



# ERC-Funded Research in Germany



## Imprint

### Published by

Deutsche Forschungsgemeinschaft (DFG)  
German Research Foundation  
Kennedyallee 40, 53175 Bonn, Germany  
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[www.dfg.de](http://www.dfg.de)

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### Printed by

Brandt GmbH Bonn

### Print-run

10,000 – August 2010



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## Foreword

Prof. Dr. Annette Schavan

Open-theme research approaches that are oriented to basic research are indispensable in order to find answers to the many unsolved questions in science and identify fields for future innovations. This is why the promotion of frontier research plays a particularly important role in shaping our society's future in a forward-looking and sustainable way. To fund such research is the task of the European Research Council ERC. Since 2007, the ERC has successfully established frontier research in the European research environment, thus revolutionising European research funding. This science-driven funding tool has become one of the most important new elements of the European Research Area.

The ERC aims to strengthen competition within Europe by evaluating individual researchers and their project ideas exclusively according to the criterion of excellence. The ERC is thus setting a new standard for the future of European research funding, the further development of research in Europe and Europe's international position in research.

To ensure that Europe can attract and retain the best researchers in the world and is prepared for present and future challenges, the ERC must be understood and used as an instrument in the competition for excellence between different science locations in Europe. As one of the leading locations for science in the world, Germany is facing up to this competition, which is aimed at creating high added value in the long-term, by greatly enhancing the diversity of the European research potential.

Two years after the publication of the first brochure on ERC Starting Grants, the present brochure presents an excellent insight into the diversity of outstanding and well-networked university and non-university research institutions in Germany, which provide scientists from all over the world with excellent opportunities for working in the field of research.

Prof. Dr. Annette Schavan, MdB  
Federal Minister of Education and Research

# Foreword

Prof. Dr.-Ing. Matthias Kleiner

Internationality is an integral part of the funding activities performed by the Deutsche Forschungsgemeinschaft (DFG – German Research Foundation). Researchers from around the world can apply for DFG Grants in order to carry out their research projects at German institutions. International collaborative projects are possible, and indeed desirable, in all DFG funding programmes.

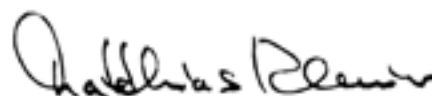
As Germany's major research funding organisation, the DFG contributes significantly to making the working and living conditions of scientists in Germany even more attractive. The DFG offers a large portfolio of tailor-made funding programmes. In addition, the German Excellence Initiative has created even better working conditions for the pursuit of outstanding research in Germany. At many research centres around the country the investigators benefit greatly from a stimulating atmosphere of exchange and collaboration in ideal environments for producing first-class scientific results.

The brochure aims to inform readers about attractive German research sites, as well as about the funding instruments for scientists interested in doing research in Germany. The European Research Council (ERC), which the DFG has supported from the outset, offers its prestigious 'Starting Grants' and 'Advanced Grants'. Such ERC Grants offer funding opportunities, for instance for outstanding research projects to be conducted in Germany. The DFG's funding portfolio also provides excellent opportunities for young and established researchers ([www.dfg.de](http://www.dfg.de)). Both institu-

tions, ERC and DFG, apply the same principles and standards when making their grant decisions. Their sole criterion: the scientific excellence of the researchers and their projects.

This brochure can only spotlight some examples that make Germany's research landscape so rich and diverse. Hence, we have chosen some select research sites to exemplify the whole range of opportunities available. Besides the institutions and disciplines that define the scientific profile of these centres of excellence, the brochure also features those 'soft factors' that make working and living there particularly interesting for researchers. Their experiences show that Germany has much to offer in research fields such as engineering, the natural sciences, the life sciences and the humanities. And in forward-looking research areas, such as biotechnology and nanotechnology, information and communications technologies, materials and production technologies or the environmental sciences, the international research collaborations with German locations rank high among the leading players.

Attractive conditions, an international scientific community, plus a creative working environment are essential for exceptional achievements in research. In this respect, Germany's universities and research institutions are superbly equipped and excellently positioned for the future.



Prof. Dr.-Ing. Matthias Kleiner  
President of the Deutsche Forschungsgemeinschaft



## About this brochure

The European Research Council (ERC) is the instrument for funding excellent basic research at the frontiers of knowledge under the European Framework Programme. Germany is not only one of the leading science locations in the world, but also one of the most successful participants in the EU Framework Programmes and an important actor in the initiation of new, pathbreaking institutions such as the ERC or the European Institute of Innovation and Technology (EIT).

At many different locations, numerous first rate universities and research institutions with the most diverse research focus areas connect and unite both basic and applied research, an example being the so called clusters of excellence at universities. With this research landscape Germany offers outstanding conditions for conducting frontier research funded by the ERC. This is demonstrated by the impressive number of German research institutions and universities already hosting one or more of the distinguished ERC grants.

This brochure has been prepared by the German National Contact Point for the ERC, a collaboration between the EU-Bureau of the German Ministry of Education and Research (EUB) and the German Science Foundation (DFG). It aims to introduce researchers to a selection of attractive science locations in Germany and to demonstrate the many advantages of coming to Germany with an ERC Grant.

The brochure opens with information on the ERC's grant schemes for early career applicants (Starting Grants) and senior researchers (Advanced Grants). Further insight is provided by interviews with a successful ERC grantholder and the representative of a university that has attracted a large number of ERC grantholders. The centrepiece of the brochure is an exemplary presentation of four locations that demonstrate the particular diversity of the German research landscape: Berlin, Bremen, Dresden and Heidelberg.

Have we made you curious? If so, the next section provides an overview of the extensive German advisory network as well as offering useful information on how to prepare a successful ERC grant application.

In the last part of the publication, you will find a selection of national funding programmes and quality attributes of the German research landscape: the programmes of the DFG – our national funding institution for frontier research – and the German Excellence Initiative that plays a key role in strengthening scientific excellence in Germany and Europe.

A map at the end of the brochure gives an overview of attractive research locations in Germany, and there is also a list of additional sources of information.



## The European Research Council (ERC)

The European Research Council was established by the European Commission to promote frontier research. Two principles distinguish the funding procedure. Excellence as the sole funding criterion plus an independent and transparent peer review process.

### ERC Grant Schemes

ERC offers two funding schemes to support pioneering frontier research projects in any scientific field without regard for and across all established disciplinary boundaries. In particular, they encourage groundbreaking and interdisciplinary proposals that address emerging fields and introduce innovative approaches.

ERC grants are awarded through open competition (international peer-review) to individual scientists and can be used to set up or extend research teams led by a Principal Investigator. Scientific excellence is the sole selection criterion.

Calls for proposals are published annually for both funding schemes. Applications can be submitted by scientists of any nationality in conjunction with a host institution located in an EU Member State or Associated Country.

ERC grants cover up to 100% of the direct research costs (related to staff, equipment, consumables, and travel) plus a 20% contribution of the total direct costs towards overheads.

### ERC Starting Grant

ERC Starting Grants support promising young researchers at a stage when they intend to establish or have already established an independent research team. Eligible applicants must have received their PhD at least 2 and up to 12 years prior to the submission deadline (justified extensions of this period may be accepted).

### Selection Criteria

- The applicant's potential to perform world-class research
- The quality of the proposed research project

### Features

- Amount of funding per grant: up to 1.5 million EUR, in exceptional cases up to 2 million EUR (pro-rata for projects of shorter duration)
- Grant term: up to 5 years
- Number of grants awarded since 2007 (two calls): approximately 500

### ERC Advanced Grant

ERC Advanced Grants support outstanding scientists already established as independent research leaders. Applicants must have made exceptional contributions to research in terms of originality and significance. They should provide an excellent track record of significant research achievements over the last 10 years.

### Selection Criteria

- The Principal Investigator's scientific track record
- The quality of the proposed research project

### Features

- Amount of funding per grant: normally up to 2.5 million EUR, in exceptional cases up to 3.5 million EUR (pro-rata for projects of shorter duration)
- Grant term: up to 5 years
- Number of grants awarded since 2007 (two calls): approximately 500

### For further information on the ERC and its funding programmes

- European Research Council (ERC)

<http://erc.europa.eu>

## Narrating futures

Interview with ERC Grant holder Christoph Bode,  
Professor of English Literature at LMU Munich



### You have been awarded an ERC Advanced Grant as a literary scholar. How would you describe the application procedure?

It's efficient and straightforward. Application procedures in the European Union are generally regarded as bureaucratic and complex. But in the case of the European Research Council it's different. The selection criteria are demanding, but if you fulfil them things move very quickly. Five months after I applied, I received a positive decision together with six exceptionally competent reviews.

### What will you use the ERC funding for?

The team of six scholars will be investigating "future narratives". Usually, narratives are concerned with the past, even those that claim to be about the future. They are set in the future and retrospectively portray what has supposedly happened. But we are interested in entirely different forms: ones that are open, undecided and allow for multiple continuation. These "future narratives" constitute a special body of works, but until now this hasn't been recognised as such.

### Where do we find "future narratives"?

There are children's books which offer a variety of narrative directions: one that continues on page 13 for instance, and another that continues on page 20. But we find "future narratives" in experimental high literature as well. And the body of works also includes computer games and films; it can be traced throughout the different media. Narratology, which developed around narratives of the past, has no terminology for these "future narratives". We want to describe the characteristics of open future formats and the ways they work, in the shape of an abstract narrative grammar. That's why our team includes an expert on game and decision theory.

### What is so attractive about an ERC Advanced Grant?

You get a lot of money and freedom to conduct research on completely new questions. "Frontier research" is strongly encouraged. The basic message is: nothing exists at all in this field so far, but on account of his or her track record we believe the applicant is capable of breaking new scientific ground. The prospect of applying the results is not essential, although in our case it's not difficult to imagine: highly complex scenarios, such as climate change, can only be communicated after they have been broken down into narratives with multiple continuation options. That's exactly what we mean by "future narratives".



## Networking is our hallmark

Interview with Professor Matthias Lutz-Bachmann,  
Vice-President of Frankfurt University

**With six ERC grants, Frankfurt University is one of Germany's foremost universities. What makes it so attractive for top researchers?**

We have long been improving conditions for top researchers at our institutes. All our professors enjoy an excellent environment, because our appointments process enables us to meet their personal requirements with tailor-made agreements. We want our scientists and scholars to enjoy the best possible conditions and the greatest possible freedoms for their research. As a foundation under public law, our autonomy particularly enables us to meet the personal needs and wishes of our researchers, such as when organising research networks. That's why the location is so attractive and visible.

**What makes your university so special?**

Frankfurt University has one of Germany's strongest research profiles, as demonstrated by its successes in the Excellence Initiative. Our three clusters of excellence in medicine, the natural sciences and the humanities reflect this. Proven experts conduct interdisciplinary basic medical research on the heart and lung system. They investigate macromolecular complexes in collaboration with two Max Planck Institutes and two industrial partners. And they analyse current and historical transformation processes in the cluster on "The Formation of Normative Orders". Interdisciplinary networking, including between university and non-university research, is a hallmark of our research networks. Our new campus, where no fewer than three Max Planck Institutes will be established, also takes this into account, making contacts and close exchange far easier and more productive.

