



Prospects for young academics

- postdoctoral work at Humboldt-Universität zu Berlin

Content

Introduction

After the doctorate - the prospects of postdoctoral work

Career planning versus family planning ?

Dual career couples in academia

Junior professorship or/and habilitation ?

Going abroad and coming back

External funding in support postdoctoral research

Non-university research institutions

Appointment to a professorship

Introduction

In the past 10 years supporting young academics doing the postdoctoral research work has become a major element in the dynamic development of the research potential at Humboldt-Universität zu Berlin. Support to be given by the university staff involved is of overriding significance in this context.

A career at Humboldt-Universität (HU) is to enable young academics to be successful in research, teaching and in the personal pursuit of knowledge. This article describes the period of postdoctoral work in general. In addition, it provides specific information on a research career at Humboldt-Universität.

Ideally, a postdoctoral academic career is aimed at obtaining a professorship within five or seven years. The condition is a doctorate with outstanding results. In the subsequent postdoctoral period of up to seven years teaching practice should be gathered and personal research projects should be carried out including a two-year research stint abroad. It also seems to be advisable to start a family with two children before the 40th birthday and a helpful partner. Naturally, there must be a vacant professorship at the right time.

If it were that simple we could stop at this point.

In reality university careers of most young and extraordinary academics is not that straight, although they are by no means less interesting or successful.

It is common knowledge that the competition towards the upper end of the career ladder becomes increasingly stiff. While climbing the ladder, the individual will face problems that sometimes seem to be insurmountable. They include:

- stiff international competition,
- unsuitable thematic structures,
- reduced flexibility or mobility,
- restrictions imposed on the personal development,
- financial constraints.

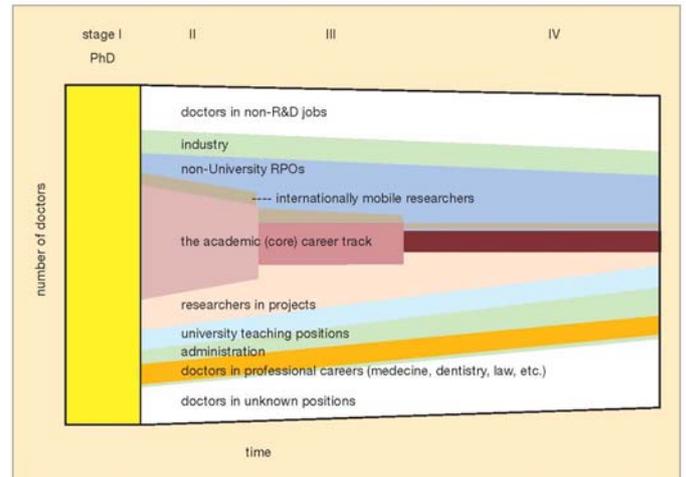


Figure 2.2. Schematic illustration of the diversity of research careers in the European Research Area (ERA) using Finland as a concrete example.

1

It is a widespread strategy in the realm of science today to evade national career bottlenecks by launching job applications to American, British or European universities because they are usually endowed and equipped more generously. Highly talented young academics still leave Germany for the USA (15 percent) because they expect better working conditions there.

Yet, with the broad array of national options available there is sufficient room for individual planning. The possibilities at university in teaching and research are particularly attractive. In fact, they are more comprehensive in Germany than anywhere else. The fruitful relationship between teaching and research is the source of enormous creative potential. It is only the universities that provide the opportunity for professors, undergraduates and doctoral students of jointly investigating a problem both intensively and creatively.

Humboldt-Universität is in a leading position in Germany in many fields of research. The German Research Foundation (DFG) provides funding for fifteen HU Collaborative Research Centres. HU researchers are actively involved in thirteen Interdisciplinary Centres, thirteen DFG Research Groups, ten Young Researchers' Groups and in twenty so-called "*Eigene Stelle*" funding programmes, to mention only a few major funding sources.

After the doctorate - the prospects of postdoctoral work

While working on their doctorate, young academics will think about their future and their career prospects. However, planning a university career consisting of teaching and research requires a particularly high degree of vision and flexibility.

