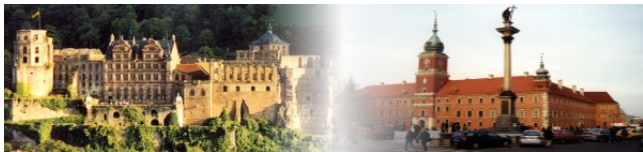


From postdoc-scholarships to junior groups and junior professorships - organizations and institutions promoting young researchers

The International Graduiertenkolleg
Complex Processes: Modeling, Simulation and Optimization



Aim of the Talk

Overview of programs promoting young scientists, with focus on the phase after obtaining a doctoral degree. I.e.,

- funding for research stays abroad
- postdoc scholarships
- project funding
- junior groups
- junior professorships

The talk does **not** include programs for promotion of undergraduate students (Begabtenförderungswerke, etc.).

Overview - Presented Institutions and Organizations

- Deutscher Akademischer Austauschdienst
- Alexander-von-Humboldt-Foundation
- Marie-Curie-Actions (European Commission)
- VolkswagenStiftung
- Deutsche Forschungsgemeinschaft
- Landesstiftung Baden-Württemberg
- Helmholtz Gesellschaft
- Leibnitz Gemeinschaft
- Max-Planck Gesellschaft
- Stifterverband für die deutsche Wissenschaft

DAAD Programs

Long- and short-term scholarships for research projects carried out at a foreign institution chosen by the candidate.

Long-term scholarships

Duration: 7-12 month, prolongation to two years is possible. Requirements:

- doctorate with grade at least magna cum laude
- doctorate dates back no longer than two years
- doctorate was achieved before the age of 30
- as a postdoc, the candidate was no longer than one year abroad

Deadlines:

3 application deadlines a year (15. March, June and November).

DAAD Programs II

Short-term scholarships

Duration: **3 to 6 month**. Applications for short-term scholarships can be submitted any time. The processing then takes about three months.

Selection criteria for both programs are:

- study time and grades
- project proposal
- publications
- age of the candidate

DAAD - the ICSI Program

Postdoc-scholarships for research stays at the International Computer Science Institute (ICSI) in Berkeley, California. **Duration: one year** with possible prolongation to two years.

Research projects come from the following fields:

- Internet Research (analysis, modeling, simulation, security, protocol development, distributed services, smart items)
- Algorithms (combinatorial, distributed and Internet algorithms; computational genomics and molecular biology)
- Speech recognition and natural language processing (automatic speech recognition, speaker recognition, human-machine interfaces)
- Social impact of information technology (challenges of the global information society, use of IT in social movements)

Alexander von Humboldt Foundation (AvH)

Sponsoring of **individual excellence** (qualification of the candidate is more important than the quality of the project) \Rightarrow implies that a candidate once rejected can not apply again with another project.

Feodor Lynen Research Scholarship

Support of research stays of German postdocs at a foreign institution.

General Requirements:

- host (supervising professor) must be a foreign scholar formerly sponsored by the Foundation
- 25 to 50% of the costs are expected to be paid by the host institution.

AvH - Feodor Lynen Scholarship

Requirements on the candidate

- age less than 38 years
- PhD completed with "excellent" or "very good"
- publications in recognized academic journals
- good knowledge of the host country's language, or at least very good knowledge of English
- a research plan that is accepted by the host, and a confirmation that research facilities can be made available
- no longer research stays abroad prior to submission

AvH - Feodor Lynen Scholarship, cont.

Long-term scholarships

Duration: 1-4 years

Short-term scholarships

Duration: 9-18 month during a period of 3 years (3-6 months per year are spent at the foreign host institute, then return to the home institute for at least two month).

Application deadlines:

- applications can be sent any time
- the Selection Committee meets three times a year (February, May/June, October)

AvH - Programs for Foreign Postdocs

Humboldt Research Fellowships

For highly qualified foreign scientists of all nationalities. Supported are long-term research stays (6-12 month) in Germany.

Georg Forster Research Fellowships

For highly qualified scholars from developing countries. Supported are long-term research stays in Germany.

Fellowships for postdocs with U.S. citizenship

Supported are long-term research stays in Germany (up to 2 years) or short-term stay (9 to 18 month during a period of up to three years).

Marie Curie Actions (European Commission)

Individual-Driven Actions

- Marie Curie Intra-European Fellowships
- Marie Curie Outgoing International Fellowships
- Marie Curie Incoming International Fellowships
- Marie Curie Excellence Grants

Host-based Actions

- Marie Curie Fellowships for the Transfer of Knowledge
- Marie Curie Fellowships for Early Stage Research Training
- Marie Curie Research Training Networks
- Conferences and Training Courses

Intra-European and Outgoing Intern. Fellowships

Open to EU and Associated State researchers of all ages with at least four years' professional experience (counted from Diploma or Masters) or a doctorate degree.

