



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

is recruiting a

Post-Doctoral Research Fellow (#CCPD03)

The **Institute of Molecular Biology gGmbH (IMB)** is an Excellence Centre for Life Science, funded by the Boehringer Ingelheim Foundation, and located in Mainz, Germany. The group for Superresolution Light Microscopy focuses on the application of advanced light microscopy e.g. to study cell nuclear architecture with links to the fields of epigenetics, developmental biology and DNA repair. The group is directed by Professor Christoph Cremer, a long-standing expert in the field of advanced light microscopy and its application in nuclear genome structure research. In collaboration with Professor Cremer, the successful candidate for this Postdoc position will be responsible for applying existing custom-made superresolution light microscopes, in particular approaches of single molecule localization microscopy (SMLM) and structured illumination microscopy (SIM), and for further development of the microscope portfolio. For example, the following advanced superresolution microscope systems are available:

- SMLM microscope with four excitation wavelengths
- Multi-color SIM with additional SMLM option microscope (Spectral Precision Distance Microscopy/SPDM)
- Long working distance SIM
- 3D single molecule localization microscope

It is planned to develop additional nanoscopy systems. The group has strong links with the IMB Microscopy Core Facility which houses additional commercial superresolution systems (STED, GSDIM microscopes).

You will

- further develop advanced light microscopy methods, e.g.
 - combine superresolution with light-sheet illumination
 - integrate multiple superresolution microscopy methods in one setup
 - integrate algorithms in our image processing toolbox (Matlab)
- use nanoscopy approaches to solve scientific questions addressed by collaboration partners
- apply for grants and publish papers
- be involved in guiding PhD and Masters students
- develop your own research profile

Required qualifications

- Ph.D. in Physics or field relevant to applied optics/light microscopy and its life science applications (e.g. Master in Physics/Ph.D. in Biosciences)
- Experience using advanced light microscopy
- Good interpersonal, written and verbal communication skills
- Commitment and dedication to your work
- Optional: Experience using light-sheet illumination

Your profile

- Interest in the setup, development and biomedical application of nanoscopy
- Experience in biomedical collaborations
- Interest in a science carrier perspective

We offer

- Cutting-edge research projects in an international environment
- Possibility to work towards a German Habilitation (*venia legendi*)
- Competitive salary
- Favourable pension scheme
- IMB is an equal opportunity employer

To apply, please email a cover letter, CV (in English), certificates and contact information of 2-3 professional references quoting Ref. No. #CCPD03 to personnel@imb-mainz.de.

Start: Q1/2018; **Duration:** Initially 2 years with the option of further extension. **Deadline:** 30th November 2017