Already while graduates are working for the doctorate, qualification deficits that may endanger a university career should be identified and minimized as early as possible. They should realize that if they may want to apply for a junior professorship or for a leadership position in a research group after taking the doctorate or in the first years of the postdoc period they will be actively involved in teaching and research as well as in administrative, managerial and committee work. Therefore, further qualifications should be obtained within the postdoc period in the following fields: teaching (e.g. didactics, the presentation of subject matter, and rhetoric), research methodology, publishing, project management and university government including supervisory and managerial techniques. They should use the opportunities offered by universities and other institutions if they envisage a senior university career. Such opportunities are offered by the Berlin Centre of University Teaching (*Berliner Zentrum für Hochschullehre*) and by the Staff Development Section (*Berufliche Weiterbildung*) at Humboldt-Universität.^{2/3/} Interesting offers are made also by non-university institutions such as the Centre for Higher Education (*Centrum für Hochschulentwicklung*), the Association of University Teachers (*Hochschullehrerverband*), the Centre for Science and Research Management (*Zentrum für Wissenschaftsmanagement*) in Speyer, and the International Academy of the German Academic Exchange Service (*DAAD*).

Depending on the individual's academic subject, there are different career prospects for young doctors. In a "ProFile" survey of 2009, some 80 percent of the doctoral students at Humboldt-Universität showed great interest in research employment after taking the doctorate. Over 50 percent were particularly interested in teaching. Interest in managerial positions was indicated by approx. 35 percent. Interest in

administrative jobs was comparatively moderate with only 13 percent.

A survey conducted at the University of Marburg, which included 1,150 doctoral students⁴, yielded the following results concerning the postdoctoral employment situation: Some 40 percent found employment in the public sector, another approx. 40 percent were employed in the private sector, and approx. 20 percent found a job in other branches of the economy. 40 percent were able to continue their research work, with 22 percent working at higher education institutions and 18 percent at other research institutions, among them the Fraunhofer Society, the Max Planck Society for the Advancement of Science and various institutes of the Leibniz Association.

The discrepancy between individual plans and reality is due to the fact that the range of alternatives to a career in higher education for young doctors in Germany is much wider than in other countries. This constellation results not only from the employment situation outside German higher education institutions but also from the fact that working for doctorate in Germany is not centered on a particular career and taking a doctorate is not necessarily aimed at a subsequent academic career.⁵

The legal framework of staff recruitment at Humboldt-Universität is the German General Act on Higher Education (*Hochschulrahmengesetz – HRG*) and the Berlin Higher Education Act (*Berliner Hochschulgesetz – BerlHG*). Labour legislation regulating temporary employment of academics (*Wissenschaftszeitarbeits- vertragsgesetz*) allows for contractual work at university of two six-year periods (six years before taking the doctorate and six years after it).⁶ Externally funded university employment without temporal restrictions is a possibility.

Since 2002 young academics have had the chance to be appointed to a professorship. After taking their doctorate they are expected to work abroad for at least two years after which they may be given a junior professorship and eventually a full professorship without necessarily having to submit a habilitation thesis (*Habilitationsschrift*).

Whether they are appointed to a tenured professorship later on depends on a number

of factors. In Germany there are a total of some 37,000 professorships, 17 percent of which held by women, with a rising tendency. Their income is based on the civil service pay groups W2 and W3. Most professors are tenured civil servants. For your personal situation that means:

- there must be a vacancy for a professorship with the appropriate scientific profile at the right time,
- the university of your choice must decide in favour of your application to fill the vacancy, and
- the Ministry of Higher Education must eventually appoint you to the position.

If you want to be the winner of the race you will have plan your final sprint very carefully.

In 2010 there were 411 budget-based and third-party funded professorships at Humboldt-Universität. A total of 101 of them are held by women professors and women junior professors. Of the 411 professorships 49 are junior professorships, with 30 of them held by women junior professors. All professorships are advertised. Advertisements are to be found at <http://www.personalabteilung.hu-berlin.de/stellenausschreibungen>. For vacancies advertised throughout Germany check at: <http://www.academics.de/home.html>.

Career planning versus family planning

Starting a career at university means winning a position in which you will have to decide for yourself about the content of research and teaching going on. You have to assert yourself and demonstrate your leadership towards your colleagues.

With this workload it is impossible to have an eight-hour or even ten-hour working day. Your regular presence in the office or at the laboratory also at weekends, time-consuming investigations and congress attendance are quite common. Besides, you are expected to contribute to the meetings of university committees. And your scientific expertise will be required on various occasions.

Starting a family and the additional personal effort involved often happens at a time of maximum professional pressure. Young ambitious fathers and mothers are then exposed to major conflicts of interest and feel the limits of their potential. Starting a family will make the situation even more complicated.

Statistically, fewer women are in top-level research positions, one reason being that the main workload in a family is on their shoulders and they can hardly give up their responsibilities. Women who made a decision in favour of a research career are the positive element in the following set of statistics.

