

PhD Program

- 3-year advanced training in the fields of cell signaling, gene regulation, and quantitative biology
- Exciting research projects and dual mentoring by senior scientists from Germany and Israel
- Regular thesis committee meetings
- Prolonged exchange visits in a partnering laboratory abroad
- Annual scientific symposia and thematic summer/winter schools
- Transferable skills courses to support personal career development
- The entire program is taught in English

How To Apply

We invite applicants from all countries holding or expecting to obtain a MSc degree including a scientific research thesis in relevant fields of study.

The German-Israeli Helmholtz Research School accepts new PhD students recruited once per year to either Berlin or Haifa/Jerusalem. Interviews take place in fall, at the according location.

More information and the online application form can be found at <http://www.mdc-berlin.de/application>

Contacts

Germany

Prof. Dr. Claus Scheidereit

Spokesperson

Head of Cancer Division,
MDC Berlin

Dr. Hanna Singer

Scientific Coordinator

MDC Berlin

E-Mail: signgene@mdc-berlin.de

MDC MAX DELBRÜCK CENTER
FOR MOLECULAR MEDICINE
IN THE HELMHOLTZ ASSOCIATION



Israel

Prof. Amit Meller, PhD

Spokesperson

Professor of Biomedical Engineering
Technion - Israel Institute of Technology, Haifa

Prof. Yinon Ben-Neriah, MD, PhD

Spokesperson

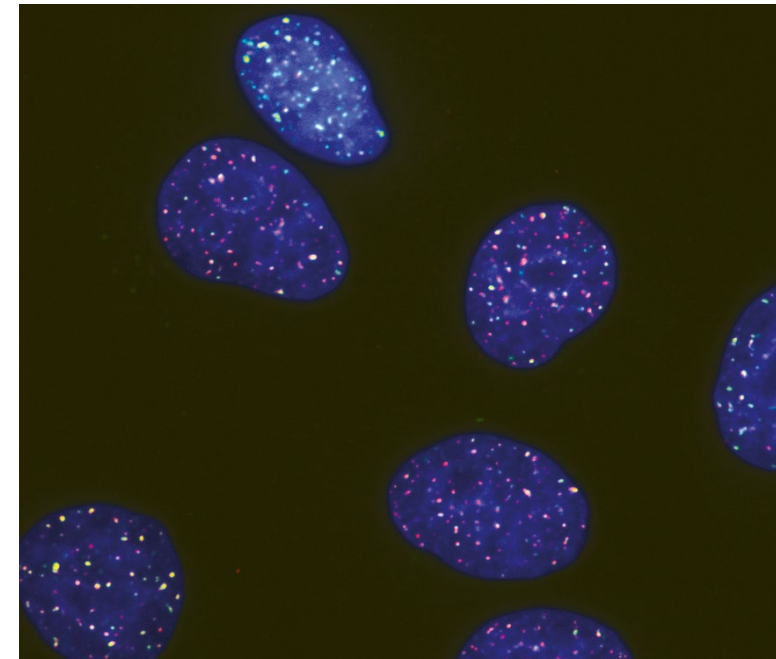
Professor of Basic Cancer Research
Head of the Proteomics and
Drug Design Program
The Hebrew University of Jerusalem



**GERMAN-ISRAELI
HELMHOLTZ
RESEARCH SCHOOL**

SignGene

Frontiers in Cell Signaling and Gene Regulation



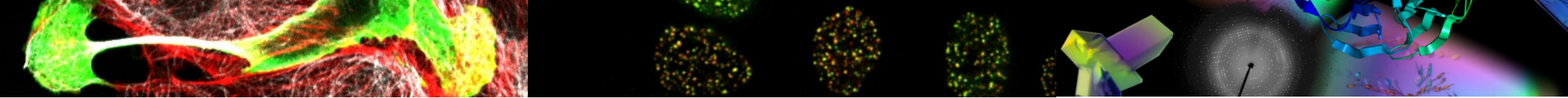
Photos: Images courtesy of Juliane Rademacher, Maj-Britt Hansen, Alexander Löwer, and Anja Schütz
Layout: Sabine Löwer, Sandra Krull and Hanna Singer



www.mdc-berlin.de/signgene

HELMHOLTZ
RESEARCH FOR GRAND CHALLENGES

MDC MAX DELBRÜCK CENTER
FOR MOLECULAR MEDICINE
IN THE HELMHOLTZ ASSOCIATION



Who We Are

The International Helmholtz Research School "Frontiers in Cell Signaling and Gene Regulation" (SignGene) is a joint PhD program between Berlin in Germany and Haifa and Jerusalem in Israel. Funded by the Helmholtz Association, we offer first-class education for PhD students in a unique international environment.

Research Focus

Our research focuses on unraveling the mechanisms governing the development and physiological functions of normal cells with the goal to understand the processes underlying the emergence and progression of diseases such as cancer.

Cell Signaling

How do cells respond to changes in their environment? How do cells integrate multiple extracellular signals and relay this information into cellular decisions?

Gene Regulation

How is the activation and repression of single genes and gene batteries achieved? How does this information feed into global gene expression networks?

Quantitative Biology

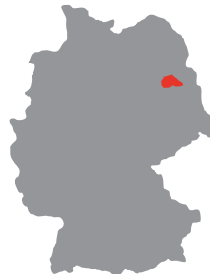
How do the structure and physical properties of individual molecules or multiprotein complexes determine their functions? Can we build computational models to understand complex cellular processes?

Partners

Lively interactions and the continuous exchange of knowledge and ideas across a network of outstanding scientists make SignGene an exceptional international research experience.

Our faculty includes 36 distinguished scientists from Berlin, Haifa, and Jerusalem. All students work on collaborative research projects and benefit from the joint mentoring by one main supervisor at their home institute and a partnering advisor abroad. Prolonged exchange stays to study and research in the partner laboratory are a key aspect of the training.

Germany



Max Delbrück Center for Molecular Medicine in the Helmholtz Association, Berlin

Humboldt-Universität zu Berlin

Charité - Universitätsmedizin Berlin

Israel



Technion - Israel Institute of Technology, Haifa

The Hebrew University of Jerusalem

Berlin

Berlin is a dynamic and vibrant city located at the heart of Europe. As the capital of Germany with a population of 3.7 million people, Berlin is the largest city in Germany.

The Max Delbrück Center for Molecular Medicine is a leading German biomedical research institute founded in 1992. About 380 doctoral students from all over the world are trained at the center in collaboration with the universities in Berlin.

Haifa

With a population of ca. 280,000, Haifa is the third largest city of Israel. Surrounded by abundant nature sites, Haifa contains an interesting mix of modern neighborhoods and historic districts, mountains and sea.

The Technion, Israel Institute of Technology, is the oldest university in Israel. The Irwin and Joan Jacobs Graduate School supports over 400 PhD students in the Departments of Biology, Medicine, and Biomedical Engineering.

Jerusalem

Jerusalem is the capital and the largest city of Israel located in the Judean mountains. Three major religions, three thousand years of history and some of the world's most innovative hi-tech start-ups all meet in this city.

The Hebrew University of Jerusalem has been ranked as Israel's top university. The Graduate School trains more than 20 % of all PhD candidates in Israel and the Palestinian territories.

