



GEORG-AUGUST-UNIVERSITÄT  
GÖTTINGEN



# CAREER PATHS IN SCIENCE AND ACADEMIA: PERSPECTIVES

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## CORE PRINCIPLES OF THE STRATEGY

The advancement of young academics and the provision of attractive career paths for academic staff are important tasks of the University.

The University offers young academics appropriate conditions for career development and indicates to them career goals and career paths within and outside the university at an early stage.

The University establishes measures for academic staff development on a permanent basis.

Gender equality, family-friendliness and diversity are important cross-section dimensions of staff development at the University.

## PREAMBLE

The advancement of young academics is a fundamental task of the University, and responsible action is taken for the sake of young academics in many places and at various levels within the University. As a group, postdocs constitute an important basis for the ongoing performance of research and teaching. The University therefore holds them in particularly high regard and offers appropriate staff development measures.

To further improve the situation, the University has made the advancement of young academics and the expansion of academic staff development activities the focus of its 'Institutional Strategy' and has addressed these matters in the University's development plan, the 'Positions and Perspectives 2014–2024' strategy process, and the 'Agreement on Objectives 2014–2018'.

The present position paper defines in a more concrete manner the framework for the advancement of academic staff that is specified by the 'Institutional Strategy', while taking into account the results of employee surveys and the various current recommendations emerging from the system of science and scholarship. In particular, it seeks to improve the situation of young academics after they have obtained their doctorate, to promote academic career paths other than that of

professor, and to make attractive career paths available to academic staff.

The aim is to indicate to young academics that concerns expressed in the employee survey, regarding what are considered to be partially insufficient working and employment conditions, are being taken seriously on the part of the University, and that the intention is to improve this situation.

Within the scope of the subsequent implementation process, the University will check the legal, financial and procedural conditions pertaining to the employment of young academics to scrutinize the extent to which they can be changed.

It is intended that the implementation of the position paper will take into account the various points of departure, conditions and needs of the Faculties. The Faculties will therefore develop Faculty-specific concepts on the basis of this document and express their positions on defined aspects of the advancement of young academics. The implementation of the papers drawn up will be evaluated after five years. Moreover, it is intended that a voluntary audit of professors will be carried out, which will lead to a certificate to demonstrate above-average commitment to the advancement of young academics.



## CAREER GOALS AND CAREER PATHS

There are various attractive career goals for young academics. Within the university, these might be a professorship, a postdoc position, a position in the field of research and information infrastructures, or a position in the field of research management. Non-university careers are available in research institutions, science organisations, public service, commerce and industry, and self-employment.

Different paths lead to the achievement of the various career goals after graduation. There should be permeability between career paths so that, even after a decision has been made

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early on, it is possible to change to a different career at a later stage.

The University presents the wide variety of career paths available to academics in a transparent way. It supports the achievement of the necessary qualifications for university and non-university career goals while taking into account equality of opportunity and the recognition of various career paths and journeys through life. At all levels, the University makes available appropriate academic staff development offerings in the form of information, individual advice, mentoring, coaching, training workshops and network building.

The University wishes to offer well-qualified academics internationally competitive and attractive career paths in order to be able to fill all positions with the people best suited to them. For career paths within the University, transparent and reliable procedures are being established.

The above-mentioned academic staff development offerings also apply to career paths in the non-university labour market. These offers are designed in close cooperation with Göttingen Campus<sup>1</sup> partners as well

<sup>1</sup> *The Göttingen Campus is a cooperative alliance between the University, the eight local*

as with partners in the commercial and societal domains.

### PATHS INTO UNIVERSITY RESEARCH AND TEACHING

The University depends on qualified scientific staff who are highly engaged in research, cover large parts of the teaching work, and perform important roles in research-related services. A permanent academic staff position can therefore be regarded as an attractive career goal, alongside that of a professorship. On the university career path, the route to a permanent position is usually via fixed-term qualification positions with the aim of attaining a doctorate, habilitation (post-doctoral academic qualification) or an achievement that is equivalent to a habilitation.

