



# The Path to ERC Grants:

Researchers in Germany Excel

Deutsche  
Forschungsgemeinschaft  
**DFG**

 Bundesministerium  
für Bildung  
und Forschung

**NKS**  
Nationale Kontaktstellen der  
Bundesregierung für das Europäische  
Forschungsrahmenprogramm

**EUB**  
EUROPEAN UNION  
THE RESEARCH FRAMEWORK PROGRAMME

## Published by

Deutsche Forschungsgemeinschaft (DFG)  
 German Research Foundation  
 Kennedyallee 40, 53175 Bonn, Germany  
 Tel. +49 228 885-1  
 www.dfg.de

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www.axeptdesign.de

## Photos

3bluestone/photocase (title page)  
 David Ausserhofer (pages 8, 9)  
 Michael Jordan (pages 11, 14, 15, 17, 19)

## Printed by

Richard Thierbach  
 Buch- und Offsetdruckerei GmbH, Mülheim an der Ruhr

## Print-run

6,000  
 July 2008

## Imprint

## Forewords

Dr. Annette Schavan Federal Minister of Education and Research .....	<b>3</b>
Prof. Dr.-Ing. Matthias Kleiner President of the Deutsche Forschungsgemeinschaft .....	<b>3</b>
Janez Potočnik Commissioner for Science and Research .....	<b>4</b>
Prof. Fotis Kafatos President of the European Research Council .....	<b>4</b>

## Interview

Christiane Nüsslein-Volhard A Model for National Funding Agencies .....	<b>5</b>
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## Testimonials

What an ERC grant means for me is .....	<b>6</b>
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## Portraits

Stephanie Reich .....	<b>8</b>
Jörg Peltzer .....	<b>11</b>
Mikael Simons .....	<b>14</b>
Armin Falk .....	<b>17</b>

## In a Nutshell

Sources of Advice .....	<b>20</b>
ERC Grant Schemes .....	<b>21</b>
DFG Programmes .....	<b>22</b>



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Excellent basic research is absolutely essential for the future prosperity and modernisation of societies. Research and innovation serve to secure our international competitiveness. This is why one of the key roles for research policy to play involves advancing and enhancing the innovative potential that lies in Germany and in the European Union.

The European Research Council (ERC) was established as a new instrument within the 7th Research Framework Programme. It attaches particular importance to basic research at European level.

The ERC aims to identify and promote the most creative and the most promising research talents in Europe. The Starting Grants funding line and, in particular, the promotion of young scientists and researchers represent investments in the future. They play a central role in strengthening the European research landscape.

The German Federal Government is particularly interested in raising the visibility and radiance of Germany's highly qualified talents and its first-class institutions. The brochure at hand presents examples of the scientists and the institutions that competed successfully in the first ERC Call for Proposals and whose outstanding ideas convinced the panels of their excellence.

Dr. Annette Schavan  
Federal Minister of Education and Research



© Lichtscheidt / DFG

As Goethe already knew, “there is no harm in the strong strengthening themselves“. Consequently, the European Research Council (ERC) and the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) mutually strengthen each other. The DFG endeavours to attract outstanding researchers to Germany, with the Emmy Noether Programme and other funding instruments. At European level, these efforts are complemented by the ERC Starting Grant.

Those who receive an ERC Starting Grant are able to present exceptional achievements – with an outstanding career in science to be expected. Scientists and researchers who hold an ERC Starting Grant represent a real plus for German research. They strengthen the position of Germany's research centres in the global competition for the world's best minds.

The diversity of funding programmes is one of the strengths of the European Research Area. The DFG programmes and the ERC funding instruments complement each other. Consequently, the European Research Area is developing through the interplay of competition and cooperation between national and European funding agencies.

Best Practice stands out in the competition for the best researchers – and this strengthens both German and European science.

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



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The European Research Council (ERC) has already achieved great success – on the strategic, methodological and operational level. The overwhelming response to the first ERC Starting Grant competition and the many initiatives taken at national level to honour and support the first grantees demonstrate an enormous enthusiasm for the ERC and are defining its reputation as a research funding organisation of world importance.