Academic Careers

Women proportion of students, graduates and Staff at higher education institutions

Percentage of women

	2006	2007	2008
Beginners (first-year students)	49.4	49.8	49.7
Students ¹	47.8	47.7	47.8
Graduates	50.5	50.8	51.1
Doctorates	41.1	42.2	41.9
Habilitations ²	22.2	24.3	23.4
University staff (total)	51.3	51.8	52.1
Full-time academic staff ¹	31.4	32.8	34.3
Other academic staff ¹	36.0	37.1	38.5
Full-time professors ¹	15.2	16.2	17.4
C4 professors ¹	9.9	10.0	10.3
Total of population ⁴	51.1	51.0	51.0

¹Total of students in the Winter Semester

²Habilitations in the calendar year

³Staff on 1 December

⁴Population on 31 December of previous year

Source: Federal Statistical Office, Germany,

<http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Statistiken/BildungForschungKultur/Hochschulen/Tabellen/Content50/FrauenanteileAkademischeLaufbahn>

The question if there are other models of scientific work, giving more freedom to human and familial relations is hardly discussed in the climate of the stiff competition for the few vacancies. Such models could certainly produce greater creativity, which would definitely be beneficial to research.

Currently, the fields in which universities are to take action in support of families involved in research work are described as follows:

- ensuring greater transparency in the appointment process for professorships,
- providing offers to dual-career couples,
- setting up child-care centres at higher education institutions,
- introducing a ranking scheme that emphasizes equality of opportunity in support of young women researchers,
- rewarding equality of opportunity put into practice by giving the Total-E-Quality label.

Humboldt-Universität supports families and women by improving the network of suitable measures on different levels which are to help young women scholars and scientists to overcome structural hurdles on their way towards a professorship.^{7/8}

The Humboldt Equality Fund for the support of young academics is the core of that network. It was set up as part of the 2010 budget for the first time, and € 250,000 are allocated to the fund every year.

The support is aimed at overcoming structural deficits in the equality of opportunity of women at Humboldt-Universität, at increasing the proportion of women in leadership positions on all academic levels and in disciplines where the proportion of women is insufficient. It is designed to further stabilize women-specific and gender research at Humboldt-Universität.

The faculties and departments and women professors appointed 2010 or later may apply for financial means for temporary staff recruitment. The allocation is based on the achievement of a target, which has to

be negotiated individually for each measure. The funds may be used for

- recruiting additional part-time academic staff (25 percent and 50 percent positions) for a chair held by a woman professor,
- recruiting additional laboratory staff for a limited period of time,
- recruiting additional student assistants,
- increasing the staff capacity by concluding work contracts.⁹

Dual-career couples – an example

"A woman physicist is appointed to a chair and her partner, a highly qualified scientist, is looking for a suitable leadership position in the vicinity. The constellation is by no means simple but highly realistic. A majority of researchers live in a partnership with persons who also work in research. However, higher education institutions in Germany have so far hardly offered suitable career prospects to dual-career couples."¹⁰

In a study entitled "Brain Drain – Brain Gain" the *Stifterverband*, a German industry initiative promoting science and learning, confirms the above statement. First-rate career prospects for both partners and agreeable child-care facilities are of crucial significance in choosing a place to stay for over 70 percent of German researcher couples working abroad.¹¹

The problem in dealing with dual-career couples in Germany lies mainly in the qualification of the scientist's partner, who has to be given a job, too. "If we are to find a job for somebody because his/her partner has a job with us, qualification is of no importance in the beginning. But nobody wants to get a job only because he/she is the husband/wife of somebody an employer took on. It is a difficult situation for both sides."¹²

Currently, Humboldt-Universität offers highly individualized solutions, tailor-made for each researcher. Moreover, the German Research Foundation offers so-called "portable" support which is designed to enable academics to work in places not far from their partners. This is particularly true

of the scholarship schemes, the "Eigene Stelle" support programme and, under certain conditions, the *Emmy Noether* Programme.

Junior professorship or/and habilitation

With an excellent doctorate and successful postdoctoral research abroad over two years you may qualify for appointment to a **junior professorship**. Higher education legislation in Germany offers the chance to researchers to take responsibility at a fairly young age. The chances to conduct independent research prior to the age of 40 have increased considerably.

Junior professors are expected to give four 45 minute lectures a week on average and to supervise students working on their dissertation or doctoral thesis. Furthermore, they must develop their own research profile and attract external funding. They will also have responsibility in the system of self-government.

Some universities have set up a large number of junior professorships. With about fifty functioning junior professorships Humboldt-Universität is currently in the first place, followed by Göttingen University, the University of Hamburg, the University of Bremen and Hanover University.