*non-university research institutions (Max Planck Institute for Biophysical Chemistry, Max Planck Institute for Dynamics and Self-Organization, Max Planck Institute for the Study of Religious and Ethnic Diversity, Max Planck Institute for Experimental Medicine, Max Planck Institute for Solar System Research, German Primate Center – Leibniz Institute for Primate Research, German Aerospace Center and the Göttingen Academy of Sciences and Humanities) and private enterprises, which are Associate Partners. The cooperation is based on the principles of voluntary participation and equality. It is founded on the recognition that Göttingen can develop its full potential as a centre of science and research only through close cooperation.*



### Qualification phases

In recent years, the University has considerably improved the advancement of doctoral students in all subjects by establishing four large graduate schools<sup>2</sup>. 'Thesis committees' provide the doctoral students with excellent academic supervision; there are extensive offerings geared to the acquisition of important key competences, and there is support for the establishment of social networks among the doctoral students.

In accordance with the guidelines issued by the German Rectors' Conference, HRK (2014), the qualification process for young academics after they have obtained their doctorate is, in future, to be divided into two phases<sup>3</sup>, which can be arranged according to disciplinary culture, with the aim of providing better support to young academics at the University:

In the first post-doctoral phase (qualification phase), the researchers will – depending on the disciplinary culture – already be

conducting independent research, or will be conducting research that is dependent on senior project managers who will be responsible for the content. In the interests of career development, this phase should not last significantly longer than three years. The decision to pursue or not to pursue the career goal of a professorship should, if possible, be taken as early as during the first postdoctoral phase. Advice from superiors and mentors in this phase is therefore of high importance. In the light of the special requirements placed on the holder of a professorship, which involve teaching ability and leadership skills in addition to academic excellence, the advice provided must be realistic and honest. The first postdoctoral phase can transition directly into other activities at the university or into a career outside the higher education sector.

In the second postdoctoral phase (decision phase), the researcher will conduct independent research on his or her own. On entry into this phase, those concerned should be largely clear about the career path to which they are aspiring, along with the opportunities and risks associated with it. It is the task of the superiors to support the decision-making process where necessary. The second postdoctoral phase should usually last between three and six years, depending on the disciplinary culture.

<sup>2</sup> Georg-August University School of Science (GAUSS), Göttingen Graduate School of Social Science (GGG), Graduate School of Humanities Göttingen (GSGG) and the Graduate School of Forest and Agricultural Sciences (GFA).

<sup>3</sup> These relate to typical career development periods. The times stated are not to be confused with the maximum fixed-term contract period according to the German Academic Fixed-Term Contract Law (WissZeitVG).



**Qualification positions**

Since the qualification of young academics is one of the University's most important tasks, an appropriate number of qualification positions should be available. These include doctoral positions and postdoc positions with the aim of achieving a habilitation financed by the budget of the institution or by third-party funds.

*Qualification positions with basic funding*

The fixed terms of qualification positions aimed at achieving a doctorate or a habilitation and financed by the basic budget should be based on the anticipated duration of the qualification phase, which can vary according to subject. The qualification goal is to be named in the job description and an appropriate proportion of the working time is to be earmarked for this qualification.

In the case of positions with the aim of a doctorate, the fixed term at the time of first appointment should not be less than three years. Extension contracts should have a minimum duration of six months. In the case of positions with the aim of a further qualification, especially the habilitation, in the postdoc phases, the fixed term at the time of first appointment should not be below three years.

In order that the qualification goal is appropriately achieved, the superiors/supervisors support and qualification training progress on a continuous basis in supervision/staff development meetings.

*Qualification positions financed by third-party funds*

In the case of qualification positions financed by third-party funds, project planning should be arranged in a way that is transparent for the employees, and the duration of the fixed-term employment relationship should be based on the duration of the approved project. When employing post-doctoral researchers in third-party-funded positions, care is taken to afford the postdocs sufficient opportunities to undertake further training and to offer them appropriate advice.

Qualification positions financed by third-party funds can present a problem as far as secured financing of the qualification phase is concerned if the project has a fixed duration of less than three years.

*Scholarships*

Scholarships that are to be financed by third-party funds can be attractive if young academics wish to concentrate on producing the dissertation leading to their qualification, especially if the scholarships concern prominent programmes, such as the Heisenberg and Humboldt fellowships. Scholarships can also offer attractive funding opportunities for young academics from abroad.

The University recognises the academic achievements that are accomplished during a period of activity as a scholarship awardee in terms of subsequent employment as academic staff as far as the law allows. Recipients of scholarships are informed in a timely manner about the restrictions regarding pension legislation that pertain to scholarships and, especially, the fact that an activity within the framework of a scholarship does not represent employment that is subject to social security contributions.