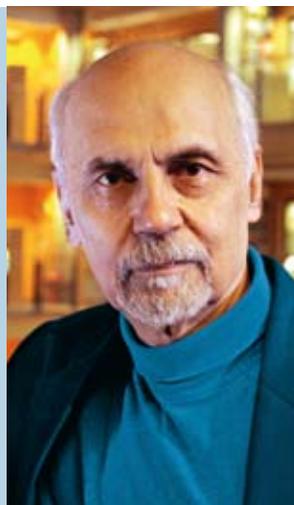
Often referred to as the “European Champions League of Research”, the ERC is making top researchers and

their host organisations more visible. This in turn will raise the status of European research among the public, policy-makers and in the business world. Not only will it help research institutions to attract and retain the brightest minds, but it will also promote Europe as an attractive location for career development and business investments.

The truly European competition, on which ERC funding is based, will also have a benchmarking effect, enabling researchers, their institutions, and national research systems to compare themselves against their peers in Europe, and to adjust their strategies to improve performance. I am convinced that this will further strengthen our ambitions towards a European Research Area.

A handwritten signature in black ink that reads "Janez Potočnik".

Janez Potočnik  
Commissioner for Science and Research



© ERC

A central mission of the ERC is to support outstanding researchers in any field of science and scholarship, who currently reside in or wish to move to Europe to perform research at and beyond the frontier of knowledge.

The first and highly popular programme of the ERC is the annual Starting Grant competition. It aims to invest in a crucial human resource: the new generation of promising research leaders. To fast-track career opportunities, the ERC expects host institutions, located in any member/candidate/associate state of the Eu-

ropean Union, to offer genuine scientific independence and attractive working conditions. These will include opportunities for career development, such as appropriate space, facilities and reasonable teaching or supervision of students for the thoroughly selected young scientists who succeed in this competition. Whilst the ERC trusts and provides generous funding for these highly promising investigators and their research projects, it also presumes similar generosity on the part of the institutions.

The first Starting Grant competition has not only revealed an extremely high overall demand for such funding, but also exposed some differences in the current attractiveness of different locations. A de facto partnership between the ERC, its national counterparts, and the host institutions is the surest way for success in this pivotal investment: towards a better future for our entire continent and the world.

A handwritten signature in black ink that reads "Fotis Kafatos".

Prof. Fotis Kafatos  
President of the European Research Council

Three questions  
for Nobel Laureate  
**Christiane  
Nüsslein-  
Volhard**  
Member of the  
ERC Scientific  
Council



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## A Model for National Funding Agencies

*The ERC set out to promote frontier research at the interface between basic and applied science. How does such a project stand out?*

Actually, that was not the ERC's intention as such. The Council promotes all kinds of research, both purely basic as well as applied.

The decision is based solely on the project's quality and on the applicant's scientific profile. We are looking for innovative projects, i.e. do not simply want to fundamentally deepen an applicant's research field. Projects have a good chance of being funded if they take an interdisciplinary approach or if they pursue new ideas in areas in which the applicant has not yet been represented.

*How would you describe the current relationship between the ERC and the national funding agencies? Where do you think this relationship between cooperation and competition will lead to?*

All ERC projects are judged independently, regardless of their respective nationality. In principle, the very same projects could also be supported by the national funding agencies. However, there is an important difference in that the ERC draws on an international community of peer reviewers. This, in turn, means a much better review quality than the national funding agencies could

perform (particularly in small member countries). The review procedures developed for the ERC by the Scientific Council, on which I sit, can serve as a model for the national funding agencies. After all, it certainly makes a lot of sense for the funding agencies to use the ERC reviews to the extent that they primarily approve proposals submitted by scientists from their country that have already been given a positive assessment by the ERC, albeit that they were not selected.

*Should the ERC establish other, possibly coordinated funding programmes besides the individual funding provided with the Starting Grants and Advanced Grants?*

For the time being, at least, it would seem advisable to concentrate on these two funding instruments. For the ERC-governed research funding to achieve sustainable effects, it is necessary that the newly established programmes are now run several times in the proposed form, wherever possible without making any major changes to the award guidelines. Minor changes can and may be made, to adapt the calls for proposals to the current demand. It is conceivable that the ERC might establish further research-promoting measures at European level – as long as the capacity for this is available and the individual funding with Starting and Advanced Grants runs smoothly.

*Interview by Uschi Heidel*

What an  
**ERC grant**  
means for me  
is ...

## Testimonials

### **Prof. Dr. Otmar Venjakob**

Mathematics,  
Professor  
at the University of Heidelberg

... a great opportunity to establish a strong research group as soon as I begin at the University of Heidelberg. Firstly, this means being able to keep up with comparable research groups in Cambridge or Kyoto, and, secondly, means cooperating with them as well.