From the point of view of those in junior professorships as a stage in a university career has been a success. More than two thirds of them are pleased with their situation. Only one in nine is not. A majority of 71 percent of those asked in a survey said they would decide again in favour of a junior professorship, 17 percent were undecided and 12 percent would not apply again for a junior professorship.¹³

On a national scale, the proportion of women in junior professorships in the various disciplines is twice as high as it is in full professorships (C3/C4 income groups) in the same subject area. Thus, in mathematics, for example, the proportion of women in full professorships is less than 10 percent, whereas in junior professorships it is almost 20 percent. In the linguistic sciences the proportion of women has traditionally been around 20 percent, whereas in junior professorships it now amounts to almost 60 percent (ibid).

The statutory evaluation at Humboldt-Universität of a junior professor, which is conducted three years after his/her appointment, is based on criteria of assessing academic performance that have stood the test both nationally and internationally. It takes into account that some of the criteria, especially those concerning quantitative elements such as the attraction of external funds or the number of international publications, are of very different significance in the various disciplines. And the chances to use research results in practice are equally very different. The criteria given below are, therefore, considered as a framework of the evaluation which should be extended or restricted in accordance with the circumstances in a given discipline.

Assessment should be based on the assumption that junior professors are independent researchers who should be in a position to work independently in their respective field. At the same time, they should be capable of giving guidance to their staff and representing their work outside the university context.

Responsibility towards students and graduates and the transfer of knowledge to them as essential elements of a junior professor's work are crucial factors in assessing a junior professor's performance in research, teaching and committee work. A junior professorship cannot be prolonged beyond three years without a positive evaluation of the professor's teaching. However, research is a *conditio sine qua non*. Outstanding research results can to some extent make up for deficits in teaching. But very good teaching will not make up for less favourable research results. Although commitment to university self-government is expected, junior professors will not be have to contribute to committee work to the same extent as full professors.

Based on transparency and on a high scientific standard, the criteria of assessing the performance of junior professors have made the model used at Humboldt-Universität very successful (Cf.: *Leitfaden für die Zwischenevaluation von Juniorprofessuren*¹⁴).

In rapidly implementing and advancing the concept of junior professorship, Humboldt-Universität sees an opportunity to employ more young postdocs and to pave the way

to further first-rate appointments to full professorships in the years to come.

After their junior professorships at Humboldt-Universität had expired, 75 percent of the young holders were appointed to full professorships at German or international universities.

In addition to the junior professorship introduced in 2002 there is, of course, the traditional route to a professorship: the habilitation.

In **the habilitation thesis** as “the German academic examination at the highest level” candidates have to prove a high level of scholarship and their ability to do research and lecture in a specialist subject. Those who are successful can apply for a full professorship. In each individual case it must be decided whether a junior professorship or the route via the habilitation is recommendable.

Depending on the habilitation regulations of the various faculties, the traditional habilitation, the so-called “accumulated” habilitation, or no habilitation at all are considered conditional for the appointment to a full professorship.

If the habilitation is required to qualify for a full professorship a number of criteria must be satisfied (Cf. habilitation regulations of the various faculties). They include:

- submitting an extensive monograph which is regarded as a major contribution to the advancement of knowledge in a specialist subject, i.e. the traditional habilitation thesis, or a monograph plus research results published in other formats, which as a whole constitute an academic achievement of the same value as a traditional habilitation thesis, i.e. the accumulated habilitation, or research results published which in their entirety constitute an equivalent of a traditional habilitation thesis, i.e. no habilitation;
- giving a public lecture covering the specialist subject with a subsequent academic discussion;
- giving a 90-minute lecture open to university staff covering a specialist area of the chosen subject.

In the past the habilitation process took place while young academics were in so-called assistantships. Since junior professorships were introduced quite a few of these posts have been transformed into

the new staff category at Humboldt-Universität. As a result, the work of junior professors is also aimed at habilitation.

Going abroad and coming back

Appointments committees often lament the lack of geographic mobility and thematic flexibility among junior academic staff. Sometimes it is too late for applicants for a professorship to realize that international references are required for the appointment.

It is indispensable for somebody who wants to start a research career at a higher education institution to provide evidence of international contacts and research work at reputed international institutions.

Academic exchange is aimed mainly at mutual inspiration as a result of which young people benefit from their partners in their own research work. While abroad, postdocs are expected to widen the range of their research methods and augment their technical expertise. On the other hand, they will bring their own methodology and experience to bear and thus contribute to the advancement of science.

