Support for Researchers in the Early Career Phase at Goethe University Frankfurt

Aims and definitions

At Goethe University, we refer to doctoral and postdoctoral researchers in the qualification phase as "early career researchers" (ECRs). They contribute substantially to innovation and the development of new ideas, hypotheses and methods. They are indispensable for the successful execution of research projects as well as the conceptualization and realization of research-oriented teaching concepts at Goethe University. They thus make a full-fledged and independent contribution to university teaching and the research process.

Goethe University wishes to make this important work and role of ECRs visible and acknowledge them commensurately. Through **tailored support and preparation for a variety of career paths**, it offers researchers in the early career phase optimal conditions for their qualification and career development. At Goethe University, we live a culture of support, esteem and shared responsibility. In this context, three key principles in particular govern our actions:

- A. We foster academic independence and individual responsibility.
- B. We are committed to transparent and high-quality **qualification**, **supervision** and **mentoring structures**, with equal access for all ECRs.
- C. We shape the **transitions** between academic career phases and various professional fields both within and outside the university in an individual and tailored approach.

The aim of this support is to enable the implementation of academic projects in line with the highest academic standards, to attract excellent national and international researchers to Goethe University and the regional scientific landscape with the alliance of Rhine-Main Universities (RMU), and to qualify outstanding academics for all sectors of our society, including business, politics, culture and the public sector.

In order for ECRs to fully develop their potential, it is necessary to create **freedom** and to facilitate their **active involvement in shaping** a transparent and constructive working and research environment. Our general **university framework**, which formally regulates participation, provides structures for important areas, defines standards for certain issues and takes various career options into consideration, makes an important contribution. In addition, **practical measures and programs** aligned with various career paths encourage researchers' development and open up new perspectives for them. As the initial comprehensive and central point of contact and advice for researchers in the early career phase, the **Goethe Research Academy for Early Career Researchers (GRADE) at Goethe University** provides information on existing offers. When selecting and designing support services, the focus lies on the **perspectives and needs of the target groups** in the respective career phases as well as their **individual requirements**

according to their level of knowledge and career goals. In its classification of career phases, Goethe University follows the model of the European Union, in which early career phases are denoted as R1-R3 (Table 1).

		European Framework for Research Careers (2011)	Phasenmodell der Goethe-Universität
Early Career Researcher ECR	R1	First Stage Researcher (up to the PhD)	Researchers up to the point of a completed doctoral degree / award of the doctoral degree
	R2	Recognized Researcher (PhD holders or equivalent who are not yet fully independent)	Researchers with a completed doctoral degree who have not yet led a research project independently and autonomously
	R3	Established Researcher (researchers who have developed a level of independence)	Researchers with a completed doctoral degree who have led a research project independently and autonomously in the qualification phase
Tenured researchers and professors	R3 [™]	Established Researcher (researchers who have developed a level of independence)	Researchers with a completed doctoral degree who have led a research project independently and autonomously and hold a permanent post
	R4	Leading Researcher (researchers leading their research area or field)	Researchers with independent status and international visibility in their research field

Table 1: Phase model

The transitions between the career phases and career options are of particular significance (Figure 1), since, overall, only few graduates and postgraduates remain in the academic system and most end up working in non-university environments. Goethe University prepares ECRs for the decisions necessary at these transition phases so they can plan and shape their further career path in an informed manner. When supporting and planning these decisions, the university pays particular attention to creating equal opportunities. The aim is to provide graduates and ECRs at Goethe University equal access to career options both within and outside the university, to dismantle existing structural hurdles and barriers and to implement an appreciative approach to heterogeneous life situations and identities.

