**Institute of Stem Cell Research**

As German Research Center for Environmental Health, Helmholtz Zentrum München pursues the goal of developing personalized medical approaches for the prevention and therapy of major common diseases such as diabetes mellitus and lung diseases. Helmholtz Zentrum München is a member of the Helmholtz Association, Germany’s largest scientific organization.

The Institute for Stem Cell Research, Group leader Dr. Micha Drukker seeks to employ a talented and highly motivated

**PhD Student - Biochemical Analysis of Human Embryonic Stem Cells Differentiation m/f (2012/1550)**

**Job Description**

The overall aim of the Drukker lab is to decipher molecular pathways governing specification human developmental progenitor from pluripotent stem cells. Specific aims of the PhD project include biochemical analysis of growth factor interactions with human embryonic stem cells and mesoderm and trophoblast progenitors, activation and repression of signal transduction pathways and transcription factor regulation of gene expression. Analysis of histone marks / DNA methylation patterns in human developmental progenitors will also be performed. PhD student will utilize a wide verity of advanced tools to achieve the goals of the project, including: chromatin immunoprecipitation - sequencing (Chip-Seq), DNA methylation analysis, purification of human embryonic stem cell-derived progenitors through sophisticated cell sorting, gene expression analysis in single cells, genetic manipulation (establishment of stem cell lines with fluorescent-lineage reporters) and culture of human embryonic and induced pluripotent stem cells (ES and iPS cells).

**Your Qualifications**

- Diploma or Masters in Biology or related subject, preclinical degree, or medical/dental/veterinarian degree
- A solid background in biology is required, and highest scientific interest in embryogenesis and developmental and/or stem cell biology is a must
- Practical experience with biochemistry, molecular and cell biology is desirable
- Good communication skills
- English knowledge is required

**Our Offer**

- Working in an innovative, well- equipped and scientifically stimulating surrounding
- Further training opportunities
- Initial short-term employment contract for three years with a standard public service salary (TVöD EG 13 50 %)

The Helmholtz Zentrum München as holder of the Bavarian Advancement of Women Prize and of the Total E-Quality Certificate is striving to increase the overall proportion of women on its staff and thus expressly urges qualified women to apply.

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Helmholtz Zentrum München  
Deutsches Forschungszentrum für Gesundheit und Umwelt (GmbH)
Job offer

Institute of Stem Cell Research
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