One of the objectives of supporting research on a national scale is to make use of international experience. Two strategies are adopted in order to accomplish this objective. One is to invite researchers from abroad and then make them stay. A typical example of this strategy is the USA. The other strategy is to send researchers abroad and then ask them to come back for the benefit of research in their own country.

Statistically, most German postdocs go to the USA, with the United Kingdom and Switzerland in second and third place. The USA has traditionally been first choice because highly attractive research conditions are offered. A research stint in the USA is considered to be an essential part of a scholar's or scientist's career. Besides, young academics will choose to go abroad not only because of the particularly attractive research conditions offered, but also because they have realized personal competence deficits, or for private reasons.

Most academics return home because their contracts have expired, or because they have been offered a suitable position in

Germany. Familial reasons are also of major importance.

For more information about the international careers of recently appointed junior professors at Humboldt-Universität their CVs should be of interest. Personal contact can be established through the internet at: <http://forschung.humboldt-berlin.de/wiss.nachw/juniorprofessuren/>.

External funding in support of postdoctoral research

The selection of donor institutions briefly described in this article emphasizes those giving public funds in support of research. Besides, there is a multitude of private donors to be found in research manuals¹⁵ and on the internet¹⁶.

For most public donors of external postdoctoral funding it is conditional that applicants took their doctorate at least two years but no longer than five years before they applied. It should also be considered that a number of donors focus postdoctoral funding on the content of research conducted by the individual applicant. The focus may be temporary and is mostly determined by socially relevant developments.

Another factor in the search for a suitable funding scheme may be that in your case not all significant criteria of a research career have been satisfied, e.g. research experience abroad, teaching and publishing practice. Therefore, your choice should be for funding programmes that will probably help you to close your own personal "gaps".

Here are two examples:

- If you did not spend a research stint abroad while you worked for your doctorate, or if you cannot conduct part of your planned research abroad for up to two years, suitable funding schemes are offered by the Alexander von Humboldt Foundation, the German Research Foundation (*DFG* – for research scholarships) and the German Academic Exchange Service (*DAAD*).
- Funding by the *DFG* "Eigene Stelle" programme does not explicitly require involvement in teaching, which is why it meant to support postdoctoral researchers who already have teaching experience.

There is no ranking in the funding schemes described below. As can be seen in the proposal documentation issued by all donors, excellence of postdoctoral research is an essential requirement given particular emphasis.

For a more detailed consultation you may get in touch with the responsible liaison officers of the donor institutions at Humboldt-Universität or ask for advice on the funding of young postdoctoral researchers at Humboldt's Research Division.¹⁷

German Research Foundation (DFG)

DFG research funding is conditional on the doctorate. Research projects are to be based on scientific work going on in the particular fields (bottom up procedure). They may be marked as belonging to schemes of particular significance.

Funding proposals should be made shortly before work on the doctor's thesis is completed. It should be noted that in the framework of project funding the *DFG* also offers staff funding, funds to support participation in scientific conferences and the printing of publications.

The review of a funding proposal is a multi-stage process and, therefore, takes approximately up to six months. Scholarships may be reduced to fifty percent if the term agreed on is exceeded. More detailed information is available from the *DFG* websites concerned with funding instruments for young researchers.¹⁸

Funding schemes specifically for young researchers include:

- research grants/scholarships/fellowships,
- the *Emmy Noether* junior research groups,
- the "eigene Stelle" funding,
- the *Heisenberg* Programme.

The *DFG*, a donor institution funding research and development of postdoctoral students at higher education institutions, offers comprehensive and extremely useful support in planning a research career tailor-made to different individual requirements. You should carefully study the proposal modalities and then identify your personal preferences before you decide for one of the schemes in accordance with your

specific needs. It is advisable to seek the advice of liaison officers at university or at the *DFG*.

Deutsche Bundesstiftung Umwelt (DBU)

The *DBU* provides funding in the field of biotechnology. By advertising funding priorities, the Foundation wants to attract proposals for specialist and restricted areas of research. Its policy is to take up topical tendencies in the environmental discussion and provide temporary but substantial funding, and thus helps to advance research into problems connected with an environmentally sustainable development.

In addition to project funding, the *DBU* provides grants/scholarships for habilitation research in the field of applied environmental protection.¹⁹

Volkswagen Foundation

Alongside the *DFG* and the *Deutsche Bundesstiftung Umwelt*, the *Volkswagen Foundation* is the most important research funding institution in higher education for young scholars and scientists undertaking research outside academia. It concentrates funding on research conducted on specialist topics and problems. The schemes are aimed at structural improvement. Draft projects can be presented to the responsible staff members at the Foundation, with the attached request for advice on how to continue. Proposals are assessed in two stages within six months. International proposals are welcome, too.