*Junior professorships with and without 'tenure track' option*

For young academics who wish to achieve independence early on, junior professorships (W1) without a 'tenure track' option are a good springboard into academic careers, including university professorships. On their entry into a professorial career, the University supports junior professors by offering appropriate training programmes.

Where the researchers concerned meet the high standards required in terms of their performance, junior professorships with a 'tenure track' option offer a reliable framework for working towards a professorship. The University awards junior professorships with 'tenure track' only where, in the event of positive evaluation, they can be extended by an existing W2 professorship. This implies that junior professorships (W1) with 'tenure-track' can be made possible through advance planning with respect to W2 professorship positions.

### Functional positions

Functional positions that comprise academic tasks of a permanent nature at the University should be filled on a permanent basis with staff best suited to the work, in accordance with the role and with regard to the necessary expertise. Academic staff employed in permanent functional positions perform academic services bound by instructions in research, teaching or other roles in the area of the complex academic research and information infrastructure. The work is characterised to a significant extent by collaboration with the other members of the organisational unit.

In conformity with the Lower Saxony Higher Education Act (Niedersächsisches Hochschulgesetz; NHG), there should be the opportunity for all academic staff working in the area of research, and hence also the holders of functional positions, to carry out third-party-funded projects independently, in agreement with the relevant superior. For the supervision of doctoral students by academic staff within the scope of such projects, the University will develop solutions such as those adopted in the Emmy Noether Programme and the graduate schools.<sup>4</sup>

<sup>4</sup> For instance, the University, as a host institution, grants the junior research group leaders in

The University has established initial staff development measures to provide academic staff with regular training for their current work and, as the case may be, prepare them for other positions that they might occupy along their career path.

Teaching staff with special tasks and assistant lecturers primarily undertake teaching duties and should be employed in permanent positions in the interests of good teaching. For teaching staff with special tasks, further training measures should be offered, and assistant lecturers should be given the opportunity to undertake training in the teaching of the language, geography, history and culture of the relevant countries on an ongoing basis, by means of regular stays abroad.

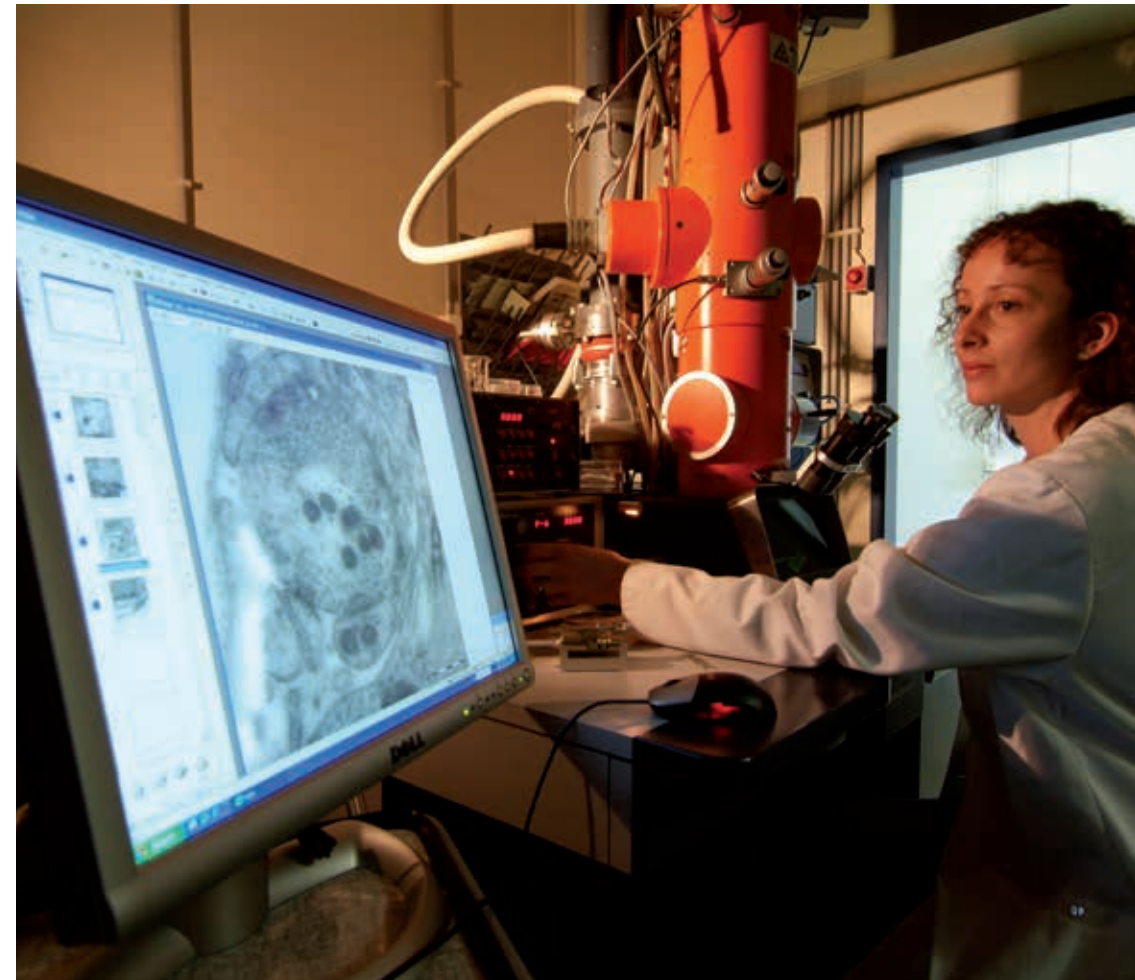
The job profiles of functional positions in the University are to be clearly set out in the advertising for these positions, and the requirements placed on applicants are to be discussed in the course of the selection and recruitment procedures. The selection procedures are