© Friederike Hentschel

### **Prof. Dr. Katrin Wendland**

Mathematics,  
Professor  
at the University of Augsburg

... the chance to set up an internationally competitive research group, so that I can turn a long-term research programme into reality and substantially expand my research field. The award will help me establish myself at my university, both nationally and internationally.



© John Weatherly/University of Warwick

### **Dr. Mathias Kläui**

Physics,  
Independent Junior Research Group Leader  
at the University of Konstanz

... the freedom to spend five years studying an innovative question with my own large-scale facilities, an experience that a young scientist like me would otherwise hardly have got financed in Germany.



© Universität Konstanz

### **Dr. Claudia K. Friedrich**

Psychology,  
Research Associate  
at the University of Hamburg

... the prospect of setting up my own lab and turning my research ideas into reality with an Independent Junior Research Group. This in turn gives me the chance to establish a new research approach to the development of neurocognitive functions at the University of Hamburg.



© private

### Prof. Dr. Anja-Verena Mudring

Chemistry,  
Professor  
at the Ruhr University Bochum

... being able to turn my scientific visions into reality and so to focus fully on a high-risk materials sciences project. My staff get the chance to gain qualifications in a highly topical field under the best of research conditions.

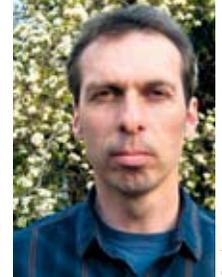


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### Dr. Lorenz Adrian

Technical Biochemistry,  
Visiting Professor  
at the TU Berlin

... the ability to extend my research based solely on content by pursuing new ideas, to advance these ideas, and to try them out from various perspectives.



© privat

### Dr. Katja Sträßer

Biochemistry,  
Head of a Research Group  
at the University of Munich

... the freedom to devote myself fully to high-risk and hence all the more promising basic research, thereby opening up a great chance to make groundbreaking discoveries. The ERC grant is also a reward for my previous research, and especially for the work done by my staff.



© EMBL

### Dr. Marc Himmelbach

Neurosciences,  
Research Associate  
at the University of Tübingen

... no longer having to depend on short-term project proposals, and so the opportunity to pursue an exciting scientific topic over a longer period of time. And, of course, secure medium-term prospects for this stage of my life as a young scientist.



© Universitätsklinikum Tübingen

### Dr. Björn Christian Rost

Marine Biologist,  
Independent Junior Research Group Leader  
at the Alfred-Wegener Institute  
for Polar and Marine Research, Bremerhaven

... the reliable planning and financial freedom needed to be able to pursue the unanswered questions of phytoplankton and climate research with my own team of scientists, driving the development of new methods forward, while also independently training doctoral students.



© Martina Buchholz

# Stephanie Reich

Physicist  
Stephanie Reich  
from Berlin



## A successful new beginning in Germany

Stephanie Reich had just accepted the offer of a professorship that would take her back to Germany and was, in her thoughts, already on the way back from the Massachusetts Institute of Technology (MIT) to the FU Berlin, when she heard of the ERC competition for young researchers. “As soon as I found out that the contest primarily aimed to fund the individual scientist, I saw it as a very positive step. The kind of funding offered by the Deutsche Forschungsgemeinschaft has been missing in Europe.”

So, in spring 2007 the 35-year-old physicist spent her first few weeks in her “new” home in Berlin not looking for a flat but, rather, writing an ERC proposal. She won, and the FU also won. The university has attracted a first-rate researcher to Germany who is also an ERC grant holder. Reich not only enhances the FU’s reputation; she also brings with her €1.1 million in research funds for the next five years.

Reich left for MIT in 2005 to take on an assistant professorship in nanoscience and optical spectrometry. “It’s always a bit faster in the United States,” she says, noting her frustration with the German universities where she had submitted several unsuccessful grant applications. In Europe it was only later that it became clear what a talent had been allowed to leave. When the FU Berlin offered her a professorship in 2007 – and rolled out the red carpet with a good core research budget – Reich didn’t hesitate to accept the appointment.