Funding schemes specifically for postdoctoral researchers encompass²⁰:

- structural and person-related awards such as *Lichtenberg Professorships*, *Schumpeter Fellowships* for young university staff and young leaders in economics, social sciences and law, the Focus on the Humanities Scheme, *Dilthey Fellowships*, *Opus magnum grants*, fellowships for humanities postdocs at the Humanities Center of Harvard University,
- funding initiatives relating to other countries,
- thematic stimuli relating to problem-centred basic research,

- the Challenges for Academia and Society Scheme,
- The "Off the Beaten Track" initiative.

German Academic Exchange Service (DAAD)

Postdocs are the concern of the *Programmabteilung Nord Referat 311*²¹ at the *DAAD*. It is responsible for all proposals coming from abroad. *DAAD* scholarships/fellowships are offered in all fields of science worldwide for a time of normally three to twelve months and up to a maximum of twenty-four months.

Funding is conditional on a brilliant doctorate which should have been taken no longer than two years before the proposal was made. Besides, financial support is awarded only to persons who stayed no longer than one year in the country in which they wish to do the postdoctoral research.

Alexander von Humboldt Foundation

Funding by the *Alexander von Humboldt Foundation* is aimed at supporting academic excellence. Funding is given to German as well as international postdoctoral researchers whatever their subject is.

Feodor Lynen Research Scholarships are suitable for German postdoctoral researchers who wish to work on a research project abroad. Proposals can be submitted for a term between six and twenty-four months. Scholarship holders must be hosted by a researcher abroad whose research was also funded by the *Alexander von Humboldt Foundation*. The Foundation will ask the host to contribute to the research scholarship.

Applications for the *Sofia Kovalevskaya Prize* can be made also by particularly successful and renowned young researchers from abroad who completed their doctoral work with outstanding success no longer than six years before they applied and who can provide evidence of publications in well-known international journals or in famous publishing houses. Holders of the *Sofia Kovalevskaya Prize* are enabled to set up a research team at a German research institution of their choice for a term of five

years in order to independently run an innovative top-level research project.²²

Fritz Thyssen Foundation

The *Fritz Thyssen* Foundation offers scholarships to young researchers who have just taken their doctorate (in a procedure similar to that of the *DFG "Eigene Stelle"*). The aim is to give adequate conditions to highly gifted young people in order to enable them to undertake independent scientific research within a given period of time, which is to be sufficiently long for them to demonstrate their outstanding quality, but it is also limited in order to give them a chance to decide in favour of an alternative career in case the original objective cannot be accomplished. The thematic emphasis is usually determined in advance.²³

The German Academy of Sciences (Leopoldina)²⁴

The Academy's postdoctoral programme is meant to give financial support to young researchers from Germany, Austria and Switzerland who are undertaking research in a natural science and medical field and who have already given evidence of their own specific research profile. Persons whose research projects are funded by the Academy are given the opportunity to continue at renowned institutions, usually abroad, on a postdoctoral scholarship. Applicants from Austria and Switzerland can be funded only while working in Germany.

Research at the host institute is usually limited to two year. In exceptional cases an extension to three years can be granted. The persons funded are expected to return to their home country after that time in order to make their improved qualification beneficial there. Applications can be submitted up to seven years after the doctorate was taken. The capital volume available is sufficient to fund about thirty-five scholarships annually. Some twenty new scholarships are awarded each year.

European Union funding

Marie Curie EU Scholarships are awarded to individual scholars and scientists who meet the specific postdoc research requirements.

Applications can be submitted by researchers in the initial four years of their research career. After financial assistance of research work abroad has expired, a re-integration scholarship may be awarded.²⁵

ERC Starting Grants

Applications can be submitted by investigators holding a doctorate from any country at the beginning of an independent research career. It is a requirement that the doctorate was earned at least two years and no longer than twelve years before the current grants were ad.

Applications are made in a one-stage process through the Principal Investigator, which means that a 25-page full-scale formal application has to be submitted. The evaluation of applications will be in two stages, including an interview in Brussels in the second stage.

ERC Starting Grants are advertised once every year.²⁶

European Science Foundation (ESF)

ESF is a co-operative type of funding by national member organizations exclusively concerned with basic research. All its activities are open to any scholar, scientist and researcher. They include European Research conferences, workshops, summer schools, fellowships and scientific networks. Dates may be obtained from the internet.²⁷

Non-university research institutions

There are a large number of non-university research institutions in Germany. All of them champion first-rate research. They offer postdoctoral positions and fixed-term jobs in research and development to young scholars and scientists. On principle, they can return to university when their contracts run out.

