement of trauma models and sample preparation. The first meeting about **„Tips, tricks & pitfalls of the thoracic trauma model“** will take place on September 11, 10:00 – 11:45, at the ZBF (room 1.24). Everybody who intends to work with this model is invited for discussion.



The second retreat will happen on November 8-10 at the Panaromahotel Oberjoch. Please fix the date!

Project Z02



The central Z02 project „Trauma Modelling and Monitoring“ serves a central platform and offers state-of-the-art simulation of clinically relevant trauma models. We are pleased to officially welcome Dr. Annette Palmer in this project. She is very experienced in the trauma modelling, will provide technical support and help you to apply for the legal approval of animal experiments. She also manages the access to

the animal facilities in the ZBF building. As announced above, Z02 organizes a meeting about **Tips, tricks & pitfalls of the thoracic trauma model** on September 11, 10:00 – 11:45, at the ZBF (room 1.24)

Publication News

By our news ticker we would like to inform you about outstanding publications within our CRC. The first publications being related to CRC projects are announced at our homepage. To broadcast our publication activities we would like to ask you to send the information about acceptance of a CRC related paper to Lutz Dürselen (lutz.duerselen@uni-ulm.de), who is responsible for the CRC website.

We are happy to announce the first outstanding paper: The team of Jan Tuckermann has recently published important results in the prestigious journal *Nature Communications*! Congratulation!

Glucocorticoids limit acute lung inflammation in concert with inflammatory stimuli by induction of SphK1

Abstract: Endothelial damage is a major component of acute lung injury pathogenesis that occurs also in trauma. The authors could show that in acute lung injury, glucocorticoids induce sphingosine kinase 1 production in macrophages, promoting endothelial barrier function and ameliorating the disease. Most importantly they demonstrate that synergistic signalling by pro-inflammatory pathways in concert with the Glucocorticoid receptor is essential for anti-inflammatory efficacy of glucocorticoids. This novel mechanism shall be considered for the development of optimized anti-inflammatory strategies.

Vettorazzi et al., Nat Commun. 2015 Jul 17;6

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