Academic Careers in Germany

Academic Career Options (DE)

PhD -> Postdoc

W1/Group Leader

Habil? Teach? People? Grants?

W1/Group Leader

Junior Prof. (W2)

Emmy-Noether

S. Kovalevskaja

Tenure track

Heisenberg

ERC!

W2 Prof.

Apl. Prof. Privat-dozent

Core facility Lecturer

Research scientist

Science Management

W2/W3 Prof.

University Chair

Regular (Ordinarius)

Endowed (Stiftungs-) Prof.

Humboldt Prof.

Universities

Research Institutes

Industry

"Fachhochschulen" Applied Sciences

Basic

Applied
Academic Careers in Germany

Interview with Dr. Barbara Janssens, DKFZ Career Service

_Felix Geist:_ Hello Barbara! You set up the Career Service for PhD students and PostDocs at the DKFZ. Could you try to explain the German academic system to us?

BJ: Of course, but I have to say that in Germany education is only partially regulated by the federal ministry (BMBF) and there are differences between the 16 federal states and their respective universities. In a nutshell, the German academic research system is based on two main pillars: higher education institutions (round 110 universities and 220 universities of applied sciences or Fachhochschulen/Hochschulen für angewandte Wissenschaften), and four non-university research organisations (Helmholtz Association, Max Planck Society, Leibniz Association and Fraunhofer Society).

_FG:_ Doesn’t it get complicated when you consider different academic positions in each of these different institutions?

BJ: It’s not as complicated as it seems at first glance. The classical university path is quite generic and only differs slightly between institutions. After a PhD, researchers will usually have one or two postdoctoral positions (2-4 years) before moving to a position of Group Leader (or junior professor) where the researcher is fully independent, last author on publications and obtains funding for research. Group Leader positions are competitive (generally 10% of applicants succeed), usually require research experience abroad and will typically be financed for 5 years. After evaluation sometimes 2 further years are granted, or the Group Leader moves on to a fully tenured (i.e. permanent) Professorship.

_FG:_ What kind of funding possibilities are there for young researchers who want to start their own group?

BJ: Next to internal funding of junior groups at universities with a tenure track system and institutes like the Helmholtz Association and Max Planck institutes, there are several additional funding programs for young researchers such as the Emmy-Noether programme, the Kovalevskaja award, the Heisenberg program and the European Research Council (ERC) – to name just the main ones. When you leave Germany there are other options, like the Marie Sklodowska-Curie actions (MSCA).
Some Group Leader Positions

Junior Professorship

The junior professorship was introduced in 2002 by the Federal Ministry of Education (BMBF) in order to offer outstanding young scientists the opportunity to teach and conduct research at university without a habilitation. They are now funded exclusively by the federal states and universities: In Baden-Württemberg, there are few of these “Junior Professorships” but for example in Bavaria these are quite common. There is a council for Junior Professors, www.juniorprofessur.org, who lobby for better perspectives. They claim that by the end of a junior professorship only 20% have a tenure track option being considered and another 15% have a follow-up position without tenure track.

Emmy-Noether

Emmy-Noether programme for young researchers leading an independent junior research group is financed by the DFG, the largest independent research funding organisation in Germany.

S. Kovalevskaja Award

The Alexander von Humboldt Foundation (AvH) offers the Kovalevskaja Award which allows to spend five years building up a working group at a research institution of your own choice in Germany. It currently requires you to have spent at least 10 years outside Germany prior to application.

University Tenure track

In Munich the TUM and LMU offer W2 tenure track to excellent young researchers, for example ERC grantees. At the Institute for Advanced Study (IAS) tenure track is offered in collaboration with the TUM in Munich, called the Mößbauer Fellows.

Non-university research groups

Funding can be provided directly by the institutes or centrally announced. For example Helmholtz Junior Groups receive up to €250,000 in funding per year for five years. Also Max Planck research groups are funded for 5 years.

Heisenberg-Programme

The Heisenberg-Programme is financed by the DFG and aims to promote and maintain young outstanding and highly qualified researchers to give them incentives for continuing their careers in science and research. Outstanding researchers, who have fulfilled all requirements in order to receive tenured professorship, are able to apply for a Heisenberg Scholarship, in order to prepare for a leading researcher position.

European Research Council (ERC)

The ERC Starting Grants support researchers of any nationality with 2-7 years of experience since completion of PhD and a scientific track record showing great promise (requiring at least one publication without the PhD supervisor). Grantees can receive up to € 1.5 million for up to 5 years.
**FG: What happens after this group leader position? Are there different kinds of Professorships?**

BJ: The German system basically offers W1 (i.e. assistant), W2 (associate) and W3 (full) Professorships. A W2 or W3 Professor is appointed by a University, or jointly appointed with a non-university research institute (then sometimes called Extraordinary Professorship). A **Humboldt** Professorship is an award of 5 million EUR by the Federal Ministry of Education and Research (BMBF) to finance candidates coming from abroad for the first five years of a W3 professorship. An “endowed Professorship” (**Stiftungsprofessur**) is financed with private equity, donated to a researcher or Research Institute. Often the financial donation covers 5 years, after which the Research Institute agrees to continue financing. Famous are for example the **Lichtenberg Professorships** or recently at the DKFZ one Professorship was financed by Eventim.