**To what extent is the ERC part of the university's internationalisation strategy?**

Frankfurt University has long been successful in bringing leading, internationally acclaimed scientists to "Mainhattan". We did exceptionally well with our clusters of excellence, and are now helping ERC Grant



holders feel at home in Frankfurt. As a privately funded university, we have the freedom to offer these ERC Grant holders especially attractive arrangements. Hence, Frankfurt University has additional funds at its disposal and can invest further strategic resources in the work of the ERC Grant holders.

**What incentives do you offer to attract top researchers from abroad?**

We offer an exceptionally dynamic university environment, a 'global city', open-minded and well-prepared to meet the expectations of top-flight international scientists and their families. We offer curricula that meet international standards, provide ideal opportunities for funding new research perspectives, interesting individual support for first-rate achievements, plus a unique team spirit that perceives the university as a community of researchers and teachers.



# Berlin



## At a glance

### Population

around 3.4 million

### Research

36 universities:

including Freie Universität Berlin, Humboldt-Universität zu Berlin, Technische Universität Berlin, universities of the arts, drama, design, business and management

non-university research institutions:

including 5 Max Planck Institutes, 13 Leibniz Institutes, 3 Helmholtz Centres, 7 Fraunhofer Institutes

### Culture

more than 175 museums, 3 opera houses, 7 symphony orchestras, around 130 theatres  
Berlinale: the world's biggest film festival  
Carnival of Cultures: street festival

### Leisure

some 20 lakes suitable for swimming  
almost 30 beach bars  
over 400,000 trees in the streets



# Berlin

## A network of diversity

"The whole world in one place" is the motto of the cosmopolitan metropolis in the heart of Europe where people from more than 180 nations live and work. The colourful mix of different cultures and the particular history of the old and new German capital have given the city its own very individual character with its luxurious office buildings, oriental markets, elegant shopping boulevards alongside old communist prefab apartment blocks, and trendy boutiques in the fashionable quarters. Add to this the almost inexhaustible range of cultural opportunities – a creative mixture of mainstream and flourishing avant-garde – and the result is a dynamic melting pot with international drawing power.

For scientists from around the globe, the city offers a particularly dense and diverse network consisting of numerous universities and non-university research institutions. The close network manifests itself, for instance, in the seven international graduate schools and four Excellence Clusters which are supported by the German national Excellence Initiative. The researchers work in close collaboration on their projects, across disciplinary and institutional borders.

### Excellence in the humanities

The humanities are strongly represented at Berlin's major universities, and they are networked with non-university research institutions through intensive collaboration. One example is the Excellence Cluster "Topoi – The Formation and Transformation of Space and Knowledge in Ancient Civilizations." More than 200 scientists from various disciplines are investigating the interdependence of space and knowledge in the cultures of antiquity. "All of Berlin's institutions working on the cultures of the ancient world belong to the cluster," says Professor Hermann Parzinger, a member of the Excellence Cluster and President of the Prussian Cultural Heritage Foundation (SPK). This umbrella organisation is Germany's largest cultural institution and unites 16 museums, the Secret State Archives, the Berlin State Library and diverse research institutes.

"Research within the Excellence Cluster is organised in more than 40 interdisciplinary groups, and this intensifies the level of collaboration among



the humanities' institutions, which are already strongly networked," says Hermann Parzinger. Once a month, the scientists involved get together to present and discuss their projects. The meetings are held in rotation at the various institutions; the upcoming venue is the Pergamon Museum. "This always creates a special atmosphere," comments Parzinger.

Worldwide networking is perfectly natural for humanities scholars: the Topoi researchers regularly invite international colleagues to Berlin for a few months to share their ideas. Some 20 foreign experts are regularly involved in research in the Excellence Cluster, sometimes being appointed to newly created professorships. "Top-level research in the humanities at the numerous, well-networked Berlin research institutions attracts leading scientists from other countries," says Hermann Parzinger. And this is confirmed by rankings drawn up by the Alexander von Humboldt Foundation on the places chosen by their fellows: Berlin is the most popular destination in Germany among humanities scholars from abroad.

### Ideal conditions for surface research

The city also has a great deal to offer natural scientists. The Max Planck Society's Fritz Haber Institute (FHI) has particularly magnetic appeal. The institute was already seen as a Mecca of physical chemistry in the early 20th century. "To this day, FHI is regarded as one of the world's leading institutions in surface and catalysis research," says Professor Hans-Joachim Freund, head of the Department of Chemical Physics at FHI. The level of excellence makes the institute a prime destination for outstanding scientists from home and abroad. "Well over half of the researchers at FHI have come to us from universities and institutes abroad," confirms Hans-Joachim Freund.



*Freie Universität Berlin*  
[www.fu-berlin.de](http://www.fu-berlin.de)

*Humboldt-Universität zu Berlin*  
[www.hu-berlin.de](http://www.hu-berlin.de)

*Technische Universität Berlin*  
[www.tu-berlin.de](http://www.tu-berlin.de)

*Exzellenzcluster TOPOI*  
[www.topoi.org](http://www.topoi.org)

*Prussian Cultural Heritage Foundation*  
[hv.spk-berlin.de](http://hv.spk-berlin.de)

*Fritz Haber Institute in the Max Planck Society*  
[www.fhi-berlin.mpg.de](http://www.fhi-berlin.mpg.de)

*Max Delbrück Center for Molecular Medicine Berlin-Buch*  
[www.mdc-berlin.de](http://www.mdc-berlin.de)

Gerard Meijer, for example, comes from the Netherlands. He heads the Department of Molecular Physics. "FHI takes the pressure off researchers by taking care of all the bureaucracy," says the ERC Grant holder. This creates space and gives him the backing he needs to be a member of the institute's board of directors without neglecting his research. Meijer also praises the excellent technical facilities: the institute has highly qualified experts in precision mechanics and electronics who manufacture the special electrodes and high voltage switches he needs for his experiments.

Scientists at FHI also benefit from their integration in Berlin's research landscape: the institute operates measuring stations at the electron storage ring BESSY II, for example, a source of synchrotron radiation unparalleled worldwide. Together with the BER II neutron source at the

Helmholtz-Zentrum Berlin für Materialien und Energie (HZB) it attracts over 2,000 surface and structure researchers from 35 countries to Berlin every year.

### Tenure track positions

Life science scholars value the working conditions offered by the city, too: "Berlin has a first-class research landscape with enormous innovative potential," says systems biologist Professor Nikolaus Rajewsky, who left the USA for the Max Delbrück Center for Molecular Medicine (MDC) in Berlin-Buch, one of the world's leading research institutions in this field.

Rajewsky is currently developing the Berlin Institute for Medical Systems Biology (BIMSB), which will be moving to Berlin-Mitte as an extension of MDC to intensify its collaboration with the universities and the Charité Medical School: "This is where the whole spectrum of large-scale methods for genome, proteome and metabolome analysis are applied. And of course, we have the necessary high-powered processors for analysis and modelling." The distinguished scientist quickly set up an international working group. "The opportunities for junior research group leaders are especially attractive by international comparison," says Nikolaus Rajewsky. MDC also offers tenure track positions, and the working language is of course English.

18 foreign junior research group leaders currently work at MDC. They include the ERC Grant holder Francesca Spagnoli. She previously researched at Rockefeller University in New York, where she started on a remarkable career as a developmental biologist before she decided to relocate to MDC in 2008. She is now leading a junior research group for organ development. "MDC made me the best offer and is the most attractive place for my project," says the Italian physician and biologist. "The great scientific community in Berlin makes it easier to develop collaborative initiatives, and it makes the city an even more attractive destination for foreign scientists."





## Huge research potential all in one place

ERC Advanced Grant holder, Sabine Schmidtke, is investigating the inter-religious symbiotic relationship between Jews and Muslims in the medieval world at the Institute of Islamic Studies at Freie Universität Berlin.

### Why did you decide on Berlin as the place to carry out your ERC project 'Rediscovering Theological Rationalism in the Medieval World of Islam'?

Berlin is an ideal location for the project. It's an important centre of Islamic studies. The whole spectrum is covered by the various institutes at Freie Universität Berlin, ranging from Arabic studies through Iranian studies to Turkish studies. It's also where the Graduate School "Muslim Cultures and Societies" has been established as part of the Excellence Initiative. And, in addition to this, there is the Centre of Modern Oriental Studies. So there's huge research potential all in one place.

### Where do your team members come from?

My team is composed of scholars from Germany, Iran, Switzerland and Palestine. We work mainly in French, although our publications are generally written in English and Arabic. We also have a very good international network.

### Who are your partners?

Our most important collaborative partner in Berlin is the Oriental Department at the State Library. We plan public workshops with them, for instance. In addition to this, we work closely and intensively with researchers and institutions in Oxford, London, Istanbul, Sanaa, Jerusalem and Montreal.

## Successful algorithms

"Berlin has always been a pioneer in applied mathematics," says mathematician and ERC Grant holder Professor Günter M. Ziegler, who heads the Discrete Geometry Group at Technische Universität Berlin. And the diversity of Berlin's mathematical research institutions is unique throughout the world. The DFG Research Center MATHEON, which was founded in 2002, builds on this potential: this is where research is carried out by some 200 mathematicians from three universities and two large, non-university research institutes, the Zuse Institute Berlin and the Weierstrass Institute for Applied Analysis and Stochastics. They cooperate with about 50 mathematical institutes around the world addressing mathematical problems directly related to applications. For instance, they develop logistics solutions for the Port of Hamburg, improve the capacity utilisation of telecommunications networks and carry out research on visualisation techniques for surgical operations.

MATHEON algorithms are already being used by numerous international companies, such as DreamWorks Animation in Hollywood. Given their emphasis on applications, Günter M. Ziegler is convinced that the mathematicians benefit from their integration in Berlin's well-networked research landscape: "Researchers in various disciplines are interested in collaboration and exchange. That's exactly what we have in Berlin, and this opens up excellent opportunities."

DFG Research Center MATHEON  
[www.matheon.de](http://www.matheon.de)

Text: Dietrich von Richthofen

## Services

### Help at the Start

Center for International Cooperation, FU Berlin  
[www.fu-berlin.de/sites/en/inu/cic/guest](http://www.fu-berlin.de/sites/en/inu/cic/guest)

### International Office, HU Berlin

[www.international.hu-berlin.de/an\\_der\\_hu-en/abteilung-internationales](http://www.international.hu-berlin.de/an_der_hu-en/abteilung-internationales)

### Guest House

TU Berlin  
[www.tu-berlin.de/abz/menue/internationale\\_gaestebetreuung/parameter/en](http://www.tu-berlin.de/abz/menue/internationale_gaestebetreuung/parameter/en)

### Insights

[www.visitberlin.tv](http://www.visitberlin.tv)



# Bremen/Bremerhaven



**At a glance**

**Population**  
over 500,000

**Research**  
8 universities:  
including the University of Bremen,  
Jacobs University Bremen,  
Bremerhaven University of Applied  
Sciences and universities for health  
economics and the arts

non-university research institutions:  
including 1 Max Planck Institute,  
3 Leibniz Institutes,  
2 Helmholtz Centres,  
4 Fraunhofer Institutes

**Attractions**  
**Überseemuseum:**  
one of the leading ethnographic museums  
in Europe

**Klimahaus Bremerhaven:**  
our planet's climate – an exciting discovery  
experience

**Sail Bremerhaven:**  
International Windjammer Festival  
Fishing port with gourmet delights

**Outdoor activities**  
800 kilometres of cycle paths  
**Worpswede:** artists' village



## Bremen

### Excellent science beside the sea

Nothing has shaped Bremen more than water. Thanks to the North Sea and the River Weser, an important trading centre once evolved here. As a hub to the world the port shaped the development of the Free Hanseatic City, and its citizens are still proud of this heritage today. Not to mention the fact that some of the best varieties of beer, chocolate and coffee were developed in Bremen.