Reich was born in Berlin, so the position at the FU meant she was returning to her home city. As the daughter of the reknowned bioinformatician Jens Reich, she had encountered the natural sciences at an early age, but it was by no means clear where her study of physics at the Berlin Institute of Technology (TU) would lead her. That it turned out to be neither journalism, which she had toyed with, nor industry, was the result of her doctoral dissertation on carbon nanotubes. These are cylindrical structures with novel properties that make them potentially useful in the creation of new materials. However, it will still take years of research before these ultra-thin tubes

(just one millionth of a millimetre thick) can revolutionise industry. Even as a doctoral student, Stephanie Reich knew she had found a challenge here that would no longer let her loose. Nanoresearch and technology – topical subjects worldwide – require international contacts. After completing her doctorate, with distinction, Reich received a research grant that enabled her to spend a year in Barcelona and another at Cambridge. She and two colleagues wrote a reference book on nanotubes that is also read in America and Asia.

Reich believed that her two years of research at MIT and the offer of a professorship in Berlin provided the best possible prerequisites for an ERC grant. “The first round focused solely on me as a scientist,” she says. “Only in the second round was I asked to provide a detailed description of my project and of the resources available at the FU Berlin.” Reich has only positive things to say about the opportunities open to her at the FU. “I really appreciate the support that German universities provide for their scientists. I have enough staff positions and regular funds to keep at least a small research group in work. This can by no means be taken for granted internationally, and is not sufficiently recognised in Germany.”

FU President Dieter Lenzen says that “if conditions are right, the brain regain will work,” and that he’s delighted to have “regained” a top-flight German researcher from the U.S. Reich says she sees the ERC grant as an accolade for the FU Berlin, which gained “elite university” status in 2007. The FU succeeded in the German Excellence Initiative for universities competition with its concept of an interna-

tional network university. This means that it offers scientists from both home and abroad – particularly young researchers – the kind of work environment the ERC looks for in assessing candidates. Lenzen understands how important the European funds will be in allowing the FU to achieve its excellence goals. “The grants are perfectly suited to supporting such expansion,” he says, and Reich is the perfect recipient in this regard because the FU attaches great importance to basic research, to promoting young researchers, and to fostering international contacts.

Reich plans to use the EU funds to expand her research group, currently comprised of 10 doctoral students, postdocs and graduate students. She also wants to set up a high-resolution spectroscopy laboratory. Reich and her research group examine the fundamental properties of nanomaterials in her “OptNano: Quantum Optics in Nanostructures” project.

One of her goals is to understand, through optics, why the properties of nanoparticles change depending on their shape and diameter. Her long-term goal is to use carbon nanotubes to produce detectors that work like the human eye, and that recognise colours. The results of this research may one day be of great practical value in enhancing computer technology or for DNA sequencing.

Reich keeps both her eyes and her mind open to new applications. In Boston she experienced the “dynamics” of MIT, where researchers seek to use their knowledge for the benefit of society. Stephanie Reich says it was there that she first learnt that scientists should always be willing to take risks and to remain open to trying out something new.

*Leonie Loreck*

Historian  
Jörg Peltzer  
from Heidelberg

# Jörg Peltzer



## European traveller

His research has a European angle and transcends disciplinary borders, and he also works in a team – hardly typical of a German historian. This is why Jörg Peltzer is particularly pleased to have received an ERC grant. “The funding makes it possible to establish a type of research structure that is new for a humanities researcher and also opens up completely new opportunities in terms of content. My group, for example, can now focus on the perspectives that various academic disciplines have of a shared past.”

Peltzer, a 33-year-old mediaevalist, is one of four researchers at the University of Heidelberg who came away with one of the cherished ERC grants after the first round. This means that the Excellence University is in the lead in ERC funding in Germany. Heidelberg’s rector, Bernhard Eitel, attributes this success to his university’s longstanding international tradition. “More than 20% of our students and about one third of our doctoral students come from outside Germany,” he says. “This internationality shapes the learning environment and ensures that strong contacts are maintained around the world. Students, doctoral students and postdocs are integrated into these networks at a very early stage – a key prerequisite for successful proposals.”

Peltzer exemplifies the scholar who has pursued an international career. Before earning his Master’s, and while working on his doctorate, Peltzer studied in France and Britain; as a postdoc he preferred to examine sources around Europe close up. The ERC grant offers him much greater opportunities. “Basic research certainly entails risk,

errors are to be expected. But now I have the finances and the time to pursue such a project seriously,” he says. Peltzer also believes that a European grant greatly enhances his image, “making it easier to open doors abroad.”

