



The Institute of Molecular Biology gGmbH
funded by the Boehringer Ingelheim Foundation

has an opening for a

Postdoc

Mass Spectrometry of Epigenetic DNA/RNA Modifications (m/w/d) (#CNP13)

The **Institute of Molecular Biology gGmbH (IMB)** is a Centre of Excellence for Life Sciences, funded by the Boehringer Ingelheim Foundation. It is located within the campus of the Johannes Gutenberg-University, Mainz, Germany.

The ERC-funded laboratory of Christof Niehrs studies regulatory DNA and RNA modifications, which play important roles in development & disease. We utilize highly sensitive mass spectrometry (Triple Quadrupole Mass Spec) and stable isotope metabolic labelling to profile epigenetic and epitranscriptomic changes, including 5mC, 5hmC, 5fC, 5caC, m6A, and others. The successful candidate will study nucleic acid modifying enzymes to unravel how chemical modifications in DNA, RNA and R-loops regulate pluripotency and differentiation of mammalian embryonic stem cells and embryos. See also www.imb-mainz.de/research-at-imb/niehrs/research/ You will use mass spectrometry, as well as genome-edited CRISPR/Cas9 stem cell mutants, as well as various NGS protocols to carry out a multi-dimensional analysis to address: Which modifications can be identified and how do they change with different cellular states? Where in the genome and in which RNAs do the modifications occur? What are molecular determinants involved in targeting of modifications to specific sites? The project will involve strong interaction with computational biologists.

You have

- PhD & publications in a relevant field
- Experience in mass spectrometry and RNA/DNA biochemistry
- Excellent communication skills and good team spirit
- Ability to solve problems independently
- Fluent in English (spoken and written)

We offer

- An international and vibrant working environment
- Part time technician support
- Competitive stipend or salary
- Training opportunities

To apply please send a **SINGLE** PDF file containing your cover letter stating research and career interests, CV, scans of your degrees (Germans: including copies of Abitur- & Master degree), and contact details of 2 references to personnel@imb-mainz.de. Informal enquires can be addressed to Prof. Christof Niehrs (c.niehrs@imb-mainz.de).

Starting date: preferably by 1st December 2020

Duration: Initially 2 years; option for further extension

Application deadline: 30th September 2020