Professorship R4

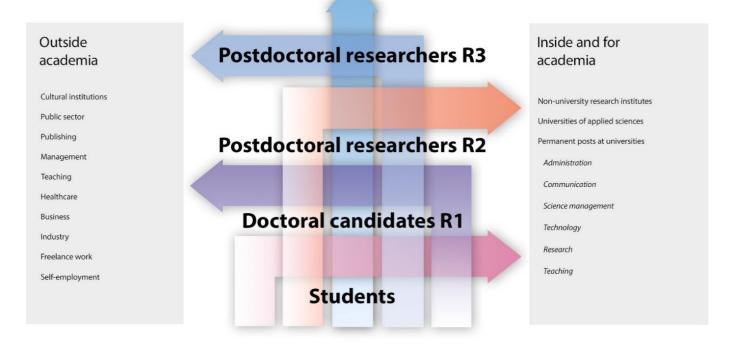


Figure 1: Transitions

Overarching services and structures

The central element in the support of ECRs is **academic work**, which, conducted at the highest level and in compliance with universally recognized academic criteria, lays the groundwork for their further careers in a wide variety of positions in academia, society and business. To this end, infrastructural **prerequisites and parameters** are anchored in Goethe University's mission statements, guidelines and general regulations. Here, the German Research Foundation's (Deutsche Forschungsgemeinschaft, DFG) <u>Principles of Effective Career Support in Academia</u> constitute an important basis, among others.

To help ECRs **organize their further qualification autonomously**, Goethe University provides many opportunities for orientation, skills acquisition, networking and decision-making (career planning). Participation in upskilling measures is a valuable constituent for career development, which Goethe University regards as an important part of the qualification process in the R1-R3 phase. To **foster early academic independence**, Goethe University offers structural and financial support. Demand-oriented contact points help with problems and the solving of possible conflicts.

The support structures of the <u>Goethe Research Academy GRADE</u> (cf. Figure 2) serve as a point of contact, offering advice and guidance for all academics in the career phases R1-R3: Master's students interested in a doctoral degree as well as doctoral candidates and postdoctoral researchers enquiring about assistance with career development, or tenure track professors wishing to develop specific skills. For each career phase, there is one contact person at the GRADE Office (GRADE Support) who provides

initial advice, so that specific, demand-oriented offers can be quickly identified. GRADE Support delivers information on centrally and decentrally organized courses, current events, workshops, advisory services and support programs (available from GRADE Support, GRADE Centers, GRADE Initiatives, GRADE Academies, departments, centers and faculties). All contact persons as well as programs for specific target groups and areas of expertise are easy to find on the GRADE website. The GRADE course program is updated every semester and adapted according to requirements.

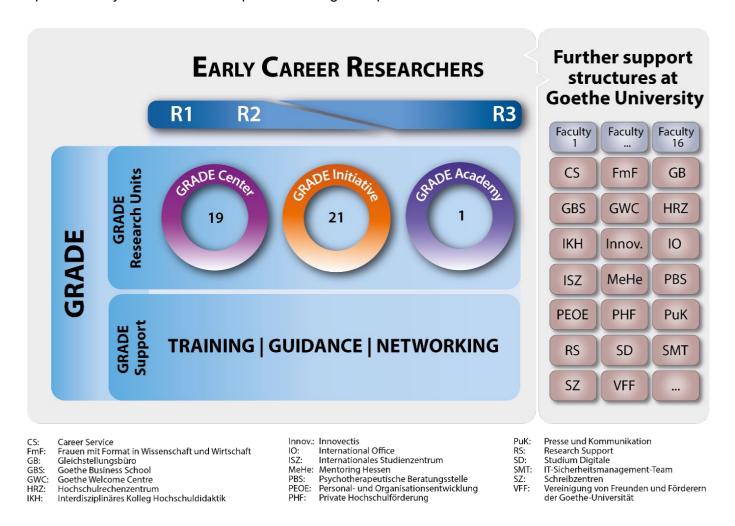


Figure 2: Support Structures for Early Career Researchers

The aim of the measures organized or mediated by GRADE Support is demand-oriented further qualification in wide-ranging competence fields and subject areas. In addition to the **specialist competencies** required in academia, measures also cover **interdisciplinary topics**: leadership, management, communication competencies, teaching, didactics and digitalization, social and diversity competencies as well as teamwork, international competencies, interdisciplinarity and creativity. Specialist, communication and social competencies are important in each career phase. Other competencies are more in demand in later phases: leadership tasks become far more demanding and complex, for example, when assuming responsibility for a working group or when more extensive teaching tasks or alternative teaching formats are

required. Table 2 shows the significance of various fields of competence for the tasks expected in career phases R1-R3.