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*the Emmy Noether Programme the right, as standard, to lead doctoral students towards conferral of a doctorate. In the graduate schools, those who have gone through a procedure equivalent to an appointment procedure and are accordingly entrusted with the performance of research and teaching tasks can also be appointed as examiners.*

carried out in a transparent manner with the participation of colleagues from the Faculty. Agreements with employees about the tasks to be performed provide clarity for both parties. Potential promotion opportunities and the correspond-

ing evaluation criteria are to be transparently represented.



## **PATHS INTO NON-UNIVERSITY RESEARCH INSTITUTIONS**

Research institutions, such as the Max Planck, Helmholtz and Leibniz institutes, offer attractive positions for researchers in non-university research. Insights into these institutions and the career paths that are possible within them can be obtained through contact with these institutions during the doctorate and in the postdoc phase. Attractive positions in the area of more strongly applied research are offered in institutions such as the Fraunhofer institutes and in departmental research as well as in public institutions, including international institutions.

Universities of applied sciences (also referred to in German as Fachhochschulen) and those educational institutions which do not fall within the responsibility of the state and which are recognised as higher education institutions offer young academics positions in teaching, continuing education and practice-oriented research and development. In addition to pedagogic and didactic aptitude and the ability to undertake in-depth academic work on an independent basis, special achievements attained during a period of professional practice of at least five years are prerequisites for a professorship at a university of applied sciences (§ 25 Section 1 No. 4c) NHG).

## **PATHS INTO RESEARCH AND INFORMATION INFRASTRUCTURES**

Research requires access to infrastructures and services. Such structures include, in particular, large apparatus, laboratories, libraries and information technology. The attractiveness of a centre of science and research depends on the availability and accessibility of such resources. The University therefore supports researchers in particular with laboratories used on a joint or cooperative basis, and with the high-quality interdisciplinary provision of information technology. For setting-up, operation, development, advice and training in these facilities, suitable employees are crucial.

In order to perform research that is increasingly being conducted on the basis of digital technology, methods specialists, in particular, are required for the purposes of software development, project management, information management, academic publishing and handling research data. The combining of these skills is giving rise to new professional fields in the context of academic information infrastructures. This applies both to the natural sciences and to the humanities and social sciences.



## **PATHS INTO RESEARCH MANAGEMENT**

Structures such as interdisciplinary centres and international networks, and the greater degree of autonomy within the system of higher education, have led to the emergence of numerous new tasks in the area of research management. These positions offer young academics attractive fields of work within the University. Many interfaces and synergies with administration arise from the tasks in the area of research management. The University will define clearly the tasks in both areas and continue to optimise the collaboration.

In addition, the major science organisations and research funding agencies offer attractive positions concerned with research coordination, the drawing up of papers on science policy, and the domain of proposals and evaluations.

The University supports entry into research management through a special mentoring programme. In addition to the mentoring relationship with experienced science and research managers at the University, this programme offers doctoral students and postdocs insights into the areas of activity pertaining to research management through work-practice shadowing. For employees working in research management, the University will offer a training programme with workshops, networking events and the opportunity to observe working processes.



