

## INTERNATIONAL PHD PROGRAMME



### GENE REGULATION, EPIGENETICS AND GENOME STABILITY

IN MAINZ, GERMANY

# ABOUT THE INTERNATIONAL PHD PROGRAMME

Our International PhD Programme (IPP) gives talented and enthusiastic students the opportunity to undertake PhD research at the cutting edge of modern biology. Projects within the IPP address key questions relating to the overarching themes of gene regulation, epigenetics and genome stability.

Our groups cover a **broad range of expertise** in biochemistry, genetics, cell and developmental biology, bioinformatics and systems biology. The fields we study range from embryonic development, evolution, ageing and disease to RNA and chromatin biology, the analysis of high-throughput datasets in genomics and proteomics and modelling of regulatory gene networks.

This range of expertise and the open and vibrant atmosphere within the programme encourage **multidisciplinary collaborations** and **innovative research**. Moreover, a range of scientific and social events ensure high levels of exchange and collaboration between the participating groups.

The programme is coordinated by the Institute of Molecular Biology – a centre of excellence in the life sciences.

Participating groups are located at the:

- Institute of Molecular Biology (IMB)
- Johannes Gutenberg University (JGU)
- University Medical Centre (UMC)
- Max Planck Institute for Polymer Research (MPI-P)

In total, the IPP comprises **over 40 research groups**. For a full list, please see: <u>www.imb.de/PhD</u>

#### TRAINING, RESEARCH AND FUNDING

The IPP is designed to train you in both the **scientific skills** and the creative and critical thinking abilities that you will need for your research and personal development as a scientist. Your PhD research will be conducted within the lab of one of the participating groups. The group leader you will be working with will act as your mentor and provide advice and guidance.

In addition to the supervision by your group leader, you will meet regularly with your **Thesis Advisory Committee**. Your TAC will consist of leading scientists who will support and advise you on the progression of your research project. This provides an excellent opportunity to interact closely with a number of top scientists during the course of your study.

We ensure our PhD students receive up-to-date training in the techniques and skills they need to succeed. The IPP offers dedicated training courses on a variety of topics that will aid your research, including advanced microscopy, cytometry and cell sorting, genomics, proteomics, statistics and bioinformatics. There will also be many opportunities for you to learn the transferrable skills that will form the basis of your career, whatever you go on to do. We organise courses on scientific writing, project management as well as presentation and leadership skills. To help you with your postdoctoral prospects, we also hold career events with presentations on various professions and workshops on how to apply and interview for jobs. Taken together, these courses and events make sure your work is as successful as possible and help you effectively plan, manage and communicate your research.

All our PhD positions are fully funded.

#### THE PHD EXPERIENCE WITHIN THE IPP

The IPP and the participating institutions have a vibrant scientific atmosphere that includes regular presentations from **leading international scientists** and technology developers from industry. IMB also hosts a number of **international conferences and workshops**. These events give you the opportunity to hear about the latest research from around the world and to interact and form collaborations with those driving it.

As part of the IPP, we organise **annual retreats and symposia** where our PhD students present their work in an informal setting and have the opportunity to meet with fellow students and other researchers. There are also plenty of social events that will allow you to get to know your colleagues. We encourage our students to present their work at national and international conferences, giving them further opportunities to network with other researchers.

There are well over 100 PhD students from over 25 different countries enrolled in the IPP.

#### ELIGIBILITY AND HOW TO APPLY

Application to the IPP is competitive. The first step is the online application via the programme's webpage (www. imb.de/PhD). Shortlisted students will be invited to Mainz for several days of presentations, interviews and visits of the host labs. The basic criteria for eligibility in the IPP are:

- A Master's degree or equivalent with outstanding grades (you can apply before you have received your degree)
- Strong communication skills in English, both written and spoken
- Prior experience in a lab or research environment

The IPP typically announces two calls for applications each year. Please check our website for the latest information on how to apply and current projects: www.imb.de/PhD

If you have any specific questions please get in touch with us at: PhD@imb.de

#### LIVING IN MAINZ

Mainz is a charming, open-minded city that has the friendly atmosphere of a lively university town. There is a diverse multicultural population with people from every walk of life living and working here. This creates a unique



welcoming environment that makes it easy to settle into life here. With Frankfurt being close by, those preferring a "big city" lifestyle will also reap the benefits of the larger metropolitan area.

The international nature of Mainz makes life easier even if you do not speak German. Most younger Germans learn English as a second language and many bars and restaurants provide English menus. Moreover, there are cinemas and theatres with programmes in English and other languages.

Additionally, with the large student population there is always something going on in Mainz. Combined with the city's strong coffee shop and bar culture this means you're never far from meeting new people.



#### **RESEARCH ENVIRONMENT**

The programme is embedded in a strong and dynamic research environment. The leafy campus of **Johannes Gutenberg University**, just west of Mainz city centre, is home to 10 departments, 150 institutes and over 30,000 students,



making JGU one of the largest universities in Germany. In addition to the University, IMB and two Max Planck Institutes (for Chemistry and for Polymer Research) are located on campus and Mainz's University of Applied

Sciences is an immediate neighbour. The University Medical Centre is located just 2 km from the main campus and has strong focus on clinical and translational research.

Mainz is also surrounded by several cities with extensive

research activities. For instance, Frankfurt is only 35 km away and is home to **Goethe University**, which has a total of 45,000 students and 10 research institutes



within the Biochemistry, Chemistry and Pharmacy Department alone. In addition, there are several Max Planck Institutes in Frankfurt (including for Biophysics, for Brain Research and for Cognitive Brain Research).



Nearby Darmstadt is home to both a **Technical University**, whose Biology Faculty has a focus on synthetic biology, and an **Applied Sciences University** that em-

phasises biotechnology. Moreover, there is an extensive **industry R&D presence** in the region, with the global headquarters of Boehringer Ingelheim and the Merck Group both in close vicinity.

#### CONTACT



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