The research conducted in the bracing North Sea climate also arouses international interest. It focuses on marine sciences, materials science and environmental science, ranging from robots to the life of the lug-worm. Information technology, telematics, neurological research and the social sciences also enjoy international recognition. Scientists from many countries study and research at the university, the universities of applied sciences, the private Jacobs University, the Max Planck Institute for Marine Microbiology and the Alfred Wegener Institute in Bremerhaven. And in true Hanseatic tradition, people value not only a cosmopolitan outlook but also networking with industry: more than 300 companies have established themselves in the vicinity of the university alone, and they utilise the knowledge generated by research.

### Freedom for researchers from the very start

Marc Strous from the Netherlands did not hesitate for long. The 38 year-old knew immediately that he would go to Bremen to use his ERC Starting Grant to build the Microbial Fitness Research Group at the Max Planck Institute for Marine Microbiology. "The MPI in Bremen is the best institute in Germany for my field of research, and it ranks as top-class internationally, too." Above all, the successful combination of biogeochemistry, molecular biology and microbiology is particularly outstanding, just like the people involved. "I already knew a few of the group leaders, so I knew that first-rate scientists were working there," says Marc Strous. The generous general conditions are another advantage: "I was able to design the group just as I wanted and equip the laboratory to match my plans," he explains.

[www.mpi-bremen.de](http://www.mpi-bremen.de)

### Great conditions for research and families

Kuroschi Rezwan from Switzerland came to the University of Bremen's Department of Production Technology as a junior professor in 2006. In August 2009, he became a full professor. The 34-year-old scientist's research in materials science was recognised by the ERC in 2008 when he was awarded a Starting Grant.

#### You have researched in Switzerland, England and the USA. Why did you finally decide on Bremen?

The department is one of the top locations in Germany and enjoys a high international standing. I have exceptionally good research and start-up conditions here. The outstanding infrastructure was also decisive. I was able to start research with my group straight away.

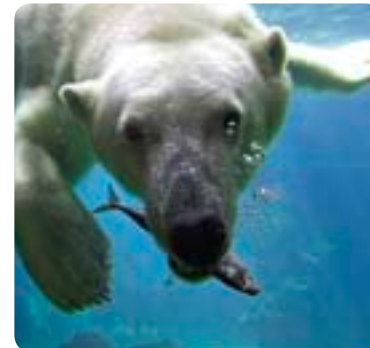
#### What role did the opportunities for collaborative research play in your choice?

The fact that there's a Max Planck Institute and a Fraunhofer Institute in Bremen was a major factor. The Fraunhofer Institute for Manufacturing Technology and Applied Materials Research is a very important partner. We also work closely with biologists, chemists, physicists and geoscientists at the University of Bremen. All in all, it's an excellent, dynamic and young environment that's increasingly gathering momentum.

#### And what do you think of the social factors?

The university is really family-friendly. That's important, because it's not just a matter of having a good research environment, but also good conditions for the family: the dual-career couples system is a familiar concept here.

[www.uni-bremen.de](http://www.uni-bremen.de)



## ■ Services

### Help at the Start

International Office of the  
University of Bremen  
[www.io.uni-bremen.de](http://www.io.uni-bremen.de)

### Dual Career Couples

[www.familie.uni-bremen.de](http://www.familie.uni-bremen.de)

### Guest Houses

[www.gaestehaus.uni-bremen.de](http://www.gaestehaus.uni-bremen.de)

### Insights

[www.bremen.de/  
video/8246847&kat\\_  
id=&click=true](http://www.bremen.de/video/8246847&kat_id=&click=true)

## 142 kilometres of core samples

"Top research scientists go to places with excellent working conditions," emphasises Professor Gerold Wefer from the MARUM Centre for Marine Environmental Sciences: "That's precisely what MARUM provides, and why it attracts international researchers such as Humboldt Award winners and ERC Grant holders." One such is the ERC Advanced Grant holder Professor Kai-Uwe Hinrichs who is conducting research at the centre which belongs to the University of Bremen. He is investigating single-cell organisms deep beneath the seafloor in his DARCLIFE project.

Different facilities collaborate closely with each other within MARUM: the geosciences and other departments at the University of Bremen, the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, the Max Planck Institute for Marine Microbiology, the Centre for Tropical Marine Ecology, the Senckenberg Research Institute in Wilhelmshaven and Jacobs University Bremen.

"We have analytical resources and apparatus that many scientists need for their measurements, but are unable to access in their own research locations: the stock of core samples is a gold mine that draws scientists from around the world to Bremen, and the underwater research devices and equipment are in great demand internationally," Gerold Wefer explains.

MARUM operates one of the three core repositories in the international Integrated Ocean Drilling Program (IODP). Research institutions from 21 countries belong to the joint geoscience project which explores the Earth's structure beneath the seafloor. Scientists drill deep into the ocean beds at different places throughout the world to extract core samples. MARUM currently has about 142 km of core samples in its archives deriving from 83 expeditions to the Atlantic, the Arctic Ocean, the Mediterranean and the Black Sea. Bremen's core repository is now an international leader.

Visiting researchers are also attracted by the intellectual environment: "At MARUM colleagues find kindred spirits with whom they can engage in scientific discussions and thus advance their own research," says Wefer. Australia, Japan, Chile, France – many of the team members come from abroad. That's why English is the language used in seminars, the workplace and the laboratories. "We also encourage our guests to learn German, but our scientific activities are all in English," says Wefer.

In 2003, MARUM introduced the MARUM Research Award for Marine Geosciences which is granted annually in recognition of outstanding masters or doctoral theses. The list of award winners includes scientists from Switzerland, Italy, Spain, Sweden and Japan, reflecting the institution's international appeal.

[www.marum.de](http://www.marum.de)





## The entire polar spectrum

Professor Karin Lochte is director of the Alfred Wegener Institute (AWI) in Bremerhaven, which is one of the world's largest centres for polar and marine research with around 900 employees. Currently, some 70 scientists from abroad are working there.

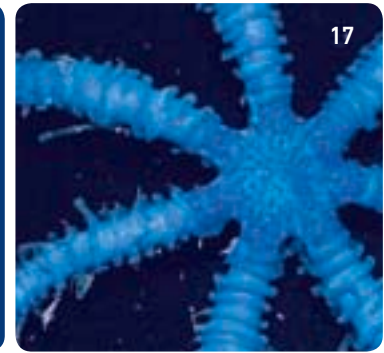
### AWI attracts many international scientists – why?

AWI is the largest polar research institute in the European Union. Its potential makes it unique in Europe, and perhaps in the world. We conduct research at both poles and cover the entire spectrum: from climate research, oceanography and biology to the geosciences. With our icebreakers, research vessels and aircraft, plus the polar stations, we offer scientists worldwide ideal research and working conditions as well as superb equipment. In addition, we are involved in numerous international projects, and this opens up a lot of career opportunities for our researchers.

### How do you help scientists from abroad to find their feet on the North Sea coast?

AWI takes special care of colleagues from abroad. Each new colleague receives a starter kit, and there is a 'welcome day' with all the important information. The doctoral students usually get themselves organised quickly and informally. We offer more extensive services to established scientists and their families: a personal contact helps them to find childcare or accommodation, and AWI offers assistance with dual-career needs, too. The institute has its own day nursery for children up to three years of age.

[www.awi-bremerhaven.de](http://www.awi-bremerhaven.de)



## In search of tomorrow's state

Almost 100 scholars work at the DFG's Collaborative Research Center (SFB) "Transformations of the State", the largest European group of its kind investigating contemporary changes in the classical nation state. Stephan Leibfried is Professor of Political Science in the Centre for Social Policy Research at the University of Bremen and speaker of the SFB which embraces political science, law, sociology and economics. "Our visiting researchers benefit greatly from our collaborative profile which combines several disciplines in the projects," says Stephan Leibfried. A variety of collaborative projects, close networking with research institutes in Europe and joint publications attract scholars especially from North America and Europe to the Hanseatic city. And it is easy for the guests to communicate with one another, because research takes place under one roof. The researchers from abroad soon make contacts at colloquia and workshops, and when they have lunch together, they have plenty of opportunity to share ideas and plan joint projects.

[www.zes.uni-bremen.de](http://www.zes.uni-bremen.de)

Text: Katja Lüers/Eva Tenzer

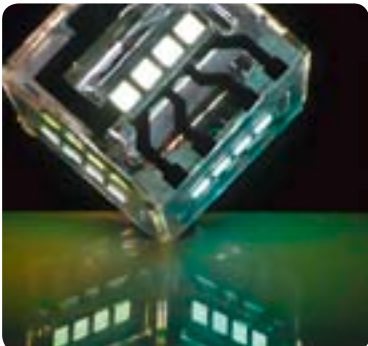


# Dresden



*The Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG) has excellent core facilities, good administrative support, a highly competitive PhD programme and most importantly, an open and collaborative atmosphere in which ideas and projects can be first incubated and then grown at full speed. The general scientific approach is very interdisciplinary, in large part due to the interactions with the MPI for the Physics of Complex Systems. A fundamentally interdisciplinary project like my SegClockDyn needs this kind of soil to achieve maximum vitality.*

**Andrew C. Oates**  
Group Leader MPI-CBG | ERC Starting Grant 2007



## Dresden

### Top-level research in close collaboration

For decades they recalled the horrors of war: the ruins of the Frauenkirche which collapsed in February 1945 after a bombing raid on Dresden. The church was carefully reconstructed and reopened in 2005. Today, it symbolises the essence of the city since the reunification of Germany: new beginnings and a pioneering spirit. Affectionately known as 'Florence on the Elbe', the city with its baroque riverside skyline attracts tourists from around the world. But the capital of Saxony has a modern face as well: in Dresden international scientists are working on tomorrow's solutions – new therapies for cancer, diabetes and retinal degeneration, efficient semiconductors, high-performance materials. Biotechnology, microelectronics and material sciences are just some of the strengths of the dynamic research location of Dresden.

"A location ranks as excellent when it attracts a lot of good researchers who combine their skills to develop their full synergetic potential. This has been achieved in Dresden," says Professor Wieland Huttner, ERC Grant holder and director of the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG). Within a brief space of time, a close-knit constellation of outstanding institutes has been established. And as the biosciences illustrate, the MPI-CBG, the DFG Research Center for Regenerative Therapies (CRTD), the medical faculty and the Biotechnology Center (BIOTEC) at Technische Universität Dresden are all within walking distance. Here English is the common language, and close collaboration is part of everyday life.