Here is a list of the largest German non-university research institutions which enjoy an excellent international reputation:

- the Max Planck Society for the Advancement of Science (*MPG*),
- the Fraunhofer Society (*FhG*),

- the Helmholtz Association of German Research Centres (*HGF*),
- the Leibniz Association (*WGL* – Blue List),
- the German Aerospace Centre (*DLR*),
- the Hahn Meitner Institute (*HMI*).

These institutions conduct contractual research and development for industry and the public sector. Based on the latest standards of science and technology with regard to industrial practice, the R&D projects are normally carried out within a fixed term. They are often undertaken in cooperation with universities or other higher education institutions, some on a contractual basis.

Most of the postdoctoral appointments are restricted to a term between three and five years, after which the researchers go back to university or choose to take up a position in industry.

Besides, there is the possibility to set up groups of young researchers. The Helmholtz Young Investigators Groups have proved to be particularly successful.²⁸

Intensive use is made at Humboldt-Universität of the networking system with non-university research institutions with regard to joint appointments. Currently, there are thirty-seven professors who although appointed at Humboldt-Universität in the ordinary appointment process do part of their work at non-university research institutions. Junior professors are also increasingly appointed jointly with non-university research institutions.

Here are a few examples of junior professorships set up jointly in support of young academics:

- Freshwater Fishing Management - jointly with the *Forschungsverbund Berlin e.V.*,
- Cooperative Sciences – jointly with the Institute of Cooperative Studies at Humboldt-Universität,
- Analytical/Process Analytical Chemistry – jointly with the Federal Institute for Materials Research and Testing (*BAM*),
- Efficient Optimization in Aerodynamics – jointly with the Potsdam Institute for Climate Impact Research (*PIK*)²⁹

Appointment to a full professorship

Advertising a full professorship will be based on the existence of a vacancy. Vacancies are advertised when the holder of the post retires, because professors in Germany are usually civil servants in tenured positions.

In addition, full professorships of newly established specialist subject areas are advertised.

A third option is the Tenure Track³⁰. It implies the obligation of a university to employ *Heisenberg* professors or *Lichtenberg* professors after their term at the German Research Foundation and the Volkswagen Foundation, respectively, has expired.

Appointments to a professorial position at the university from which a person took the doctorate or the habilitation without having worked somewhere else in between are rare exceptions in Germany because internal appointments of professors are normally not allowed. On the other hand, the appointment to a tenured professorship will be the ultimate aim of all career endeavours.

It is for these reasons that young academics must keep their eyes riveted on developments in their subject and the staff situation at universities in order to be able to assess their chances realistically and possibly use them. They must be aware that competition for the professorial posts is extremely stiff, because not only postdoctoral scholars and scientists as well as junior professors will apply for full professorships but also full professors who seek a professional change.

The **appointments process** is based on regulations and rituals which are not easy to see through. The members of the Appointments Commission represent different interests, and internal rivalry may play a certain role in their decision in favour of a nominee. On the basis of the documentation submitted and other information available to them, the members of the Appointments Commission form an opinion of the potential future professor and his or her qualifications.

If you have been invited to give a demonstration lecture you have taken the first hurdle. The general impression you give is very important. In demonstration

lectures candidates should develop a good feel for the situation. They should try to give a positive impression of their scholarship and their teaching competence. At the same time they should be exuding a pleasant sense of calm. The candidate's main concern before the lecture should centre around the following points:

- preparing and presenting the lecture,
- presenting one's own personality, research and teaching experience,
- dealing with "difficult" questions in the colloquium,
- dealing with the risk of failure.³¹

Humboldt-Universität attaches great importance to creating a warm atmosphere for each individual young academic in both the university as a whole and in the faculties. Future colleagues are to feel welcome to the University. You should, therefore, try to contact the "old hands" and ask them to make you familiar with the conditions they work in.

Presenting openness and, in this way, attracting the best professorial staff is our main concern.

On the website you find a survey giving detailed information concerning the appointments process:³²

- the stages of the appointments process,
- an information brochure on the appointment to an extraordinary professorship,
- an information brochure on the modalities of the appointments process,
- an explanatory leaflet for women applying for a junior or full professorship,
- an explanatory leaflet on the appointments process published by the Federal Conference of Women's and Equal Rights Representatives,
- a statement of the Women's Representative on the appointments process,
- the Tenure Track at Humboldt-Universität.³³

Postdoctoral scholars and scientists, both male and female, are welcome to teach and conduct research at Humboldt-Universität. The University as well as the city of Berlin are attractive places for you and your family.