![Humboldt Professorship](image)

From [www.eui.eu](http://www.eui.eu):

The procedure for the **appointment of Professors** (**Berufungsverfahren**) is the same at all German universities. [...] According to the provisions of the Federate State laws, at least nine individuals must participate in the procedure. A "sufficient number" of opinions are collected from experts who do not have a personal relationship with the candidates and who have an established academic reputation in the academic community. These experts are asked to provide comparative evaluations of all the candidates.

According to the normal appointment procedure, the appointment committee sends a ranked list to the university senate, which is free to modify the list before it is submitted to the ministry*. The ministries cannot easily justify ignoring the lists but they are free to appoint one of the three candidates. It happens that the ministry disregards suggestions emanating from the faculties.

An important feature of German academia is that with the exception of Junior Professors, habilitated academics usually cannot obtain a W3 professorship at their own university. This is specified in the Higher Education Act (HRG) and is called internal promotion prohibition.

*note that this might change in the near future
**FG: Is it different for Professorships at Fachhochschulen?**

BJ: Yes indeed, these professorships are slightly different in some aspects. For instance the teaching commitment is higher, but is being reduced since a few years. For teaching German language is often required, but nowadays the first years can be in English. Research is encouraged but third-party financing is usually harder to get. To give you some numbers, I found statistics from 2012 (Statistisches Bundesamt) that the cost for a Professorship at a Fachhochschule is on average 172k Euro compared to 580k Euro for Universities.

The formal requirement for W2/W3 Professorships at universities of applied sciences is a PhD and at least 5 years of non-university experience. In some cases, this can be industry experience, but sometimes also research at a more applied non-university research institute. Thus in principle one can qualify for these Professorships relatively soon after graduation, provided some “applied” experience.

**FG: That is really interesting, thank you! You mentioned “habilitation” a few times – do I need this to become Professor or is that a myth?**

BJ: Indeed it’s good to inform yourself about what it means before embarking on this journey. There is no obligation to do the Habilitation for an academic career, but many scientists still chose to take this highest academic degree after a doctorate.

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

The official **Habilitation** process in the relevant faculty can be made conditional upon the submission of a thesis or a series of academic publications. Depending on the faculty a number of hours of teaching (“Semesterwochenstunden”) have to be shown. A teaching credential is then issued which grants the holder permission to instruct at a German university, to bear the title “Privatdozent” and to supervise doctoral candidates. It can be issued for the subject that is to be taught by the university’s executive body upon request by the person undergoing the Habilitation process. The Habilitation process is governed by a faculty or a joint commission according to the rules and regulations of the so-called Habilitationsordnung. In this process, all professors in a faculty have the right of collaboration and approval. Preconditions are regulated by the statutes of the local state Hochschulgesetz currently in effect. The latest editions of the Habilitationsordnung are available from the dean of each faculty.

Formally **Habilitation** determines whether a person is sufficiently suited as a scholar and a teacher to be a university Professor in a specific field. Historically **Habilitation** was required for the Berufung to become a university Professor, but since 2002 selection committees do have the right to appoint professorships without **Habilitation**, if they consider the candidate has equal teaching, publication and third party funding credentials. Still **Habilitation** was not
abolished and about 10% of doctoral holders in Germany still obtain the Habilitation. Although there are exceptions, usually one cannot be recruited as a Full Professor at the university where you did the Habilitation and also in Heidelberg there are faculty-specific regulations for Habilitation. For example for the Faculty of Medicine you will need formal training in didactics (Hochschuldidaktische Kurse or Dozentenschulung).

FG: Are there any options other than the classical career path from PhD via PostDoc and Group Leader to Professor?

BJ: Indeed there are other options in academia! The most common positions are in core facilities (microscopy, technology transfer, sequencing, clinical trials etc.) and science administration or management. Within research groups and/or cooperative research networks, researchers can become “lab manager”, “grant manager”, “project coordinator” or even “deputy head”. In Germany it is very rare but not impossible to work as a “dependent” researcher. In exceptional cases scientists can obtain a position if they are responsible for permanent long-term tasks. A position is considered “scientific” if at least 50% of the tasks are scientific. There is a so called “12-year rule” which limits the total number of years a scientist can be employed with fixed-term contracts.

FG: Thank you so much for the interview Barbara. Could you give us some internet sources with info about the academic career track?

BJ: Here is where I found useful information with different pieces of the “academic career puzzle”:

research-in-germany.org
www.myscience.de
www.eui.eu
www.academics.com
www.academics.de
www.forschung-und-lehre.de
www.juniorprofessur.org
www.che.de
www.hochschulverband.de
www.kowi.de
www.kisswin.de
www.unicum.de

Interview conducted by Felix Geist (DKFZ), December 2015.
To receive an electronic copy: email careerday@dkfz.de