### Top-flight colleagues recruited

CRTD sees itself as the core of the interdisciplinary network with its 15 research groups, seven of which are headed by foreign scientists. More than 80 groups are working at various institutes in the network, in areas ranging from basic research to clinical applications, with the aim of making stem cells utilisable. Professor Michael Brand, director of CRTD, is investigating adult neural stem cells and their potential for regeneration

in the brain. He has succeeded in recruiting top-flight colleagues from abroad for this research in Dresden. "Scientists find it very appealing to have interdisciplinary expertise just around the corner." And it really is only a short walk to the medical faculty, the home of one of the largest stem cell transplant programmes in Europe.

At the centre, research into cell therapies focuses on leukaemia, diabetes, Parkinson's disease and retinal degeneration. In their work the 300 scientists at CRTD, well over half of whom come from abroad, use a central service platform. It is operated by experts who, for instance, provide high quality cells for all of the research groups. "This creates many areas of common interest amongst the scientists," says Michael Brand.

In the field of publications, the most rigorous test of scientific success, CRTD already ranks amongst the leaders. One third of the centre's publications are the result of collaborative activities. In Michael Brand's opinion, this highlights two things: "In Dresden we rank high in terms of international comparisons, and our network is thriving."

### Attractive: four ERC Grant holders work here

The MPI of Molecular Cell Biology and Genetics is just two streets away in a very unusual and attractive building. "We wanted to promote communication, so we deliberately decided to have only one entrance," admits Wieland Huttner, director of MPI. And it works. The four-storey atrium where the researchers meet every day is filled with a "vibrant atmosphere" according to the scientist. And it is not unusual for a new idea or a joint project to be born here over a cup of coffee.

The building creates a fertile environment for the 'Dresden Model' which lends the institute its uniqueness: there are five directors who alongside some 20 other colleagues are also research group leaders. Each of around 25 research groups manages its own budget and is completely free in its



### At a glance

#### Population

Over 500,000

#### Research

9 universities:

including the Technische Universität Dresden, universities of applied sciences and international business studies, music, fine art and dance

non-university research institutions:

including 3 Max Planck Institutes, 4 Leibniz Institutes, 10 Fraunhofer Institutes

#### Inventions

The first European porcelain, toothpaste in tubes, tea bags

#### Leisure

Film Nights on the banks of the Elbe

#### Neustadt:

the upbeat quarter with clubs, cinemas, cafés

#### Saxon Switzerland:

hiking in the National Park



## ■ Services

### **Welcome.dresden.de**

*Working – Accommodation – Living*

<http://welcome.dresden.de>

### **Help at the Start**

*TU Dresden*

[http://tu-dresden.de/internationales/akademisches\\_auslandsamt](http://tu-dresden.de/internationales/akademisches_auslandsamt)

### **Guest House**

*On campus*

<http://www.studentenwerk-dresden.de/english/wohnen/gaestehaus.html>

### **City Highlights**

<http://www.youtube.com/watch?v=vHFck5e4vA0&feature=channel>

choice of research. The level of exchange between the groups, each with up to 16 scientists, is intense. And the flat hierarchies make cooperation within and between the individual groups both easy and frequent. The 'faculty' meets once a month: here the directors, the research group leaders, the head of the central 'Services & Facilities', representatives of the postdocs, the doctoral students and the administration gather to discuss the many activities at the institute.

The 'Dresden Model' is a hit. In 2009, readers of 'The Scientist' magazine chose the institute as the best place for postdocs to work outside the USA. Apart from the excellent standard of research, they applauded the quality of interpersonal relations among the 400 colleagues from 45 nations. The 'beer hour' every Friday afternoon is just one of the many opportunities to relax and chat about research or personal matters with directors and group leaders.

Four ERC Grant holders are researching at MPI. Suzanne Eaton from the US is exploring the choreography of tissue production from individual cells, based on the model of the fruit fly. Wieland Huttner also received an ERC Advanced Grant in 2009 for his work on the evolutionary enlargement of the brain in which the frequent division of neural stem cells plays a significant role. "We're investigating the gene responsible for this and have already managed to shed light on several corresponding cell biological mechanisms. This knowledge provides insights into the evolutionary development of the brain and can pave the way for using stem cells to

treat neurodegenerative diseases." Stefan Diez and Andrew Oates are also working at the institute as ERC Starting Grant holders.

## Carefree environment

Young international scientists are convinced by the practice of conducting top-level research in an open, communicative environment. The entire research infrastructure at MPI-CBG is available to everyone, including doctoral students, and MPI's International Office (IO) takes care of the equally important things not related to research. "When we arrived in Dresden from the US, IO helped with everything, childcare for our son, recognition of our driving licences, opening a bank account. I don't know what we would have done without this excellent assistance," says Marija Zanic, a postdoctoral fellow. And her colleague Ilya Levental agrees: "The comprehensive service provided by IO clinched my decision to come to Germany."

*Center for Regenerative Therapies Dresden (CRTD)*

[www.crt-dresden.de](http://www.crt-dresden.de)

*Biotechnology Center (BIOTEC)*

[www.biotec.tu-dresden.de](http://www.biotec.tu-dresden.de)

*Max Planck Institute of Molecular Biology and Genetics*

[www.mpi-cbg.de](http://www.mpi-cbg.de)

*Dresden International Graduate School for Biomedicine and Bioengineering – one of Germany's largest programmes for doctoral students*

[www.digs-bb.de](http://www.digs-bb.de)

## Materials with a promising future

A good third of the 600 scientists at the Leibniz Institute for Solid State and Materials Research (IFW) come from abroad, so staff are experienced in providing professional help for newcomers, ranging from visa applications to finding accommodation. And the laboratories offer scientists even more opportunities: innovative research in modern materials science. One special focus in Dresden is metallic glass. It is extremely hard, highly durable and very elastic. These properties make the material interesting for instruments, precision mechanics, lightweight components or implants, and its magnetic qualities are suitable for sensors. Not surprisingly, Jürgen Eckert is a focus for scientists from around the globe. The director of the Institute for Complex Materials at IFW is an internationally recognised specialist in metallic glass and holds numerous patents. The 2009 Leibniz Prize winner exemplifies close collaboration: as professor at TU Dresden he ensures cooperation between the university and IFW and pursues research with partners around the world. Today, for example, international scientists in Dresden are researching very resilient high-performance materials in the context of a 'Global Research Lab'.



## Luminous plastic

"We achieve the very best results with our high-performance OLEDs, or organic light-emitting diodes," says physicist Karl Leo, a pioneer in this field. He notched up several world records by making white emission so bright that OLEDs have long since outshone fluorescent lighting. OLEDs are seen as the technology of the future, for instance for displays.

Research conditions have to be right for such excellent results. And they certainly are at Dresden's microelectronics research centre. No less than 800 researchers work in the organic semiconductor cluster which Karl Leo says is "Europe's largest cluster of its kind." The professor at TU Dresden is also director of the Fraunhofer Institute for Photonic Microsystems. Both institutions offer scientists a great diversity of high-quality equipment: "The experimental possibilities are very good thanks to our vacuum and coating technologies. This also promotes our research into organic solar cells," says the winner of the Leibniz Prize, Germany's most valuable scientific award. It is this infrastructure that makes Dresden the perfect place for everything from basic research to industrial applications. Karl Leo cooperates with the leading producers of organic semiconductors who are also located in the area. This geographical proximity enables researchers to position themselves in the value-added chain and develop their career prospects in industry at the same time. It is quite common for postdocs to continue their research in the R&D divisions of Dresden companies following their project at the Fraunhofer Institute. For this very reason, when they do return home, they are highly sought-after by industry in their own countries.

Text: Uschi Heidel

*Leibniz Institute for Solid State  
and Materials Research (IFW)*  
[www.ifw-dresden.de](http://www.ifw-dresden.de)

*Institute of Applied Photophysics  
at TU Dresden*  
[www.iapp.de](http://www.iapp.de)

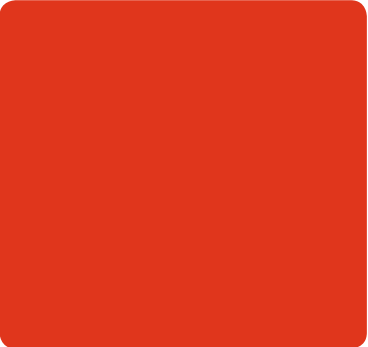
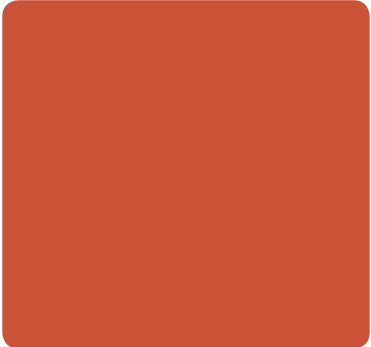
*Fraunhofer Institute for Photonic  
Microsystems*  
[www.ipms.fraunhofer.de](http://www.ipms.fraunhofer.de)



**Goethe on Dresden, 1790:**  
*"There are unbelievable treasures of  
every description in this beautiful place."*



# Heidelberg



**At a glance**

**Population**  
Over 145,000

**Research**  
5 universities:  
including Heidelberg University,  
universities for education, sacred music  
and Jewish Studies

**non-university research institutions:**  
including 4 Max Planck Institutes,  
1 Helmholtz Centre (DKFZ), the European  
Molecular Biology Laboratory (EMBL)

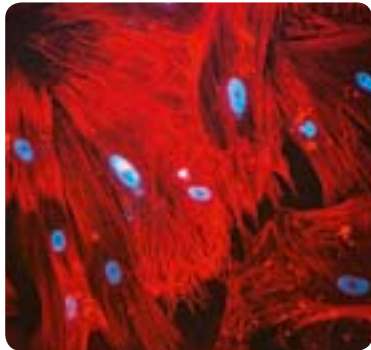
**German records**  
The longest pedestrian precinct  
The warmest temperatures in 2008

**Leisure**  
'Heidelberg Spring' International Music  
Festival  
Rugby stronghold  
Festival of crime writing



*"Heidelberg has a high density of excellent research institutions, and this makes it easy for you to get in touch with scientists who are working in areas beyond the immediate focus of your own activities. I'm happy to see that many scientists from abroad are also making use of these opportunities."*

**Professor Harald zur Hausen, Nobel Prize winner in Medicine 2008**  
Longstanding chairman and member of the scientific board of the German Cancer Research Center (DKFZ)



# Heidelberg

## Beyond disciplinary frontiers

"Long have I loved you; I should like, for my pleasure, to call you 'Mother' and to present to you an artless song" are the first lines of the most frequently quoted ode to the city of Heidelberg, penned by the Romantic poet Friedrich Hölderlin. This idyllic region has captured the imagination of many poets, including Goethe and even the somewhat sceptical Mark Twain. Present-day visitors to Heidelberg sense this aura, especially on the Philosopher's Walk: flanked by vines, the gaze takes in the Old Town, the famous Old Bridge spanning the Neckar and the Castle. And since Heidelberg lies in one of the warmest regions in Germany, even almond and fig trees flourish here.

If we follow the Philosopher's Walk back into the city and cross the Theodor Heuss Bridge, we come to the Karl Jaspers Centre for Advanced Transcultural Studies, the seat of the excellence cluster 'Asia and Europe in a Global Context'. True to the Romantic spirit of this picturesque city, the humanities are a major focus area. Researchers in the excellence cluster are investigating the complex interaction between European and Asian cultures in art, politics and society in the past and the present. For example, this is where the Indian professor Monica Juneja is researching 'global art history.' She analyses how images gain new meanings when they are integrated into different cultures.