And that is important to Peltzer, who wants to study the formation and visualisation of princes in late Mediaeval Europe by focusing on a comparison of England and the Empire. What role did the princes play in their respective socio-political structures? Can we indeed speak of a formation of European princes? What strategies did the princes employ to defend their status, to enhance it and to make it visible? Peltzer believes a multi-perspective view is essential, just as he did when he led an Emmy Noether Independent Junior Research Group. “Our team”, he says, “approaches this question from historical, artistic, architectural, archaeological and semiotic perspectives.”

Peltzer felt very comfortable with his research project before the ERC Commission. “As a candidate, I was treated professionally. “The jury’s questions demonstrated a deep understanding of the subject and of my proposal,” he says. “Even if I had not been awarded a grant, the interview would have helped me to advance the project. It was a great experience.”

The grant is important not just for Peltzer personally, but also for his subject. “I would like to use this project to strengthen the European perspective in mediaeval research,” he says. “The ERC funds provide the opportunity to do this.”

The university is proud of its grant holder's success. Rector Eitel says that "ERC grants also provide objective proof of the strong research abilities to be found at German universities and research institutions. A seal of approval such as this is becoming ever more important as we compete internationally. However, proven, top-class researchers also have an impact here at home. The group's doctoral students benefit from Peltzer's international contacts as well as from the ERC funding. They can make their own contacts, work accordingly, and bring their know-how back to the university," he says.

This is why the the University of Heidelberg's Department for Research and Project Management is committed to promoting the interests of its scientists. A regular newsletter and hands-on support for writing proposals are among the services it provides. "Its staff are up to speed on all the research done at the university and can bring experts from various disciplines together to work on complex proposals," Eitel says.

With his ERC grant, Peltzer brings a total of € 900,000 to his university. He would like to use the money to finance his research group long term, to fund stays abroad and, above all, to gain time for research. But he doesn't want to abandon teaching completely. "I believe it is important to pass on new ideas directly to the students, to inspire them, perhaps even to recruit them for a career in science," he says. "It's also important for the discipline itself. In addition, teaching always offers the opportunity to frame and test initial insights and discoveries. Students generally let you know pretty quickly whether a hypothesis is defensible or not."

*Isabell Lisberg-Haag*

## Universities are the Centrepiece

Bright minds and extensive university autonomy are the fundamental conditions for producing excellent research. Political measures should therefore aim to create an efficient environment for innovative research at international level. In its capacity as a high-tech state, Baden-Württemberg plays a particularly important role for young researchers. The state funds the next generation of researchers in a variety of ways, such as the Postgraduate Research Grants Programme of Baden-Württemberg, the Graduate Schools and Doctoral Training Groups Programme and the Margarethe von Wrangell Habilitation Programme for Women. Postdocs can do independent research in the Elite Funding Programme for Young Researchers financed by the Landesstiftung Foundation Baden-Württemberg. This is augmented by the financial resources provided by the Excellence Initiative, which benefit the University of Heidelberg in particular, as well as improving its activities to promote young researchers.

A contact office has been set up for young scientists willing to return to Germany, while amendments to the Higher Education Act offer a new range of freedoms – allowing, inter alia, tenure tracks at universities – which serve to ensure that excellent young researchers come to Baden-Württemberg.

The funding of outstanding young scientists and researchers by the European Research Council is the ideal complement to our funding instruments and supports the universities in their continuing efforts to develop concepts aimed at the promoting young researchers.

*Peter Frankenberg,  
Minister of Science, Research and the Arts, Baden-Württemberg*

# Mikael Simons

Doctor of Medicine  
Mikael Simons  
from Göttingen



## A step closer to the dream

Above all else, the ERC grant has created an opportunity for medical doctor Mikael Simons. The money from Brussels will allow him to concentrate fully on his neurobiological studies over the coming years. “It gives me more time to get even better qualifications for a professorship,” says 38-year-old Simons. Since 2004, as part of the Deutsche Forschungsgemeinschaft’s (DFG’s) Collaborative Research Centre 523, Simons has led a Junior Research Group at the University of Göttingen on “Protein and Membrane Transport between Cellular Compartments”. His goal is a full professorship in multiple sclerosis at a hospital for neurology. Only few such institutions exist in Germany and such positions only rarely become available. Simons is pinning his hopes on patience – and a bit of luck.