We gladly support and advise you in all your efforts to find out information about postdoctoral research work at Humboldt-Universität.

<http://www.hu-berlin.de/postdoktoranden/>
Research Administration Division
Contact: Dr. Uta Hoffmann
Ziegelstraße 13c
D – 10117 Berlin
nachwuchs@uv.hu-berlin.de
phone: +49 30 2093 1664

Endnotes:

- ¹ Research Careers in Europe, Landscape and Horizons, A report by the ESF Member Organisation Forum on Research Careers, 2009
- ² <http://www.hu-berlin.de/studium/berweit/bw.htm>
- ³ <http://www.bzhl.tu-berlin.de/>
- ⁴ Kersting 2000 Kersting, Norbert: Promotionsstudium im Vergleich (Doctoral studies compared), Universität Marburg, 2000
- ⁵ Janson, Kerstin; Schomburg, Harald; Teichler, Ulrich: Wege zur Professur. Qualifizierung und Beschäftigung an Hochschulen in Deutschland und den USA (Routes to a professorship. Qualification and employment in higher education in Germany and the USA), Waxmann, Münster, 2007
- ⁶ Information on the legal regulations are available at: http://www.bmbf.de/pub/WissZeitVG_endg.pdf
- ⁷ <http://www.hu-berlin.de/ueberblick/leitung/pb/pb3/familiengerechte-hochschule/buero/>
- ⁸ <http://gremien.hu-berlin.de/fb/foerd>
- ⁹ <http://www.amb.hu-berlin.de/2010/6/062010>
- ¹⁰ DFG: Eine Partnerschaft – Zwei Karrieren (One partnership – two careers), Erste Tagung zu Karrierechancen für Wissenschaftlerpaare erörtert modelle für deutsche Hochschulen, Press Release No. 8, 4 March 2003.
- ¹¹ Lisberg-Haag, Isabell: Nicht ohne meinen Liebsten. Universitäten und Förderorganisationen geloben, mehr Rücksicht auf „Doppelkarriere-Paare“ zu nehmen (Not without my sweetheart. Universities and donor organizations pledge to show more consideration to "dual career couples". In: Frankfurter Rundschau, 5 March 2003.
- ¹² Nüsslein-Vollhard, Christiane: Es gibt keine Patentlösung (There is no easy solution). In: Dual Career Couples – Karriere im Duett, Mehr Chance für Forscherpaare (Career for a duet, more chances for researcher couples), DFG, 2004
- ¹³ http://www.che.de/down/downloads/CHE_Juniorprof_essur_Befragung_AP_90.pdf
- ¹⁴ <http://www.amb.hu-berlin.de/2003/42/4220030>
- ¹⁵ For example: Forschungshandbuch (Research Manual) 2008/2009, Hochschul- und wissenschaftsfördernde Institutionen und Programme (Donor institutions for higher education and science), Dr. Dieter Herrmann and Dr. K. P. Christian Spath
- ¹⁶ <http://www.kisswin.de>; <http://www.elfi.info>
- ¹⁷ <http://www.hu-berlin.de/vorlesungsverzeichnis/foerd.html>
- ¹⁸ <http://www.dfg.de/foederung/programme/einzelfoerderung/index.html>
- ¹⁹ <http://www.dbu.de>
- ²⁰ <http://www.volkswagenstiftung.de/foederung.html>
- ²¹ postdoc@daad.de
- ²² <http://www.humboldt-foundation.de/web/kovalevskaja-preis.html>
- ²³ <http://www.fritz-thyssen-stiftung.de/>
- ²⁴ <http://www.leapoldina-halle.de/cms/akademie/foerderprogramm/html>
- ²⁵ <http://www.kowi.de/desktopdefault.aspx/tabid-92/>
- ²⁶ http://www.kowi.de/desktopdefault.aspx/tabid-98/260_read-172/
- ²⁷ <http://www.esf.org/research-areas.html>
- ²⁸ http://helmholtz.de/forschung/forschung_foedern/nachwuchsfoederung/
- ²⁹ Rechenschaftsbericht der HU 2009 (Humboldt-Universität 2009 Report)
- ³⁰ http://forschung.hu-berlin.de/wiss_nachw/juniorprofessuren/tenure_jp.pdf
- ³¹ Information at: <http://gremien.hu-berlin.de/frb/berufver>
- ³² <http://gremien.hu-berlin.de/frb/berufver>
- ³³ http://forschung.hu-berlin.de/wiss_nachw/juniorprofessuren/tenure_jp.pdf