### Unique dynamic

"Our strength in all areas of history and cultural studies lies in our international approach," says Bernhard Eitel, Rector of Heidelberg University, which is almost 625 years old, making it one of Europe's oldest universities. Founded in 2002, the Collaborative Research Centre 'Ritual Dynamics' with more than 90 international researchers is the largest integrated research project on this topic in the world. Another example of international collaboration is the interdisciplinary research being pursued by ERC Starting Grant holder Jörg Peltzer. His internationally networked group is comparing the development of political and social orders in late mediaeval European principalities. The historian combines historical, archaeological and semiotic perspectives in a multi-angle approach. Such independent junior research groups are still rare in the humanities, but



not in Heidelberg, where they are actively promoted. "These junior research groups add a unique dynamic to the humanities at our university," says Bernhard Eitel.

To get to the university's campus for natural sciences and life sciences at Neunheimer Feld, we cross the Ernst Walz Bridge and pass the Max Planck Institute for Medical Research. The life sciences are another major focus in Heidelberg. Specialists at the university conduct research in cell biology, plant sciences, zoology, neurobiology, pharmacy and biotechnology. Experts also work at the European Molecular Biology Laboratory, the Center for Molecular Biology, the Biochemistry Centre, the Institute of Human Genetics and the German Cancer Research Center. All this is complemented by about 100 biotechnology companies.

### Getting the soft factors right

The German Cancer Research Center (DKFZ) is one of the world's most important biomedical research centres with 850 scientists investigating the mechanisms of cancer genesis and developing new diagnostic and treatment methods. In 2008, the longstanding director of the centre, Professor Harald zur Hausen, received the Nobel Prize in Medicine for his contribution to research on human papilloma viruses. Like many scientists in Heidelberg, the celebrated researcher thinks and works on an interdisciplinary basis: "It was in the USA that I learned how effective flexible structures in research can be." For this reason the Nobel laureate dissolved the institutes at DKFZ and brought them out of isolation by establishing research focus areas. "The scientists have no difficulty changing from one research focus area to another, and this is having positive effects on interdisciplinary collaboration," says Harald zur Hausen. And





*Heidelberg University*  
[www.uni-heidelberg.de](http://www.uni-heidelberg.de)

*Max Planck Institute for Medical Research*  
[www.mpimf-heidelberg.mpg.de](http://www.mpimf-heidelberg.mpg.de)

*German Cancer Research Center*  
[www.dkfz.de](http://www.dkfz.de)

*European Molecular Biology Laboratory*  
[www.embl.de](http://www.embl.de)

Heidelberg gets the soft factors right, too: both DKFZ and the university have been awarded the prestigious German certificate for family-friendly workplaces. The university's Children's Centre not only helps visiting researchers to find the right kindergarten or school for their offspring but also puts them in contact with sports clubs and cultural activities for children. Apart from this, the university stages its own events to help international researchers settle down quickly in Heidelberg. The programme ranges from getting together for breakfast and film evenings to excursions and concerts.

### **Stimulating working atmosphere**

The main laboratory of another leading research centre lies in the Neckartal-Odenwald Nature Park: the European Molecular Biology Laboratory (EMBL). Founded in 1974, the organisation is run by 18 European states and is one of the world's largest molecular biology research facili-

ties with around 100 research units. At EMBL the ERC Starting Grant holder Francesca Peri is investigating zebra fish to discover how microglia cells function. These cells are responsible for immune defence in the central nervous system. "Working at EMBL is the dream of every developmental biologist," says the Italian scientist. "The working groups are small, distances are short and exchange is intense: it's a very stimulating working atmosphere." The ERC grant holder sees the proximity of the Max Planck Institute for Medical Research as a definite advantage, because of the top scientists working there. Since it was founded the Max Planck Institute has produced five Nobel Prize winners. In fact, Heidelberg is one of the cities with the most Nobel laureates in Europe.

### **Shortly after the Big Bang**

Let's return to the Philosopher's Walk and Heidelberg University's 'Physikalisches Institut'. The building was originally constructed between 1907 and 1912 for the Nobel Prize winner Philipp Lenard. His successors, including the Nobel laureate Walter Bothe, developed the institute into an internationally recognized centre for atomic, nuclear and elementary particle physics. Today's physicists address fundamental questions concerning the Standard Model of elementary particle physics or the evolution of matter shortly after the Big Bang.

The physicists at the university are also well-networked: in Heidelberg with the Max Planck Institutes for Astronomy and Nuclear Physics; in the region with the Karlsruhe Institute of Technology and the GSI Helmholtz Centre for Heavy Ion Research in Darmstadt; in Europe with the European Organization for Nuclear Research in Geneva and the 'Institut Laue-Langevin' in Grenoble. "Our university is also strong on interdisciplinary research with non-university institutions," emphasises Bernhard Eitel. In 2007, Heidelberg's strategic plan was singled out for recognition in the German government's Initiative for Excellence competition.



## Eminent researchers close at hand

Hannah Monyer has been director of the Department of Clinical Neurobiology at the University Hospital since 1999. She is investigating the molecular basis of consciousness and memory funded by an ERC Advanced Grant.

### What does Heidelberg have to offer?

I'm very interested in the history of science and philosophy. That's why I enjoy the idea of walking along the same streets as Schumann or Goethe once did. The city's atmosphere is steeped in history. And Heidelberg has a lot of exciting cultural activities, too, such as the international music festival 'Heidelberg Spring'.

### And in your work?

Heidelberg's department of neurobiology covers a broad spectrum. Virtually everything it encompasses is on campus, and I can easily walk from one institute to another with my specimens. This is the best place for me to work in my particular field of research. It's also important for me to have as many eminent international colleagues as possible close at hand.

### How important is interdisciplinary research?

I'm a member of a research group in which professors from different faculties meet once a week for a year to discuss a particular topic. In the coming semester I'll be working together with a philosopher on the topic of sleep and memory. I'm well aware that the highly complex activities of our brains cannot be encompassed by any single discipline. At our institute we take regular exchanges with colleagues from other disciplines very seriously, and they are an integral part of our interdisciplinary concept.



## Extragalactic research

When Grand Duke Friedrich I of Baden opened a new observatory on the Königstuhl Mountain near Heidelberg in 1898, nobody was aware that billions of galaxies exist in addition to our own. Who could have imagined the challenges that astronomy would pose in the 20th and 21st centuries? In Heidelberg space research, in particular, is conducted on an extremely broad scale. In 2005, the State Observatory Königstuhl amalgamated with the 'Astronomisches Rechen-Institut' and the Institute for Theoretical Astrophysics to form the Heidelberg Centre for Astronomy. The centre is augmented by the two Max Planck Institutes for Astronomy (MPIA) and Nuclear Physics (MPIK) which also focus on astroparticle physics. The institutes are very active internationally. For instance, MPIA is working together with partners to build the Large Binocular Telescope, the world's largest single telescope. What lies behind 'dark matter'? Where might life have originated in the universe? Heidelberg will also be making its contribution towards answering these questions.

*Heidelberg Centre for Astronomy*  
[www.ari.uni-heidelberg.de/zah](http://www.ari.uni-heidelberg.de/zah)

*Max Planck Institute for Astronomy*  
[www.mpia.de](http://www.mpia.de)

*Max Planck Institute for Nuclear Physics*  
[www.mpi-hd.mpg.de](http://www.mpi-hd.mpg.de)

## ■ Services

### *Wish you were here*

*The metropolitan Rhine-Neckar region*  
[www.wishyouwerehere.de](http://www.wishyouwerehere.de)

### *Help at the Start*

*Heidelberg University*  
[www.uni-heidelberg.de/international/index\\_e.html](http://www.uni-heidelberg.de/international/index_e.html)

### *International Guest House*

*On campus*  
[www.uni-heidelberg.de/university/visitors/gaestehaus](http://www.uni-heidelberg.de/university/visitors/gaestehaus)

### *City Website*

[www.heidelberg-marketing.de/content/e7185/e7635/index\\_eng.html](http://www.heidelberg-marketing.de/content/e7185/e7635/index_eng.html)



## The National Contact Point (NCP) for the ERC

The European Research Council (ERC) is implemented via the specific programme "Ideas" from the European Union's 7th Research Framework Programme. To support researchers with their proposals and project implementation, National Contact Points have been established for all branches of the Research Framework Programme.

The National Contact Point responsible for the ERC is jointly run by the EU-Bureau of the Federal Ministry of Education and Research (BMBF) and the Deutsche Forschungsgemeinschaft (DFG). The National Contact Point for the ERC provides researchers and disseminators with information on the ERC funding programmes. It supports scientists when submitting proposals for an ERC grant. The National Contact Point also advises German research centres if they plan to strategically integrate ERC grants into their respective internationalisation policy.

### EU-Bureau of the Federal Ministry of Education and Research

The EU-Bureau is the central contact point at the Federal Ministry of Education and Research (BMBF) on questions relating to the EU Research Framework Programme. The EU-Bureau also coordinates the network of National Contact Points in Germany. In addition, the EU-Bureau runs numerous National Contact Points on cross-cutting areas of the Research Framework Programme.

### Deutsche Forschungsgemeinschaft (DFG)

The German Research Foundation is the self-governing organisation for science and research in Germany. It serves all branches of science and the humanities. The core task of the DFG is to select the best research projects by scientists and academics at universities and research institutions on a competitive basis and to finance these projects.

### Contacts at the EU-Bureau of the BMBF on questions relating to the ERC

[www.nks-erc.de](http://www.nks-erc.de)

- Salim Chehab  
Telephone: +49 228 3821 368  
Email: [salim.chehab@dlr.de](mailto:salim.chehab@dlr.de)
- Stefanie Schelhowe  
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Email: [stefanie.schelhowe@dlr.de](mailto:stefanie.schelhowe@dlr.de)
- Nicole Schröder  
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- Marion Korres  
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Email: [marion.korres@dlr.de](mailto:marion.korres@dlr.de)

### Contacts at the DFG on questions relating to the ERC

[www.dfg.de/erc](http://www.dfg.de/erc)

- Dr. Annette Doll-Sellen  
Telephone: +49 228 885 2923  
Email: [annette.doll-sellen@dfg.de](mailto:annette.doll-sellen@dfg.de)
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Email: [georg.duechs@dfg.de](mailto:georg.duechs@dfg.de)
- Philip Thelen  
Telephone: +49 228 885 2663  
Email: [philip.thelen@dfg.de](mailto:philip.thelen@dfg.de)
- Martin Winger  
Telephone: +49 228 885 2360  
Email: [martin.winger@dfg.de](mailto:martin.winger@dfg.de)

### Further sources of advice on the ERC

- European Liaison Office of the German Research Organisations (KoWi)  
[www.kowi.de/erc](http://www.kowi.de/erc)
- Advisers (EU-Referent/innen) at Universities and Research Institutions  
[www.forschungsrahmenprogramm.de/beratung.htm](http://www.forschungsrahmenprogramm.de/beratung.htm)

## How to write a successful ERC proposal

The ERC funds investigator-driven research projects led by single researchers that are selected solely on the basis of scientific excellence. ERC calls are published every year in summer (Starting Grants) and autumn (Advanced Grants). They are divided into three different domains: Physical Sciences & Engineering, Life Sciences and Social Sciences & Humanities with different deadlines.