Simons’ research achievements are evidence of his exceptional qualifications. His groundbreaking work on the role of cholesterol in the development of Alzheimer’s disease has brought him several prizes. He won the Heinz-Maier-Leibniz Prize, conferred by the DFG, in 2001 and the Academy Prize of the Heidelberg Academy of Sciences and Humanities in 2002. In 1995 he received the National Dissertation Prize at the Sixth German Medical Congress. Before coming to Göttingen, Simons studied medicine at Heidelberg, where he worked at the Institute of Neurobiology and the Neurological University Hospital in Tübingen. Klaus-Armin Nave, an expert in neurogenetics and director of the Max Planck Institute for Experimental Medicine in Göttingen, says he expects great things from Simons. “I know of no other researcher in Germany who excels like Mikael Simons in basic research while also working actively as a clinician,” says Nave. Above all, he says, the ERC grant is recognition for Simons’ work; in the future, Simons will conduct his research at Nave’s institute in Göttingen.



Without the grant, Simons would probably have met the same fate that awaits most young scientists: applying for continuing funding while keeping their eyes open for interesting professorships. Doing research and coordinating all of this takes up valuable time – time Simons needs for both his basic research and his clinical work. “The ERC grant gives my Junior Research Group and me a bit of security,” says Simons. And, of course, he is rightly proud of winning; because only 3% of some 9,000 grant applicants were approved.

Simons sees the grant as a positive for both reasons. “Researchers usually apply for a specific position at a specific institution. With the ERC grants, however, they apply as individuals and can choose where they want to do their research. This means you can select your scientific environment.”

Simons also praises the application procedure, which he believes is still not used often enough. “It was competitive, the requirements became tougher as the process progressed, and you could introduce your own vision at the interview.” He also believes the ERC grants will lead more researchers to stay in Germany and, conversely, will bring researchers from abroad to Germany.

Simons says the Max Planck Institute for Experimental Medicine in Göttingen was the obvious choice because it provides the best environment for his research and because he had already made close contacts with the institute. Even before the ERC competition, he had discussed the possibility of continuing his research at the Max Planck Institute with Klaus-Armin Nave, whom he knows from Heidelberg. The Collaborative Research Centre at the University of Göttingen was coming to the end of its term and Simons was keeping an eye open for new sponsors, so the ERC grant came along at the right time.

“Simons is a positive example of how the selection of a Junior Research Group and the provision of financial resources can go hand-in-hand,” says Nave, adding that this is not always the case. He says Simon’s choice of the Max Planck Institute is a sign of recognition, but that it is also important to note that the institute has set higher goals than merely renting out laboratory facilities or equipment.

“Much like a football team, we want the best players on our side,” he says. As he sees it, Simons’ ERC grant will promote the institute. “When others see players of this quality on our team, we can attract them as well.” Nave says he not only wants to see how the competition develops, but is also thinking about ways to encourage scientists to have a go.

Simons will use the € 1.4 million at his disposal over the coming four years to expand his research group. Both of his two current doctoral students will stay on, and Simons plans to continue researching the cell biology of multiple sclerosis with a third doctoral student and a postdoc. Multiple sclerosis occurs when myelin, an insulating sheath of nerve fibres, is destroyed by endogenous cells of the immune system. This layer is important for transmitting signals between the individual nerve cells. The consequences can differ from sight and speech disorders via paralysis through to problems with bladder and bowel. The body’s ability to repair myelin becomes increasingly difficult as the disease progresses. Simon wants to understand how myelin is formed, and his group’s long-term goal is to develop a means of promoting the formation of new myelin once the disease appears. If he succeeds, Mikael Simons’s dream of doing research that benefits patients will have become a reality.

*Christian Hohlfeld*

# Armin Falk

Economist  
Armin Falk  
from Bonn



## Time for unrestricted research

Armin Falk never expected, nor had he ever experienced, an interview such as this, and the 40-year-old economist's enthusiasm can still be felt when he talks about his meeting with the ERC panel. "It was like a scientific seminar of the highest order. I was able to talk pure science with some of the world's leading economists," he says. The panellists are first-rate, and the only thing that counts is an applicant's scientific excellence. The Bonn-based professor sees this as one of the ERC's great advantages, because it creates the opportunity to compete with the world's best. Those who prove themselves here enjoy great respect in the scientific community.