Definition of competencies: In the highly flexible world of work, it is important to continuously adapt to new questions and problems and to react flexibly and creatively to challenges. This is especially true for scientific work in academic and non-academic fields. In the debate among experts, context-specific knowledge or the skills needed to master complex and demanding tasks are subsumed under "**competencies**". Competencies are not only developed implicitly during academic work but can also be further expanded through targeted qualification offers.

	R1	R2	R3
Specialist competencies			
Social and diversity competencies			
International and intercultural competencies			
Digitalization competencies			
Capacity for teamwork			
Creativity			
Organizational competencies			
Science communication			
Management competencies			
Didactic and teaching competencies			
Interdisciplinarity			
Leadership competencies			
Low need Medium need			High need

Table 2: Acquisition and development of competencies by qualification phase

In all qualification phases, it is particularly important that ECRs' supervisors and mentors facilitate access to infrastructures and networks and safeguard the academic quality of their projects in the best possible way through an appropriate balance of support and individual responsibility. In addition, further support is required to ensure the best possible development of talents:

- Qualification programs for the development of specialist competencies and transferable skills.
- Advice, coaching, mentoring on how to develop solutions to problems, plan further career steps or implement own ideas in products and services, with a special focus on the transitions between qualification stages, also with a view to the non-university sector.
- **Financial support** for the implementation of ECRs' own interdisciplinary research ideas and to foster independence, as well as grants for specific requirements, e.g. to support young families.
- Guidance and networking in meeting spaces to exchange ideas on contents and methods.

As a **family-friendly university**, we take special care to support researchers with children and families, for example through the Family Service of our Equal Opportunities Office, childcare centers on our campuses and the development of work-time models that offer sufficient flexibility for staff and their families.

Table 3 provides an overview of the measures and structures available for ECRs at Goethe University.

areer Phase	Measures and Structures	Aim ¹					
Principles and Parameters							
	Gender Equality and Diversity Action Plan	В					
All	Anti-Discrimination Policy	В					
	Contact points for problems and conflicts	В					
R1	General Conditions for the Doctoral Regulations of Goethe University & Doctoral Regulation of the Faculties	В					
	Guidelines for the Supervision of Doctorates	B B, C					
R2	Concept for career paths for researchers in mid-level academia						
R3	Tenure Track and Appointment Statutes	A, B					
	Qualification						
	Specialist training	А					
	Academic methods, academic writing and presentation techniques	Α					
	Management and communication competencies	Α					
All	Language acquisition and language service	Α					
All	Social/leadership competencies	Α					
	Teaching and didactics	Α					
	Career development	С					
	Gender/diversity awareness	Α					
R1	eLearning course "Good Academic Practice during Doctoral Studies"	A, B					
	Training for professorial appointment procedures	С					
R3	Clinician and Medical Scientist Program	A, C					
KS	Training for supervisors	A, B					
	Onboarding for newly appointed professors	С					
	Advice and Coaching						
	Individual coaching	A, C					
	Career advice	С					
All	Information/advice on funding landscape and acquisition of external funding	A, C					
	Research supervision: research ethics/experiences of violence	Α					
	Self-care and self-management	Α					
	Information and advice on starting a doctoral degree	С					
	Exposé workshop	С					
R1	Workshop series "Get prepared for the future"	С					
	Mentoring ProCareer.Doc: development of individual career strategies for female researchers	A, C					
	Mentoring ProAcademia: strategic career planning for female researchers	A, C					
R2	Postdoc Peer Groups	А					
	Grant proposal coaching (Fokus A B Program)	A, C					
R3	Mentoring ProProfessur: strategic career planning and scientific profile building for female researchers	A, C					

¹ A: Fostering of academic independence and individual responsibility | B: Access to transparent and high-quality qualification, supervision and mentoring structures | C: Needs-based design of the transitions between academic career phases.