### Frontier research

There are no restrictions regarding the topic of your research (bottom-up). Think about the most pressing question in your research field. What needs to be discovered now? What is it that you always wanted to find out? How can you open up new horizons in research and close existing research gaps? The “groundbreaking-nature” of your research is the most important aspect for the evaluation. High-risk/high-gain projects are welcome.

### Proposal structure and evaluation procedure

The application consists of maximum 25 pages with information on your scientific profile (5 pages) and your project (5-page summary, 15-page extended version).

The proposals will be evaluated by peer reviewers who will assess the scientific quality of your research project (0-4 points) and your profile (0-4 points). Both criteria are weighted equally.

The evaluation of your proposal is divided into two steps: in the first step only your scientific profile and the five-page summary will be evaluated. It is, therefore, very important that these five pages convince the members of the panel that your proposal should pass the first step. Make them curious about your research! Explain why your project will make a difference. The five-page summary should be formulated so that it is understandable for reviewers who are not experts in your specific field.

In the second step of the evaluation the full proposal is considered. In this extended version you should provide more details on your project design and also explain how you will set up your team and apply the methods described.

Make contact with your host institution well in advance and discuss your budget with the person responsible.

### Useful information

Please be aware that evaluators have to read many proposals in a short time: make it easy for them to read through your text. Use subheadings, bullet points, tables and graphs and highlight important sentences.

#### Please don't forget:

- You have to present the entire proposal as one submission
- You need a commitment letter from your host institution
- For Starting Grant applicants: you need to upload your PhD certificate

#### Further information:

- Guide for Applicants (published with each open Call)
- Work Programme (published once a year)
- Contact the National Contact Point and your Host Institution (see page 26)



## DFG Programmes

### Climbing the peaks of science, independently

DFG Programmes offer attractive research conditions and prospects for promising and advanced scientists. This overview focuses on three prominent DFG Programmes. Excellent scientists of any nationality have the opportunity to conduct research in Germany and to advance their careers.

#### The Emmy Noether Programme

Early independence, training in leadership functions, and the chance to manage their own budgets – Emmy Noether grant holders work under conditions that other scientists dream of. They lead their own Junior Research Groups, select their own staff, and supervise their own doctoral researchers.

Under the Emmy Noether Programme, grant holders complete their qualification process all the way through to a professorship much sooner than colleagues holding assistant positions. An “Emmy” is expected to complete the programme successfully in five, or at the latest, six years. The professorial appointment rate demonstrates that this avenue is feasible. Many Emmy Noether Programme grant holders and alumni now hold professorships. Around 600 Emmy Noether Junior Research Groups have been approved since 1999, with roughly 50 new groups established each year.

The programme is open to outstanding young researchers from all disciplines, generally up to four years after obtaining a doctorate. Applicants need to demonstrate that they have independently conducted postdoctoral research, thus further developing their scientific profile. International research experience should be substantiated by participation in internationally competitive projects or collaborative projects of high scientific quality.

This programme aims to recruit the best, regardless of where they are currently doing their research. Emmy Noether funding is of interest to foreign researchers and to Germans thinking about returning to their home country as well, because it offers the opportunity to work in Germany under attractive conditions. The university is, however, required to con-

firm that it will provide the requisite facilities and will take on the role of employer for the grant holder.

#### The Heisenberg Programme

“Heisenberg” stands for quality in the global scientific community. Here, scientific excellence counts above all else, providing the programme with an internationally acknowledged quality seal. More than 2,000 young researchers have been funded to date.

The Heisenberg Programme is open to outstanding young scientists of any nationality who wish to prepare for a research leader position at a German university. Freedom in the choice of research topic and in where and when they do their research during a funding period of up to five years, have always made the fellowship an attractive option. The funding focuses on young researchers who have qualified for a professorship via the Emmy Noether Programme, DFG project positions, industrial research, or on those who hold a mid-level faculty position, but do not yet hold a tenured position at a German university. The programme targets foreign scientists wishing to work in Germany as well as German scientists returning to Germany from abroad.

Besides the Heisenberg Fellowship, since 2005, the ERF has also offered the Heisenberg Professorship, a funding instrument that includes reliable career prospects. In particular, it provides foreign scientists with the opportunity to conduct research in Germany on a long-term basis. The professorship is also an attractive option for German researchers abroad planning to return to Germany. The programme enables young scientists to look for a German university at which they can establish a new research field with their professorial appointment. At the same time, the host university is required to submit a plan that describes how the Heisenberg Professorship will contribute both to raising the university's profile and to its structural development.

Almost concurrently with the DFG's strict assessment process for acceptance into the Heisenberg Programme, the host university also verifies the candidates' aptitude for the new professorship by carrying out an appointment procedure. If the choice falls on a candidate who applied via the DFG, the successful applicant will receive a Heisenberg Professorship. After five years and successful evaluation by both the DFG and the university, the position will be changed into a tenured professorship.

The Heisenberg Professorship follows the American tenure track system – as an equivalent to an associate professorship. Likewise, the Emmy Noether Programme corresponds to an assistant professorship.

It is expected that foreign applicants for both programmes continue their scientific career in Germany following completion of their respective programmes.

### Reinhart Koselleck Projects

This programme enables outstanding researchers with a proven scientific track record to pursue exceptionally innovative, higher-risk projects. It is open to researchers who hold or are eligible to hold professorships, especially at universities, and who have an outstanding cv and great scientific potential. This programme supports projects that cannot be funded within the scope of other DFG programmes or within the framework of the applicant's own institution.

Funding covers staff, scientific instrumentation, consumables, travel, miscellaneous and publication costs. Applicants may request funding from 500,000 EUR up to 1.25 million EUR, for five years.

**To apply, please refer to the appropriate guidelines and detailed information on the internet:**

[www.dfg.de/emmy\\_noether/en/index.html](http://www.dfg.de/emmy_noether/en/index.html)  
[www.dfg.de/heisenberg/en/index.html](http://www.dfg.de/heisenberg/en/index.html)  
[www.dfg.de/en](http://www.dfg.de/en) > Funding > Forms and Guidelines  
 Guidelines Emmy Noether-Programme 1.22e  
 Guidelines Heisenberg-Programm 1.17e  
[www.dfg.de/en/research\\_funding/programmes/individual/reinhart\\_koselleck\\_projects](http://www.dfg.de/en/research_funding/programmes/individual/reinhart_koselleck_projects)

### Your contact at the DFG

• Dr. Anjana Buckow  
 Telephone: +49 228 885 2845  
 Email: [anjana.buckow@dfg.de](mailto:anjana.buckow@dfg.de)

### For questions relating to the Emmy Noether Programme

• Heide Horstmann  
 Telephone: +49 228 885-2577  
 Email: [Heide.Horstmann@dfg.de](mailto:Heide.Horstmann@dfg.de)

### For questions relating to the Heisenberg Programme

• Paul Heuermann  
 Telephone: +49 228 885-2398  
 Email: [Paul.Heuermann@dfg.de](mailto:Paul.Heuermann@dfg.de)

### For questions relating to Reinhart Koselleck Projects

• Sarah Holthausen  
 Telephone: +49 228 885-2032  
 Email: [Sarah.Holthausen@dfg.de](mailto:Sarah.Holthausen@dfg.de)



## The Excellence Initiative

The idea was developed by policymakers and science in Germany from 2004 onwards, and the decision was made by the federal and state governments in June 2005. The Initiative's goal is to strengthen cutting-edge research in Germany and to improve its international competitiveness. So, a competition was organised to select outstanding projects in three areas:

- **Graduate Schools**  
to promote young scientists and researchers
- **Clusters of Excellence**  
to promote cutting-edge research
- **Institutional Strategies**  
on projects to promote top-level research

The competition was run by the DFG and the German Council of Science and Humanities. A total of 1.9 billion EUR was made available by the federal and state governments to fund the selected projects. Equipped with a further 2.7 billion EUR, the Initiative for Excellence will be continued until 2017.

### The Graduate Schools

Graduate Schools aim to combine and improve the promotion of young scientists and researchers and to raise the profile of research. Highly qualified doctoral students are trained in these Schools, offering an excellent research environment. Graduate Schools are grounded in a broad scientific environment, build on innovative questions, and are headed by proven scientists. Hence, they provide the ideal conditions for a doctorate, inspire the doctoral students' to identify with the respective campus, and altogether contribute to forming internationally competitive centres of science. The Excellence Initiative has chosen 39 Graduate Schools so far. Each of these will be funded over five years with an average of one million EUR per year.

## The Clusters of Excellence

Clusters of Excellence pool the research potential available at university locations in Germany and, hence, strengthen their international visibility and competitiveness. Their key policy is to engage in scientific networking and collaboration in research fields of particular promise for the future. Besides various university institutions, non-university research institutions and industrial partners also play a valuable role in all aspects of the Clusters. The idea behind the Clusters of Excellence was to make a significant contribution to the respective university's strategic planning and to accelerate the process of setting thematic priorities at universities. The Excellence Initiative currently funds 37 Clusters of Excellence. Over a period of five years, each Cluster of Excellence will receive an average of 6.5 million EUR per year.

### The Institutional Strategies


Institutional Strategies aim to strengthen a university as a whole, so that it can compete successfully with the leading players in the international science market. An Institutional Strategy calls for a university to develop a long-term plan on how it can consistently expand and enhance its cutting-edge research and improve the promotion of young scientists and researchers. This means identifying existing strengths and sharpening profiles in all fields. To qualify for the third funding line, universities have to develop an exceptional Institutional Strategy and must, additionally, each have at least one Graduate School and one Cluster of Excellence. The Excellence Initiative currently funds Institutional Strategies at nine universities. Each of the universities will receive up to 13.5 million EUR per year over five years.