Falk wants to study how key personality traits – such as the willingness to take risks, the quality of patience, and attitudes towards work and leisure – are spread across the population, what influences them and how they are transmitted. "Preferences like these fundamentally influence the behaviour of each and every one of us – including our economic actions," says Falk, who plans to survey people in Europe, the United States, Japan, and a Muslim country. Falk convinced his panel, and the ERC grant holder now has €1.3 million available for the project over the next five years.

Falk says he applied for an ERC grant because he wanted to get "a lot of money fast and without too much red tape." He was, above all, attracted by the prospect of finally having enough time for empirical

research. The ERC's flexible grants provide the time and the freedom that pioneering international research requires. Falk says he would rather not have to devote quite as many hours to teaching as he has in the past, and the money allows him to employ a colleague to take on these duties. Falk believes the "teaching buyout" – quite common at Anglo-Saxon universities – might encourage colleagues who are currently in the United States but willing to return home to apply for an ERC grant.

Falk, who completed his doctorate and postdoctoral habilitation at the University of Zurich, says he has found his ideal work environment in the University of Bonn's Department of Economics – which he calls "the best in the country". He has held a professorship here since 2003, and until 2007 also served as director of research at the Institute for the Study of Labour in Bonn. Today he heads the university's Laboratory for Experimental Economics, which provides the ideal environment for his research. Last but not least, Falk maintains close contacts with neurologists at the university hospital, where he uses medical-imaging techniques to study how the brain functions in decision-making. He says this leads to "entirely new insights into the physiology of the brain, on which human behaviour in general – and economic behaviour in particular – are based." Falk, who initially read history and philosophy, is targeting "neuroeconomics", the still hardly explored frontier between economics and neuroscience that aims to give economists a better understanding of why we behave the way we do.

Dr. Reinhardt Lutz, Head of Administration at the University of Bonn, says the university is more than proud of its ERC grant winner: “Out of 9,000 applicants there were 40 German winners, one of whom is at our university. This is a fantastic success that can be compared to winning a project under the Excellence Initiative. The ERC grant is a distinction not only for the researcher, but also for the university.” Of 16 proposals from the University of Bonn entered in the competition, four reached the second round.

Lutz says he expects the creation of the ERC to mark a major turnabout. In the past, he says, universities did not attach a great deal of importance to EU research funding. “It was a time-consuming process that led to limited success; there was also the suspicion that too much importance was placed on maintaining a regional balance,” he says. That has changed. Now, the only criterion for an award is scientific excellence. This, coupled with an outstanding peer-review process monitored by the ERC, has made such an impression that the University of Bonn is now actively encouraging scientists and researchers to submit proposals.

“This is an international competition in which only a few applicants have succeeded. In fact, this grant is like a little Nobel Prize. If the competition continues at this level, a research institution such as ours simply must participate,” says Lutz.



Bonn wants to publicise the programme as early as possible, and will include a direct link to the ERC grants on its website. The university also wants to increase support for its researchers during the application phase and to encourage them by providing financial incentives. While external fund-raising from EU programmes used to rank somewhere near the bottom of its “bonus list”, in the future financial resources such as ERC grants will be seen as among the most important and will be rewarded with additional university funding. Lutz says the university will use distinctions such as the ERC grants to enhance its profile and marketing, much as it has done with its Collaborative Research Centres and Leibniz Prize winners.

Falk wants to use some of the €1.3 million from the ERC to finance not only a professorship, but also positions for a postdoc and several student assistants. Much of the money will be used to carry out the experiments and surveys planned for various countries because, he says, “These things cost a lot of money.” After his success in the ERC competition, the University of Bonn will provide additional resources to support Armin Falk’s research.

*Uschi Heidel*

### **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 when these 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. In addition, the EU-Bureau runs numerous National Contact Points on cross-cutting areas of the Research Framework Programme. The EU-Bureau also coordinates the network of National Contact Points in Germany.

### **Deutsche Forschungsgemeinschaft (DFG)**

The DFG is the central funding organisation for basic research in Germany. Its core responsibility is to fund research projects conducted by scientists at universities and research institutions. The DFG promotes scientific excellence by selecting the best researchers and projects through competitive procedures.

