

Department of Hematology, Hemostasis, Oncology and Stem Cell Transplantation

PhD candidate (f/d/m) in Cancer Epigenetics

The Hannover Medical School (MHH), with about 10.000 employees the biggest company of Lower Saxony, is a university institution for research and teaching in human and dental medicine and a university hospital of supra-maximum medical care. Research, teaching, medical care and administration work hand in hand in the integration model at the MHH-campus.

The Research Group "Translational Epigenetics" led by Dr. Florian Perner at the Department of Hematology, Hemostasis, Oncology and Stem Cell Transplantation is offering a position for a highly motivated PhD candidate.

Our group focuses on the characterization of epigenetic alterations that are required for the growth advantage of pre-malignant stem cell clones, malignant transformation of hematopoietic stem- and progenitor cells and maintenance of myeloid cancers. A highly conserved machinery of chromatin modifiers shapes the epigenome in healthy and malignant cells. Several of those proteins are essential for body and organ formation during embryonic development and get hijacked by cancer cells to reshape chromatin structure and gain primitive stem cell-like capacities. The group of Dr. Perner studies these epigenetic mechanisms in leukemia, clonal hematopoiesis and pre-leukemic conditions to understand the underlying basic biological principles and advance targeted epigenetic treatment strategies.

Your task

- Establishment of cell culture and animal models of clonal dominance in hematopoietic cells
- In-depth profiling of chromatin features, DNA methylation and transcription
- Functional genomic screening and pharmacologic perturbation of critical chromatin modifiers

Our requirements

- Master's degree in Biology, Biochemistry, Systems Biology or equivalent
- highly self-motivated with a genuine interest in epigenetics and know-how in molecular and cell biology
- preferably: experience in computational biology and high motivation to develop analytical strategies to integrate complex datasets and decipher novel aspects of chromatin biology
- willingness to invest exceptional efforts in the development of the research project

We offer

- Excellent project funding for highly competitive and sophisticated research studies
- A position in a well-equipped laboratory of a high-quality institution and close mentoring with regular personal and group meetings
- Enrollment in a structured dissertation program at Hannover Medical School
- A contract with Hannover Medical School (MHH) according to the collective labor agreement for public service employees of the federal states of Germany (TV-L)
- Temporary full-time position with one of the largest employers in Lower Saxony and an excellent university hospital
- Personal and professional development opportunities supported by our diverse internal and external training and continuing education programs
- A job ticket for public transport
- An excellent range of sports, counseling and preventive care programs because your health is close to our hearts

You have any questions beforehand?

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