## Excellence Initiative and ERC in Germany

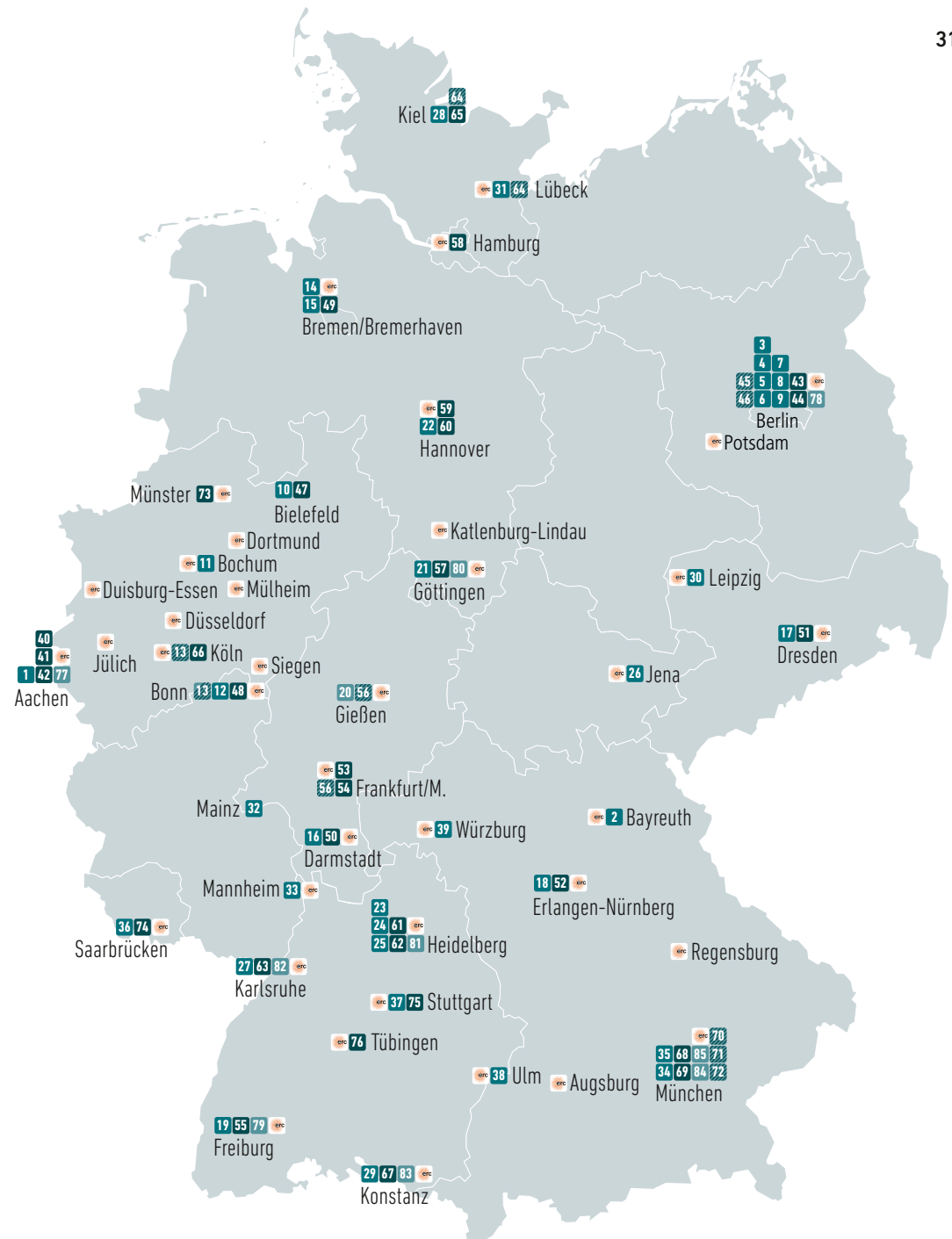
This map shows the locations that were promoted by the Excellence Initiative and the first ERC calls until 2009.

Each circle  designates a location where at least one ERC grant has been awarded.

Each square stands for a Cluster of Excellence , a Graduate School  or an Institutional Strategy .

Diagonally lined squares  mark centres of excellence which are located at two different places.

The numbers in the squares refer to the list on the following pages



## GRADUATE SCHOOLS

- 1 Aachen RWTH [www.rwth-aachen.de](http://www.rwth-aachen.de)  
Aachen Institute for Advanced Study in Computational Engineering Science (AICES)  
[www.aices.rwth-aachen.de](http://www.aices.rwth-aachen.de)
- 2 Bayreuth U [www.uni-bayreuth.de](http://www.uni-bayreuth.de)  
Bayreuth International Graduate School of African Studies  
[www.bigsas.uni-bayreuth.de](http://www.bigsas.uni-bayreuth.de)
- 3 Berlin TU [www.tu-berlin.de](http://www.tu-berlin.de)  
Berlin Mathematical School  
[www.math-berlin.de](http://www.math-berlin.de)
- 4 Berlin HU [www.hu-berlin.de](http://www.hu-berlin.de)  
Berlin-Brandenburg School for Regenerative Therapies  
[www.bsrt.de](http://www.bsrt.de)
- 5 Berlin HU [www.hu-berlin.de](http://www.hu-berlin.de)  
Berlin Graduate School of Social Sciences  
[www.bgss.hu-berlin.de](http://www.bgss.hu-berlin.de)
- 6 Berlin HU [www.hu-berlin.de](http://www.hu-berlin.de)  
Berlin School of Mind & Brain  
[www.mindandbrain.de](http://www.mindandbrain.de)
- 7 Berlin FU [www.fu-berlin.de](http://www.fu-berlin.de)  
Friedrich Schlegel Graduate School of Literary Studies  
[www.geisteswissenschaften.fu-berlin.de/en/friedrichschlegel](http://www.geisteswissenschaften.fu-berlin.de/en/friedrichschlegel)
- 8 Berlin FU [www.fu-berlin.de](http://www.fu-berlin.de)  
Graduate School of North American Studies  
[www.jfki.fu-berlin.de/graduateschool](http://www.jfki.fu-berlin.de/graduateschool)
- 9 Berlin FU [www.fu-berlin.de](http://www.fu-berlin.de)  
Berlin Graduate School Muslim Cultures and Societies  
[www.bgsmcs.fu-berlin.de](http://www.bgsmcs.fu-berlin.de)
- 10 Bielefeld U [www.uni-bielefeld.de](http://www.uni-bielefeld.de)  
Bielefeld Graduate School in History and Sociology  
[www.uni-bielefeld.de/bghs](http://www.uni-bielefeld.de/bghs)
- 11 Bochum U [www.ruhr-uni-bochum.de](http://www.ruhr-uni-bochum.de)  
Ruhr University Research School  
[www.research-school.rub.de](http://www.research-school.rub.de)
- 12 Bonn U [www.uni-bonn.de](http://www.uni-bonn.de)  
Bonn Graduate School of Economics  
[www.bgse.uni-bonn.de](http://www.bgse.uni-bonn.de)
- 13 Bonn U / Köln U [www.uni-bonn.de](http://www.uni-bonn.de)  
Bonn-Cologne Graduate School of Physics and Astronomy  
[www.gradschool.physics.uni-bonn.de](http://www.gradschool.physics.uni-bonn.de)
- 14 Bremen U [www.uni-bremen.de](http://www.uni-bremen.de)  
Global Change in the Marine Realm – Bremen International Graduate School for Marine Sciences  
[www.glomar.uni-bremen.de](http://www.glomar.uni-bremen.de)
- 15 Bremen U [www.uni-bremen.de](http://www.uni-bremen.de)  
Bremen International Graduate School of Social Sciences  
[www.bigsss-bremen.de](http://www.bigsss-bremen.de)
- 16 Darmstadt TU [www.tu-darmstadt.de](http://www.tu-darmstadt.de)  
Graduate School of Computational Engineering  
[www.graduate-school-ce.de](http://www.graduate-school-ce.de)
- 17 Dresden TU [tu-dresden.de](http://tu-dresden.de)  
Dresden International Graduate School for Biomedicine and Bioengineering  
[www.digs-bb.de](http://www.digs-bb.de)
- 18 Erlangen-Nürnberg U [www.uni-erlangen.de](http://www.uni-erlangen.de)  
Erlangen Graduate School in Advanced Optical Technologies  
[www.aot.uni-erlangen.de/saot/glance](http://www.aot.uni-erlangen.de/saot/glance)
- 19 Freiburg U [www.uni-freiburg.de](http://www.uni-freiburg.de)  
Spemann Graduate School of Biology and Medicine (SGBM)  
[www.sgbm.uni-freiburg.de](http://www.sgbm.uni-freiburg.de)
- 20 Gießen U [www.uni-giessen.de](http://www.uni-giessen.de)  
International Graduate Centre for the Study of Culture (GCSC)  
[www.uni-giessen.de/gcsc](http://www.uni-giessen.de/gcsc)
- 21 Göttingen U [www.uni-goettingen.de](http://www.uni-goettingen.de)  
Göttingen Graduate School for Neurosciences and Molecular Biosciences  
[www.uni-goettingen.de/en/sh/56640.html](http://www.uni-goettingen.de/en/sh/56640.html)
- 22 Hannover MHH [www.mh-hannover.de](http://www.mh-hannover.de)  
Hannover Biomedical Research School  
[www.mh-hannover.de/hbrs.html](http://www.mh-hannover.de/hbrs.html)
- 23 Heidelberg U [www.uni-heidelberg.de](http://www.uni-heidelberg.de)  
Heidelberg Graduate School of Fundamental Physics  
[www.fundamental-physics.uni-hd.de](http://www.fundamental-physics.uni-hd.de)
- 24 Heidelberg U [www.uni-heidelberg.de](http://www.uni-heidelberg.de)  
The Hartmut Hoffmann-Berling International Graduate School of Molecular and Cellular Biology  
[www.hbigs-heidelberg.de](http://www.hbigs-heidelberg.de)
- 25 Heidelberg U [www.uni-heidelberg.de](http://www.uni-heidelberg.de)  
Heidelberg Graduate School of Mathematical and Computational Methods for the Sciences  
[www.mathcomp.uni-heidelberg.de](http://www.mathcomp.uni-heidelberg.de)
- 26 Jena U [www.uni-jena.de](http://www.uni-jena.de)  
Jena School for Microbial Communication  
[www.jsmc.uni-jena.de](http://www.jsmc.uni-jena.de)



