

Postdoctoral researchers at European universities: profiles, roles and institutional support structures

EUA-CDE Thematic Peer Group report

Chair: Tim Engels, University of Antwerp, Belgium
Coordinators: Alexander Hasgall & Ana-Maria Peneoasu

March 2024

To cite this report

Engels, T., Hasgall, A., Peneoasu, A. & Hanenberg, P. (2024), Postdoctoral researchers at European universities: profiles, roles and institutional support structures, European University Association.



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European University Association asbl

Rue du Rhône 114

Case postale 3174

1211 Geneva 3, Switzerland

+41 22 552 02 96

www.eua-cde.org · info@eua-cde.org

Introduction

Postdoctoral researchers play an essential role in the European higher education system as they make an important contribution to research, education and outreach to society. During the postdoctoral period, meant to be a transitional career phase, they perform cutting-edge research, take up various responsibilities in academic education and very often contribute to the realisation of wider cultural, economic and/or societal impact of research. They present their findings to society, are involved in teaching and mentoring of junior researchers, while also contributing to the academic community and the development of knowledge across various fields.

Despite their valuable contribution to the research environment, the situation of postdoctoral researchers remains [challenging](#) in Europe. Several reasons can serve as an explanation in this regard. First, postdoctoral researchers face critical issues related to their employment status, going from temporary or short-term contracts to multiple postdoctoral positions with limited chances for career progression in academia. In addition, it has become increasingly common for postdoctoral researchers to remain in [successive postdoctoral roles](#) for several years, sometimes with just a small hope of long-term academic appointments. Part-time employment is often also a burden, as postdocs tend to work full-time to ensure advancement of their academic careers but are paid only for a fraction of their invested time, as funding may be limited.

According to a 2017 [survey](#) conducted by the European network of postdoctoral associations, the majority of respondents reported working more hours than indicated in their contracts, while a [study](#) carried out in six European countries suggests that early-career researchers experience an increased workload and face significant pressures in terms of scientific productivity as well as the performance of several other tasks requested at this stage. Moreover, the charged volume of work can significantly conflict with their private life, leaving little time for social activities or family responsibilities. The results of this study also suggest that the goal to maintain an appropriate work-life balance is both widely desired by early-career researchers and very difficult to achieve in the academic world. This frangible framework, characterised by [precarity](#) means that the postdoctoral population often reports several issues simultaneously, including mental health challenges, lack of recognition for their expertise and high employment insecurity. Precarious working conditions can also have a negative impact on the [diversity](#) of a scientific community, as researchers from lower socio-economic backgrounds may be less willing to take the risk of an academic researcher career. There are also some indications that women may be particularly affected by this condition.

Another aspect that further complicates the issue is the lack of consolidated information about the situation of postdoctoral researchers at European higher education and research institutions, along with limited knowledge regarding career opportunities or the size of this population.

Career and financial insecurity, unstable working conditions, high publication and grant pressures and work-life imbalances have motivated many European universities to step up their institutional support to shape highly skilled and well-rounded postdoctoral researchers, ready to explore a variety

of job opportunities both inside and beyond academia, and to provide them with specific services and infrastructures. Besides the institutional responsibility for this part of the academic population, there is also a need to better their situation in order not to lose talent who may not be willing to enter academia under present conditions.

Other stakeholders active in this field have also perceived the timeliness of this topic. In the framework of the European Research Area, the European Commission announced in July 2023 [a set of measures](#) to empower research careers. These measures will contribute to ERA action 4 and they include a proposal for a Council Recommendation for a new European framework for research careers, a new Charter for Researchers and the European Competence Framework for Researchers (ResearchComp), adopted in December 2023.

Given the need to gather further evidence at the European level, advance the knowledge about postdoctoral researchers and provide an overview about the current offers at European universities, EUA-CDE established in 2023 a Thematic Peer Group (TPG) focused on the topic of “*Profiles and institutional support for postdoctoral researchers*”. With 28 EUA-CDE member representatives from 16 countries, this working group aimed at exploring the status of and key activities performed by postdoctoral researchers. It further discussed the increasing institutional support and tailored services and resources designed for this population concerning career development, training, funding, teaching as well as childcare responsibilities. Members of the 2023 Thematic Peer Group also reflected on how to better accommodate the needs of postdoctoral researchers and produced recommendations about how to improve their conditions and enrich their experience during the postdoctoral period. In addition, the report presented examples of good practices, suggesting possible ways of enhancing the institutional support for postdoctoral researchers.

This report serves as a source of reflection for academic leaders, doctoral school managers and professionals on developing the support provided to postdoctoral researchers, suggesting ways to make the postdoctoral period a positive and fruitful experience.

Definition and profile

Supporting the population of postdoctoral researchers and enriching its experience requires a systematic definition that enables universities to identify this group.

The current lack of a common definition and understanding of the distinguishing features of postdoctoral researchers arises from the heterogeneous nature of their roles, duties, and status, varying according to national, institutional, disciplinary and/or local contexts. The lack of consensus is evident in the multiplicity of titles (postdoctoral research fellow, research assistant, junior/senior researcher, research associate, scientific collaborator, project employee/staff, etc.) applied to describe postdoctoral researchers, the titles differing not only between countries but also among universities within the same country. In addition, institutional databases, particularly of human resources, are often not adequately designed to capture the specificities of the group.

To provide clarity for its work and build the conversation based on a shared understanding of the different notions associated with postdoctoral researchers, TPG members have identified the following working definition. While this definition encompasses several aspects about the nature of a postdoctoral position, it is certainly not exhaustive, potentially omitting exceptional cases. It is important to acknowledge that the following definition does not cover postdoctoral researchers employed by companies or governments, given the distinct context of their employment compared to those working at universities. Nevertheless, it does cover shared university-company postdoctoral positions.