Career Phase	Measures and Structures					
	Mentoring for tenure track professors					
Guidance and Networking						
	Career guidance	С				
	Network building	A, C				
All	Welcome and support measures for international researchers	B, C				
	Dual Career and Family Service	B, C				
	Career fairs	С				
R1	Council of Doctoral Candidates Representatives					
R2	"Kurswechsel-Konferenz" – career conference for female researchers	С				
	Postdoc Day	A, C				
	Johanna Quandt Young Academy at Goethe (JQYA) membership and fellowships	A, C				
R3	Network of female R3 researchers and newly appointed professors	A, C				
	Reception for newly appointed professors	С				
Financial Support						
A 11	Seed finance/funds for own projects	A, C				
All	Funds for conferences and travel	Α				
R1	Information, advice and workshops on financing a doctoral degree	С				
KI	Grants for specific requirements (esp. international doctoral candidates and families)	B, C				
R2	Seed finance for first proposals (Fokus A B Program)	Α				
	Sabbatical Fellowships	A, C				
R3	Support for international mobility	A, C				
	Project support	Α				

Table 3: Measures and Structures for ECRs

Support objectives and measures in specific career phases (R1-R3)

R1 – Researchers in the doctoral phase

The primary qualification goal for doctoral candidates is to acquire the necessary specialist competencies required for independent academic work. Important are additional transferable skills that doctoral candidates can acquire, depending on the cultural exigencies in their respective subject, by organizing their own research project or collaborating in research groups, and that they can systematically expand through qualification measures (cf. Table 2). These make it possible to structure the doctoral degree successfully and pave the way for careers within and outside academia. To this end, Goethe University offers comprehensive interdisciplinary qualification programs (cf. Table 3).

The doctoral phase in particular is characterized by career decisions, starting with the decision for or against a doctoral degree. Here, Goethe University offers guidance and support. During the doctoral degree, the planning and preparation of the next steps on the path to the academic and non-academic employment market constitute central topics and are therefore a focus of the university's support and advice structures.

Career planning in the doctoral phase

Goethe University has various measures in place for persons interested in undertaking a doctoral degree and for doctoral candidates, which allow them to prepare in the best possible way for the great abundance of career paths and the various career goals conceivable after their studies, including:

- **Information events** and **advisory sessions** for advanced master's students as a source of guidance and assistance in their decision for or against a doctoral degree.
- **GRADE Career Talks** as well as **career fairs** organized by the Career Service allow doctoral candidates to familiarize themselves with various fields of work and career prospects and to enter into direct dialog with specialists and managers from professional practice.
- **GRADE Workshops** provide systematic support for career planning and entering a profession.
- Specifically for female researchers, the ProCareer.Doc and ProAcademia funding lines within the Mentoring Hessen program provide practical insights and better orientation on career options in academia, business and science management.

In the doctoral phase especially and in addition to the wide variety of demand-oriented qualification measures and advisory services, a transparent and cross-university framework is very important as a reliable foundation for doctoral candidates' first independent research projects. A binding supervision agreement at the beginning of the doctoral degree, which documents the main features of the thesis and regulates the responsibilities of supervisors and doctoral candidates, forms the basis for managing expectations in a transparent way and helps to achieve the doctoral goal. Important common requirements, processes within doctoral examination procedures as well as supervision standards are governed by the General Doctoral Regulations, by subject in the doctoral regulations of the faculties and in the Guidelines for Doctoral Supervision. If conflicts arise during the doctoral phase, doctoral candidates are free to approach the GRADE ombudspersons.

To create the necessary freedom for academic independence, GRADE advises on funding opportunities for the doctorate.

R2 - Researchers in the orientation phase

When starting work as a postdoctoral researcher, it is essential to upgrade one's specialist competencies in the own academic field and related subject areas, along with increasing academic independence and profile building. At the same time, the R2 phase is an orientation phase in which researchers must prepare for different career paths and acquire the corresponding competencies for professional fields both within and outside academia (cf. Table 2). Expanding one's national and international networks to consolidate one's own position and reputation in the academic landscape is one of the goals in this career stage. Goethe University offers postdoctoral researchers numerous opportunities for customized and targeted further qualification (cf. Table 3).