## CLUSTERS OF EXCELLENCE

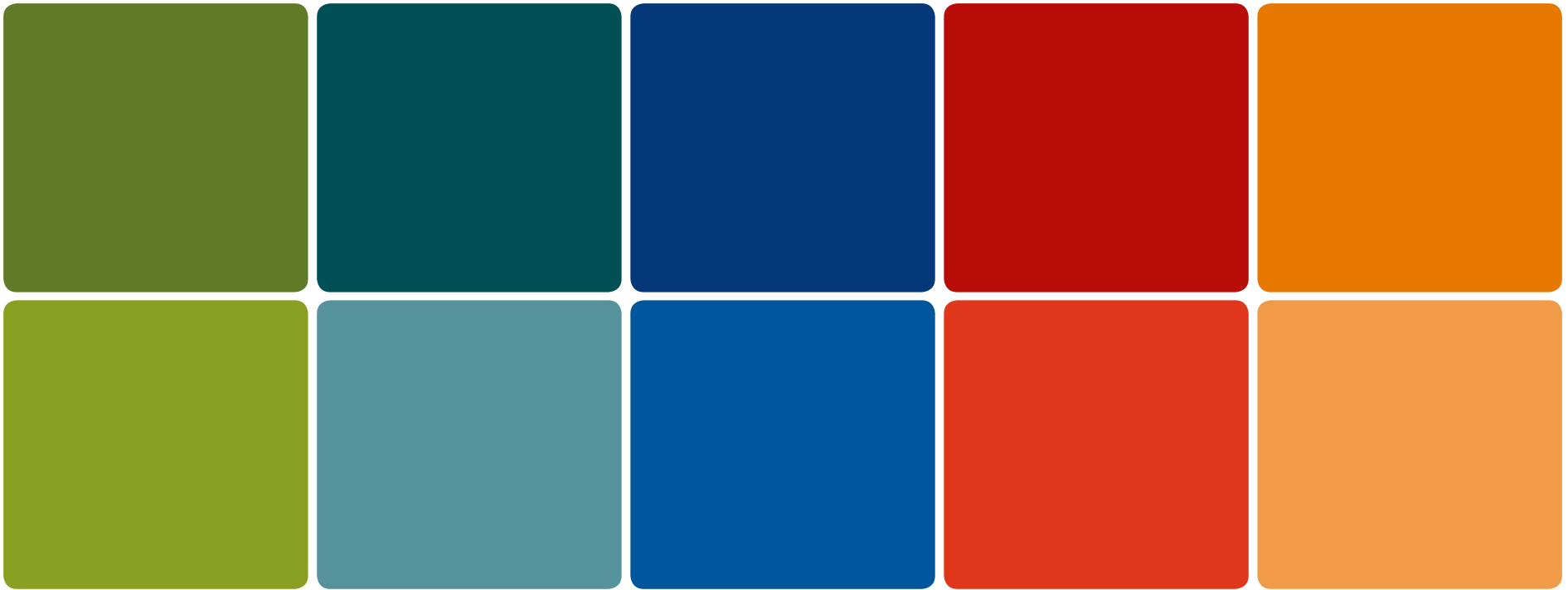
- 27 Karlsruhe Institute of Technology (KIT) [www.kit.edu](http://www.kit.edu)  
Karlsruhe School of Optics and Photonics (KSOP)  
[www.KSOP.de](http://www.KSOP.de)
- 28 Kiel U [www.uni-kiel.de](http://www.uni-kiel.de)  
Graduate School for Integrated Studies of Human Development in  
Landscapes  
[www.uni-kiel.de/landscapes](http://www.uni-kiel.de/landscapes)
- 29 Konstanz U [www.uni-konstanz.de](http://www.uni-konstanz.de)  
Konstanz Research School "Chemical Biology"  
[www.chembiol.uni-konstanz.de](http://www.chembiol.uni-konstanz.de)
- 30 Leipzig U [www.zv.uni-leipzig.de](http://www.zv.uni-leipzig.de)  
Leipzig School of Natural Sciences – Building with Molecules and  
Nano-Objects  
[www.buildmona.de](http://www.buildmona.de)
- 31 Lübeck U [www.uni-luebeck.de](http://www.uni-luebeck.de)  
Graduate School for Computing in Medicine and Life Sciences  
[www.gradschool.uni-luebeck.de](http://www.gradschool.uni-luebeck.de)
- 32 Mainz U [www.uni-mainz.de](http://www.uni-mainz.de)  
Materials Science in Mainz  
[www.mainz.uni-mainz.de](http://www.mainz.uni-mainz.de)
- 33 Mannheim U [www.uni-mannheim.de](http://www.uni-mannheim.de)  
Empirical and Quantitative Methods in the Economic and Social Sciences  
[gess.uni-mannheim.de](http://gess.uni-mannheim.de)
- 34 München TU [www.tumuenchen.de](http://www.tumuenchen.de)  
International Graduate School of Science and Engineering (IGSSE)  
[www.igsse.de](http://www.igsse.de)
- 35 München LMU [www.uni-muenchen.de](http://www.uni-muenchen.de)  
Graduate School of Systemic Neurosciences  
[www.mcn.lmu.de](http://www.mcn.lmu.de)
- 36 Saarbrücken U [www.uni-saarland.de](http://www.uni-saarland.de)  
Saarbrücken Graduate School of Computer Science  
[www.cs.uni-saarland.de](http://www.cs.uni-saarland.de)
- 37 Stuttgart U [www.uni-stuttgart.de](http://www.uni-stuttgart.de)  
Graduate School for Advanced Manufacturing Engineering  
[www.gsme.de](http://www.gsme.de)
- 38 Ulm U [www.uni-ulm.de](http://www.uni-ulm.de)  
International Graduate School in Molecular Medicine Ulm  
[www.uni-ulm.de/med/med-molmed.html](http://www.uni-ulm.de/med/med-molmed.html)
- 39 Würzburg U [www.uni-wuerzburg.de](http://www.uni-wuerzburg.de)  
Graduate School for Life Sciences  
[www.graduateschools.uni-wuerzburg.de/life\\_sciences](http://www.graduateschools.uni-wuerzburg.de/life_sciences)
- 40 Aachen RWTH [www.rwth-aachen.de](http://www.rwth-aachen.de)  
Integrative Production Technology for High-Wage Countries  
[www.production-research.de](http://www.production-research.de)
- 41 Aachen RWTH [www.rwth-aachen.de](http://www.rwth-aachen.de)  
Tailor-Made Fuels from Biomass  
[www.fuelcenter.rwth-aachen.de](http://www.fuelcenter.rwth-aachen.de)
- 42 Aachen RWTH [www.rwth-aachen.de](http://www.rwth-aachen.de)  
Ultra High Speed Mobile Information and Communication  
[www.umic.rwth-aachen.de](http://www.umic.rwth-aachen.de)
- 43 Berlin TU [www.tu-berlin.de](http://www.tu-berlin.de)  
Unifying Concepts in Catalysis  
[www.unicat.tu-berlin.de](http://www.unicat.tu-berlin.de)
- 44 Berlin FU [www.fu-berlin.de](http://www.fu-berlin.de)  
Languages of Emotion  
[www.languages-of-emotion.de](http://www.languages-of-emotion.de)
- 45 Berlin FU/Berlin HU [www.hu-berlin.de](http://www.hu-berlin.de), [www.fu-berlin.de](http://www.fu-berlin.de)  
NeuroCure – Towards a Better Outcome of Neurological Disorders  
[www.neurocure.de](http://www.neurocure.de)
- 46 Berlin FU/Berlin HU  
[www.fu-berlin.de](http://www.fu-berlin.de); [www.hu-berlin.de](http://www.hu-berlin.de)  
Topoi – The Formation and Transformation of Space and Knowledge in  
Ancient Civilizations  
[www.topoi.org](http://www.topoi.org)
- 47 Bielefeld U [www.uni-bielefeld.de](http://www.uni-bielefeld.de)  
Cognitive Interaction Technology  
[www.cit-ec.de](http://www.cit-ec.de)
- 48 Bonn U [www.uni-bonn.de](http://www.uni-bonn.de)  
Mathematics: Foundations, Models, Applications  
[www.hausdorff-center.uni-bonn.de](http://www.hausdorff-center.uni-bonn.de)
- 49 Bremen U [www.uni-bremen.de](http://www.uni-bremen.de)  
The Ocean in the Earth System  
[www.marum.de](http://www.marum.de)
- 50 Darmstadt TU [www.tu-darmstadt.de](http://www.tu-darmstadt.de)  
Smart Interfaces: Understanding and Designing Fluid Boundaries  
[www.csi.tu-darmstadt.de](http://www.csi.tu-darmstadt.de)
- 51 Dresden TU [www.tu-dresden.de](http://www.tu-dresden.de)  
Regenerative Therapies: From Cells to Tissues to Therapies: Engineering the  
Cellular Basis of Regeneration  
[www.crt-dresden.de](http://www.crt-dresden.de)

- 52 Erlangen-Nürnberg U [www.uni-erlangen.de](http://www.uni-erlangen.de)  
Engineering of Advanced Materials- Hierarchical Structure Formation for Functional Devices  
[www.eam.techfak.uni-erlangen.de](http://www.eam.techfak.uni-erlangen.de)
- 53 Frankfurt/M U [www.uni-frankfurt.de](http://www.uni-frankfurt.de)  
Macromolecular Complexes  
[www.cef-mc.de](http://www.cef-mc.de)
- 54 Frankfurt/M U [www.uni-frankfurt.de](http://www.uni-frankfurt.de)  
Formation of Normative Orders  
[www.normativeorders.net](http://www.normativeorders.net)
- 55 Freiburg U [www.uni-freiburg.de](http://www.uni-freiburg.de)  
Centre for Biological Signalling Studies – from Analysis to Synthesis  
[www.bioss.uni-freiburg.de](http://www.bioss.uni-freiburg.de)
- 56 Gießen U/Frankfurt/M U [www.uni-giessen.de](http://www.uni-giessen.de),  
[www.uni-frankfurt.de](http://www.uni-frankfurt.de)  
Cardio-Pulmonary System  
[www.eccps.de](http://www.eccps.de)
- 57 Göttingen U [www.uni-goettingen.de](http://www.uni-goettingen.de)  
Microscopy at the Nanometer Range  
[www.cmpb.uni-goettingen.de](http://www.cmpb.uni-goettingen.de)
- 58 Hamburg U [www.uni-hamburg.de](http://www.uni-hamburg.de)  
Integrated Climate System Analysis and Prediction  
[www.clisap.de](http://www.clisap.de)
- 59 Hannover U [www.uni-hannover.de](http://www.uni-hannover.de)  
QUEST – Centre for Quantum Engineering and Space-Time Research  
[www.quest.uni-hannover.de](http://www.quest.uni-hannover.de)
- 60 Hannover MHH [www.mh-hannover.de](http://www.mh-hannover.de)  
From Regenerative Biology to Reconstructive Therapy “REBIRTH”  
[www.rebirth-hannover.de](http://www.rebirth-hannover.de)
- 61 Heidelberg U [www.uni-heidelberg.de](http://www.uni-heidelberg.de)  
Asia and Europe in a Global Context: Shifting Asymmetries in Cultural Flows  
[www.asia-europe.uni-heidelberg.de](http://www.asia-europe.uni-heidelberg.de)
- 62 Heidelberg U [www.uni-heidelberg.de](http://www.uni-heidelberg.de)  
Cellular Networks: From Analysis of Molecular Mechanisms to a Quantitative Understanding of Complex Functions  
[www.cellnetworks.uni-hd.de](http://www.cellnetworks.uni-hd.de)
- 63 Karlsruhe Institute of Technology (KIT) [www.kit.edu](http://www.kit.edu)  
Center for Functional Nanostructures  
[www.cfn.uni-karlsruhe.de](http://www.cfn.uni-karlsruhe.de)
- 64 Kiel U/Lübeck U [www.uni-kiel.de](http://www.uni-kiel.de), [www.mu-luebeck.de](http://www.mu-luebeck.de)  
Inflammation at Interfaces  
[www.inflammation-at-interfaces.de](http://www.inflammation-at-interfaces.de)
- 65 Kiel U [www.uni-kiel.de](http://www.uni-kiel.de)  
The Future Ocean  
[www.ozean-der-zukunft.de](http://www.ozean-der-zukunft.de)
- 66 Köln U [www.uni-Koeln.de](http://www.uni-Koeln.de)  
Cellular Stress Responses in Aging-Associated Diseases  
[www.cecad.uni-koeln.de](http://www.cecad.uni-koeln.de)
- 67 Konstanz U [www.uni-konstanz.de](http://www.uni-konstanz.de)  
Cultural Foundations of Social Integration  
[www.exc16.de/cms](http://www.exc16.de/cms)
- 68 München LMU [www.uni-muenchen.de](http://www.uni-muenchen.de)  
Munich-Centre for Integrated Protein Science (CiPSM)  
[www.cipsm.de](http://www.cipsm.de)
- 69 München U  
[www.tumuenchen.de](http://www.tumuenchen.de)  
Cognition for Technical Systems – CoTeSys  
[cotesys.in.tum.de](http://cotesys.in.tum.de)
- 70 München LMU/München TU [www.uni-muenchen.de](http://www.uni-muenchen.de),  
[www.tumuenchen.de](http://www.tumuenchen.de)  
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