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

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

[www.dfg.de/internationales/europa/foerderung/erc/europaeischer\\_forschungsrat.html](http://www.dfg.de/internationales/europa/foerderung/erc/europaeischer_forschungsrat.html)

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### **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)
- EU-ReferentInnen (Advisers) at Universities and Research Institutions  
[www.forschungsrahmenprogramm.de/beratung.htm](http://www.forschungsrahmenprogramm.de/beratung.htm)

ERC grants support frontier research projects in any scientific field

## ERC Grant Schemes

### ERC Grant Schemes in a Nutshell

ERC grants support frontier research projects in any scientific field without regard for and across all established disciplinary boundaries. In particular, they encourage interdisciplinary or pioneering proposals that address emerging fields and introduce unconventional approaches.

ERC grants are awarded through open competition to individual scientists, irrespective of origin or nationality, who are working or moving to work in Europe. The sole criterion for selection is scientific excellence.

Applications are submitted by a single Principal Investigator in conjunction with a host institution. Proposals can only be submitted in response to the call published annually for each grant scheme.

The host institution, such as a university, a research organisation or a research-performing company, provides the infrastructure necessary to carry out a frontier research project. Host institutions must be situated in a member state of the European Union or in an 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 Independent Researcher Grant

ERC Starting Grants support the most 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 more than 3 and less than 8 years prior to the submission deadline.

### 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 2 million euros (pro-rata for projects of shorter length)
- Grant term: up to 5 years
- Number of grants awarded: approximately 300 per year

### ERC Advanced Investigator 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 euros, in exceptional cases up to 3.5 million euros (pro-rata for projects of shorter length)
- Grant term: up to 5 years
- Number of grants awarded: approximately 300 per year – with significantly increased numbers in future calls until 2013.

### **Climbing the peaks of science, freely and independently**

Two outstanding DFG programmes offer attractive research conditions and real prospects for young scientists. Excellent scientists from Germany and abroad get an opportunity to conduct research at a German university of their choice, to advance their career, or even receive a professorship.

#### **The Emmy Noether Programme**

Early independence, training in science management skills, and the chance to manage their own budget – Emmy Noether grant holders work under conditions that other scientists dream of. Because they get to lead a Junior Research Group, to select their own staff, and to supervise their own doctoral students. This programme overrides the old master-pupil model and enables talented young researchers to develop their own profile at an early stage.

Under the Emmy Noether Programme, grant holders complete their qualification process all the way to professor much sooner than colleagues holding assistant positions. The postdocs are expected to complete an “Emmy” in five, or at the latest, six years. The professorial appointment rate shows how feasible this path is. Many Emmy Noether Programme grant holders and alumni meanwhile have their own professorship. Some 470 Emmy Noether Junior Research Groups have been funded since 1999, with some 50 new groups established each year.

The programme is open to all candidates who can demonstrate that they have independently conducted their own postdoctoral research and so have been able to develop their own scientific career profile. Applicants must be open, both geographically and thematically. This is why the programme welcomes applicants who have already gained at least one year’s experience abroad, either while doing their doctorate or during the postdoctoral phase. The programme also acknowledges outstanding international cooperation.

This programme aims to recruit the best, regardless of where they are currently doing their research. Emmy Noether funding is of interest to both foreign researchers and to Germans thinking about returning to their home country, because it offers the opportunity to work in Germany under attractive conditions. Talented young scientists can apply for a place up to four years after completing their doctorate. The application conditions include confirmation by an institution that the requisite facilities will be provided and that it will take on the role of employer for the grant holder.

## The Heisenberg Programme

“Heisenberg” stands for quality in the world’s scientific community. Only scientific excellence counts, 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 from home and abroad 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, subject to the funding term of up to five years, have always made the fellowship an attractive option. The funding focuses on young researchers who have qualified for professorship via the Emmy Noether Programme, DFG project positions, industrial research, or who hold a mid-level faculty position, but do not yet have a tenured position at a German university. Applications are also open to junior professors who received a positive evaluation. The programme targets foreign scientists thinking about working in Germany as well as German scientists returning to Germany from abroad.

Besides the Heisenberg Fellowship, the DFG has also been able to offer the Heisenberg Professorship since 2005, a funding instrument that provides reliable career prospects. In particular, it offers foreign scientists the chance to conduct research in Germany long term. The professorship is also an attractive option for German researchers abroad who are 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 pro-

fessorial appointment. At the same time, the host university is required to describe how the establishment of a Heisenberg Professorship will set a new scientific research focus at the institution.

At around the same time as 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 appointments 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 transformed into a tenured professorship.

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

### Contact at the DFG

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# The Path to ERC Grants:

Researchers in Germany Excel