## PATHS INTO COMMERCE AND INDUSTRY

In addition to remaining in the university environment, employment in enterprises and business related institutions also offers young academics attractive areas of work that are chosen by the majority of young scientists and scholars. In certain areas, the opportunity exists for young academics to continue to carry out research-oriented activities. In other areas, young academics are needed to undertake new specialist and management tasks. The University's partnerships and networks with commerce and industry at the regional, national and international levels open up good entry-level opportunities and prospects.

Contacts between young scientists and scholars and regional commerce and industry are initiated via colleagues at the relevant institution, and making such contacts is facilitated by centrally held events. To offer further depth, a mentoring programme, in which experienced managers from enterprises act as mentors, prepares doctoral students and postdocs for the path into commerce and industry. As in the case of all other mentoring programmes, training measures enable key competences to be acquired.

In future, the existing contacts with regional commerce and industry will continue to be made available for use by young researchers who, during the doctoral phase, postdoc phase or after completing their habilitation, are considering the career goal of working in the industrial and services sector or in applied research. In the development of supporting measures, the specific features of the labour market, which are reflected for example in the qualification requirements stated by employers, are to be taken into account.

Together with MBM ScienceBridge GmbH<sup>5</sup>, the University offers an advisory service for researchers who are planning patent applications, and, together with non-university partners, it is expanding the provision of advice for spin-off companies.

<sup>5</sup> MBM ScienceBridge GmbH, a subsidiary of the University, is a technology transfer service provider. It evaluates, protects and markets inventions from higher education institutions and research institutions.

## ACADEMIC WORKING CONDITIONS

In the domain of science and scholarship, the creativity and commitment of the employees is a prerequisite for success. Favourable work and employment conditions are therefore implemented at the University in order to attract the best staff and to give them the freedom to act creatively.

For academic staff working in research and teaching as well as those in positions in the areas of research and information infrastructures and research management, the University offers reliable conditions in which staff gain recognition for the value of their work.

## ACADEMIC STAFF DEVELOPMENT

Academic staff development programmes and measures at the University are offered by various institutions that cooperate with each other and have come together to form a network. The network is preparing a mission statement entitled "Academic Staff Development at the University" and drawing up staff development standards.

Together with the Faculties, the University presents the staff development offerings in a visible and transparent way, and it will identify further staff develop-

ment measures. For the implementation of the staff development measures, the University is making its own resources available as well as attracting further financial resources.

The University will play an active role in national and international staff development networks, assimilate impulses for enhancing the academic staff development system, and work proactively in this context.

## STAFF STRUCTURE AND STAFF PLANNING

An important feature of staff structure is the balance between fixed-term training positions and permanent qualification positions. This structure determines the profile of positions in the Faculties and hence in the University as a whole. It has an effect on the efficiency of the Faculties and institutions as well as on the career opportunities and the job satisfaction of the academic staff.

Together with the Faculties, the University will therefore systematically identify, describe and define the roles and activities that are to be maintained on a permanent basis in academia. On this basis, functional positions will be established and filled.

In regard to staffing structure, the University is striving to achieve a long-term, data-based staff planning system based on its strategic objectives and on the needs of the Faculties and interdisciplinary areas.

To this end, reliable data on the type and number of existing academic positions in the areas of research and teaching, research and information infrastructures, and research management are to be collected on a regular basis via key figures.

An annual staff report will provide information about the status quo and the development of the staffing structure. As part of this process, the gender and diversity perspective will be taken into account as a component of the key figures to identify possible instances of disadvantage and to design measures in ways that are in keeping with gender equality, family friendliness and diversity.

## COLLABORATION ON THE GÖTTINGEN CAMPUS

The advancement of young academics and researchers in general is an important task of all university and non-university institutions on the Göttingen Campus. The intention in this regard is to ensure that Göttingen, as a centre of science and scholarship, continues to be attractive to researchers from Germany and abroad in the future.



## SOURCES

### POLICY PAPERS AND GUIDELINES

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### INTERNAL STRATEGY DOCUMENTS

Entwicklungsplan der Universität 2013–2017 [Development Plan of the University 2013–2017] (May 2013).

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### LAWS

Niedersächsisches Hochschulgesetz [Lower Saxony Higher Education Act] (NHG) in the version dated 26 February 2007 (Nds. GVBl. 2007, 69) as last amended by the law of 16/12/2014 (Nds. GVBl. p. 436).

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