Intra-European scholarships

- duration: 1-2 years
- candidate must find a research team willing to host him
- joint application with the host institution

Marie Curie Outgoing International Fellowships

- duration: 1-3 years, including a compulsory return phase
- candidate must find a host organization for 'outgoing phase' AND a EU host institution for 'return phase'
- joint application with both institutions
- typically 2/3 of time 'outgoing phase', 1/3 time 'return phase'

VolkswagenFoundation

Private Foundation with smaller budget, therefore **focus on selected funding initiatives**.

- Thematic Impetus
- Societal Challenges
- International Focus
- Support of Persons and New Structures
 - ▶ Lichtenberg-Professorships
 - ▶ Symposia and Summer Schools
- Extraordinary Projects (exceptions)

In order to get support from the VolkswagenFoundation one has to "fit" in one of these initiatives.

VolkswagenFoundation: Thematic Impetus

A number of "hot topics" is defined by the foundation, presently:

- Innovative Methods for Manufacturing of Multifunctional Surfaces
- New Conceptual Approaches to Modeling and Simulation of Complex Systems
- Interplay between Molecular Conformations and Biological Function
- Evolutionary Biology

Scientists are encouraged to team up and submit joint proposals.

VolkswagenFoundation: Lichtenberg-Professorships

The foundation supports successful candidates for up to 8 years (evaluation after 4 years). The hosting university must ensure to progressively assume the successful professorship and its infrastructure, and guarantee that a regular W2 or W3 professorship will be included in the university's budget following expiry of the funding.

Requirements on the candidates:

- main target group: junior researchers, 2-3 years after PhD (W1)
- age limit 35 years
- international research experience
- also accepted: young researchers, at least 4 years after PhD (W2) (preferably returning to Germany from abroad)

Deadline for the submission of applications is November 1 in any given year.

Deutsche Forschungsgemeinschaft

The central, self-governing research organization that promotes research at universities and other publicly financed research institutions in Germany.

Funding is available via:

- Research Fellowships
- Emmy Noether Program (junior groups)
- Heisenberg Program
- International European Young Investigator Award (EURYI)
- Short Courses and Summer Courses
- staff position in a DFG project
- ...

DFG - Research Fellowships

Research Fellowships

To enable scientists and academics to carry out a research project on a specifically defined topic within a limited time period in Germany or abroad.

Details:

- aimed at qualified researchers (those holding a doctorate) from all disciplines working at German research institutions
- funding duration: 2 years
- funding: basic fellowship plus monthly lump sum for maintenance and travel costs
- application deadline: none

DFG - Emmy Noether Program

Emmy Noether Program

For young researchers from all disciplines working in Germany, or to recruit young, outstanding postdocs working abroad (back) to Germany.

- funding duration: 5 years, evaluation after 3 years
- application deadlines: none, processing time: 6 month

Requirements on the candidate:

- rapid completion of research training, outstanding publications in high-ranking international journals
- 2-4 years of postdoctoral experience
- international research experience (at least 12 month spent abroad during doctoral or postdoc-phase, or international cooperation shown in relevant publications)

Success rate: 30%

DFG - Heisenberg Program

Heisenberg Program

To provide outstanding researchers which fulfill the requirements for appointment to a long-term professorship with the opportunity to prepare for a leading position in science and research and to use the time to work on an advanced research topic.

- duration: maximal 5 years
- funding: basic fellowship plus monthly lump sum (maintenance and travel costs)
- application deadline: none

Requirements on the candidate:

Young researchers of all disciplines who qualify for a professorship by holding a habilitation or equivalent qualification and who have proven themselves by carrying out particularly outstanding research.

Postdoc-scholarships for young scientists with a duration of up to two years.

Requirements:

- research is carried out at a university in Baden-Württemberg
- applicant is not older than 32 years
- preliminary work concerning the project exists

Candidates apply to the hosting universities following a call for proposals (next probably spring 2006). Universities must contribute to the funding of the position and necessary infrastructure.

Helmholtz-Association

The largest research institution in Germany:

- yearly budget of 2.2 billion Euro
- 24.000 employees
- about 1800 doctoral students, 750 diploma students and 100 habilitation candidates

The Association is a community of **15 scientific-technical and biological-medical research centres**. Examples:

- Deutsches Elektronen-Synchrotron (DESY)
- Deutsches Krebsforschungszentrum, Heidelberg (DKFZ)
- Forschungszentrum Jülich (FZJ)
- Max-Delbrück-Centrum für Molekulare Medizin (MDC), Berlin-Buch

Helmholtz-Association: Young Scientist Programs

The association supports young scientists by:

- PhD and postdoc programs
- junior groups (joint appointments with the universities)
- sponsorship programs with industry
- and prizes and awards.

