

Postdoctoral Scientist for BM Niche Research



In the research group '**Inflammatory Stress in Stem Cells**', run by **Dr. Marieke Essers**, we are focusing on understanding the link between inflammation and the hematopoietic stem cell (HSC) compartment. Investigating the effect of stress-induced pro-inflammatory cytokines on HSCs and their niche will allow us to better understand what the mechanisms are by which HSCs are reassuring the successful restoration of the blood system and how HSCs are protected from pathogenic insults.

We are looking for a **highly motivated Post-doc** with a strong interest in **bone marrow niche research**. The successful candidate will work on investigating the **response of the bone marrow niche under inflammatory stress**, and the role the different niche components play in supporting the stress induced response of the HSCs. The candidate will perform state of the art transplantation experiments, using a panel of unique transgenic mouse models, combined with flow cytometry, transcriptional profiling, bioinformatics integration of sequencing data from HSCs and niche cells and imaging of the bone marrow. The aim of the project is to provide important new insights in the role of IFN signaling and the interactions between the niche and the HSCs in the bone marrow, both under homeostasis as under inflammatory stress.

Required educational background and experience

Applicants should hold a PhD or equivalent in biology, biochemistry or a related field, and have published in international peer-reviewed journals. The ideal candidate has expertise in molecular and cellular biology, with a special focus on immunofluorescent imaging and should have experience with animal handling and experimentation (mouse). The candidate is highly self-motivated, and able to pursue research projects independently. Excellent communication skills and proficiency in English are mandatory.

The position is limited for two years.

For more information on the lab visit <http://www.hi-stem.de/research-essers>.

The Stem Cell Institute

HI-STEM gGmbH is a non-profit public-private partnership between the German Cancer Research Center (DKFZ) in Heidelberg and the Dietmar Hopp Foundation.

HI-STEM performs cutting-edge research on stem cells with the aim of translating these results into novel clinical applications. This includes the development of novel diagnostic tools and innovative therapies to monitor and target leukemic and solid tumor stem cells as well as metastatic disease.

Contact

Please send your application with CV and reference letters by email to:

Dr. Marieke Essers

marieke.essers@hi-stem.de

HI-STEM gGmbH

Im Neuenheimer Feld 280

69120 Heidelberg

Phone: 06221 – 42 3901

www.hi-stem.de



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