Career development in the orientation phase

Goethe University supports postdoctoral researchers in the areas of orientation and qualification for their further career paths within and outside academia, among others by:

- Illustrating different career prospects and encouraging the formation of professional networks within formats such as the GRADE Career Talks, GRADE Workshops and the "Kurswechsel-Konferenz" or specifically for female researchers within the ProAcademia funding line of Mentoring Hessen.
- Advice and seed finance for ECRs' own projects and third-party projects (e.g. within GRADE's Fokus Program), which enhance researchers' visibility and academic independence.
- A large number of advisory and coaching formats, such as peer counselling within postdoctoral peer groups.

Goethe University creates the best possible conditions for postdoctoral researchers so they can develop their potential unhindered and concentrate on their individual career goals. These include, among others, participation opportunities, where researchers can articulate their specific requirements in the orientation phase and contribute to the future design of university structures. In addition, specialist departments offer comprehensive expertise and services, for example on research data management and open access publication, acquisition of external funding, teaching and didactics, or the reconciliation of family and career, to support postdoctoral researchers in all academic and career-related concerns and challenges to the best possible extent.

R3 – Researchers in the decision-making phase

The R3 phase is mainly characterized by the researcher's systematic preparation for a professorship or other management function. The focus lies on raising their profile in terms of academic independence to enhance their visibility in the academic community. The acquisition of external funding, the publication of research results and networking in the specialist community are of central importance for the further course of their careers. Strategic project planning, writing competencies for complex proposals and a skilled use of alliances are therefore important success factors in this context. Preparing for professorial appointment procedures, qualifying for management tasks and staff responsibility as well as contributing to university committees, professional associations or journals, for example as an editor or reviewer, also become increasingly significant in this phase. The support offered by Goethe University in the R3 phase (cf. Table 3) centers on promoting independence in research and teaching as well as individual advisory and coaching measures.

Career design in the decision-making phase

Goethe University offers advanced researchers on the path to or at the point of transition to a permanent professorship or other management function a selected portfolio of career-enhancing measures and services, including:

- Customized qualification programs, e.g. via GRADE Workshops, above all in the areas of leadership and human resource management, acquisition of external funding, teaching and diversity competencies, as well as training for professorial appointment procedures.
- Tailored support for the acquisition of prestigious individual grants (Emmy Noether, ERC grants, etc.).
- Comprehensive advice, mentoring and coaching for R3 researchers, e.g. within the ProProfessur funding line for advanced female researchers or the mentoring program for newly appointed tenure track professors.
- As a platform for individual career development for postdoctoral researchers, the <u>Johanna Quandt</u> <u>Young Academy at Goethe</u> offers its members a wide and varied portfolio:
 - Intellectual advancement with a yearly academy program on a global theme
 - Financial support within several pertinent funding lines
 - Inclusion in existing networks
 - A forum to discuss socially relevant and higher education policy issues and co-shape the university's further development

At Goethe University, researchers in the R3 phase find the formal and structural prerequisites they need for their personal free development. Faculties and institutes offer freedom and provide the facilities necessary for **conducting independent research projects**. In addition, advanced postdoctoral researchers can obtain funds for their specific needs in the various funding lines of the Johanna Quandt Young Academy at Goethe – from support for continuing education and networking measures to sabbaticals. **Tenure track professorships**, which Goethe University began advertising in 2007, are subject to a transparent and binding advertising and evaluation process regulated by university statutes. They are awarded their own appointment funding and may also make use of all the offers and support measures that are available to appointed professors. A **permanent employment concept** structures new career paths in academia and offers reliable and long-term career prospects alongside professorships. For researchers new to the university, the **welcome programs** of the International Office, the Dual Career Service of the Equal Opportunities Office or the 100-day program for newly appointed professors help facilitate their start at Goethe University.