Funding comes in the form of a work contract in the given institute.

Helmholtz-Kollegs (PhD students)

PhD programs jointly organized of Helmholtz Centers and universities. The doctoral degree is given by the university.

Helmholtz-Association: Junior Groups

Junior groups:

- jointly organized by Helmholtz Centers and universities
- per year 20 new junior groups
- funding: 250.000 Euro per year (project leader, three technical assistants, material)
- funding duration: 5 years, evaluation after 3-4 years

Requirements on the candidates:

- doctoral degree obtained 2-6 years before
- international research experience (at least 6 month during PhD or postdoc phase)

Applications are to be submitted directly to the Helmholtz-Centers following an advertisement of the position.

Leibnitz-Association

The Association consists of 84 autonomous institutes of medium size (50-400 employees), active in the fields:

- humanities and education (14)
- economy and social sciences (17)
- life sciences (21), example:
FMP Research Institute of Molecular Pharmacology, Berlin
- mathematics, science and engineering (23), examples:
IfOK Leibniz Institute for Catalysis, Rostock
MFO Mathematisches Forschungsinstitut Oberwolfach
WIAS Weierstrass Institute for Applied Analysis and Stochastics, Berlin
- environmental sciences (9)

Leibnitz-Association: Activities

To support young researchers, the Association:

- maintains PhD-student-networks among the institutes
- provides postdoc-positions and
- supports junior groups

To find an appropriate position candidates should contact the institutes directly. Funding is available only at the Leibnitz-institutes, however, part-time employment at a university is possible.

Max-Planck-Society

Presently 80 research centers are maintained, with a staff of over 12.000 employees and 9100 PhD students, postdocs, and research scientists. Scientists can be promoted either by a work contract or a scholarship. Open positions are announced through the internet or scientific journals. Only applications for these announced positions are accepted.

International Max Planck Research Schools

- presently 37 research schools
- created in collaboration with universities
- PhD program for students from Germany and abroad

MPG - Postdoc Programs

Postdoc-scholarships

Scholarships for postdoc-positions are provided to allow postdoctoral fellows to carry out self-chosen research projects on one of the Max-Planck-institutes.

Max-Planck junior groups

- Presently about 70 junior groups
- obtaining funding for one scientific position, 2 technical assistants and one PhD student or postdoc
- team leader can receive the title "junior professor", if in collaboration with a university a part-time teaching position is assigned

More Information and Guidance

Databases with smaller organizations promoting specific fields or actions can be found at:

Stifterverband für die Deutsche Wissenschaft:

www.stifterverband.de

Bundesverband Deutscher Stiftungen:

www.stiftungsindex.de/

Search criteria are for example the scientific discipline or type of funding (research project, research visit, conferences, etc.)

Guidance with applications:

Koordinierungsstelle EG der Wissenschaftsorganisationen (KoWi)

www.kowi.de/

More information - Links

DAAD	www.daad.de
AvH	www.humboldt-foundation.de/
Marie Curie	http://europa.eu.int/comm/research/fp6/mariecurie-actions/action/action_en.html
Volkswagen	www.volkswagenstiftung.de
DFG	www.dfg.de
BW	www.landesstiftung-bw.de/
Helmholtz	www.helmholtz.de/
Leibnitz	www.wgl.de/
Max-Planck	www.mpg.de/

Who Promotes What?

	PhD	postdoc-scholarship Germany	postdoc-scholarship abroad	project	junior group	junior prof	conferences organization	conferences attending
DAAD			X					
AvH			X					
MC			X				X	
VW				X		X		
DFG	X	X	X	X	X	X	X	X
BW		X						
HH-G	X	X			X	X		
L-G	X	X			X			
MPG	X	X			X	X		

Age and Time Limits

Program	Time after PhD (years)	Age Limit
DAAD scholarship	0 - 2	–
AvH sholarship	–	38
MC scholarship	4-10 years after Diploma	–
VW (project)	–	–
VW (Lichtenberg-Prof)	2-3	35
DFG (Research Fellowship)	–	–
DFG (Emmy-Noether)	2-4	–
DFG (Heisenberg-Prof)	–	–
BW (postdoc-scholarship)	–	32
Helmholtz (junior group)	2-6	–
Leibnitz (junior group)	–	–
MPG (junior group)	–	–