A postdoctoral researcher is someone holding a doctoral degree, whose primary activity is conducting research and who is in a transition phase towards a long-term career path inside or beyond academia.

In addition, it was agreed that the postdoctoral position is a temporary or limited term appointment. It serves as a period of professional training and development which allows further specialisation in a specific field and the acquisition of skills necessary for advancing along a defined career trajectory. Typically, postdoctoral researchers are still in the process of gaining their independence from the scientific point of view under the general supervision of a principal investigator (PI) or a non-academic mentor.

Postdoctoral researchers are also often perceived to be on a path towards leadership, whether within or beyond academia.

In relation to the [European Researcher Career Framework](#), postdoctoral researchers are typically in the R2 category, sometimes approaching R3. Tenure track professors should not be considered as postdoctoral researchers, even if in some cases their tenure track may begin shortly after obtaining their doctorate.

During the group discussions, consensus emerged on the need to reflect on an overall duration of the postdoctoral period to prevent the so-called '[permadoc phenomenon](#)' (accumulation of consecutive fixed-term or temporary contracts). In this context, TPG members often considered 5-6 years beyond the completion of the doctorate as an appropriate timeframe for the postdoctoral research phase, allowing room for flexibility in specific cases.

The type of funding can be considered as the key determinant in distinguishing different sorts of postdoctoral positions. Postdoctoral positions can be funded in several ways, and the group identified three primary funding streams available in their countries:

- ◆ funding granted by a ministry, a national science foundation, an international agency or a private foundation (typically in the form of fellowships/ scholarships);
- ◆ third-party project based funding, e.g., Horizon Europe projects or collaborations with stakeholders such as companies. On the whole, postdoctoral researchers devote almost all their time to achieving the goals of the specific project;
- ◆ funding sourced from the university. The main difference of this type of postdoctoral position lies in the inclusion of teaching duties as a core part or, in some cases, the focus of postdoctoral activities, demanding even more time than research.

While this is not an exhaustive list, this differentiation points to three key denominators which describe postdoctoral researchers' profile.

Responsibilities and activities performed by postdoctoral researchers

Postdoctoral researchers are widely recognised as a very productive group of individuals both inside and outside academia, given their essential contribution to the conduct of research, high-quality education and the advancement of knowledge across different research fields. They are also strong drivers of innovation, supporting European knowledge economies.

Despite their substantial impact on the advancement of research, they are also engaged in a broad range of tasks and activities, according to the TPG members. The findings from the 2021 [EUA-CDE survey](#) confirm this pattern.

Postdoctoral scholars play an important role in contributing to the scientific enterprise and to the research and teaching missions of universities.

Areas of activities of postdoctoral researchers, apart from conducting research, include:

- ◆ writing scientific publications;
- ◆ disseminating research results in view of wider cultural and/or societal impact;
- ◆ contributing to innovation and engaging with knowledge transfer and valorisation activities;
- ◆ supervising:
 - undergraduate and graduate students (bachelor's and master's programmes) and doctoral candidates
 - junior postdocs (in the case of senior postdocs);
- ◆ mentoring;
- ◆ teaching;
- ◆ writing grant proposals;
- ◆ managing projects;
- ◆ managing research data;
- ◆ managing laboratory equipment and consumables;
- ◆ participating in committees / decision making boards;
- ◆ initiating or actively participating in the organisation of events;
- ◆ performing administrative work;
- ◆ undertaking research stays.

While individual postdoctoral researchers may deal only with a subset of all these tasks, this comprehensive overview illustrates their involvement in almost all academic activities, even when these responsibilities may not always be explicitly mentioned in the job profile and be part of the remuneration system.

This wide array of tasks performed by postdoctoral researchers can be summarised into three main areas of activities:

1. research, innovation and knowledge valorisation
2. teaching
3. administration

As a postdoctoral position entails a considerable number of duties, the working group also focused on the implications these daily activities have on effective time management. Not surprisingly and aligning with findings from the 2021 EUA-CDE survey, TPG members observed that researchers dedicate most of their working hours to academic research and innovation. However, the time investment outside of the research performance is noteworthy in several universities. In particular, the amount of time spent on teaching or administration activities was estimated to be approximately one day per week. Overall, this overview shows that postdoctoral researchers are faced with a workload that exceeds a standard full-time position, with overworking being a common phenomenon.

In addition, the different funding sources often have an influence on researchers' daily activities. Those postdoctoral researchers directly funded by universities tend to engage more extensively in activities related to key university missions beyond research, teaching, in particular. Postdoctoral researchers funded by external, project-based resources, on the other hand, are more likely to exclusively focus on research and knowledge transfer. This situation significantly shapes their career development and activities assessment. To elaborate, postdoctoral researchers funded by institutional funds may be better equipped for the duties of a senior academic but may have less time to dedicate to research. Depending on the assessment systems in place, this suggests that prospects for academic careers depend on the portfolio of activities of a postdoctoral researcher, an aspect that needs to be better understood.

Evidence gathering

In the context of supporting postdoctoral researchers, the process of „evidence gathering“ or data collection plays a pivotal role in tailoring and enhancing this support. Mainly two methods of evidence gathering were mentioned by the TPG members: institutional databases and questionnaires.

Institutional databases, often referred to as register data, aim at collecting quantitative data providing insights into the backgrounds of postdoctoral researchers. These databases include details such as the type of contract, attached funding, duration, sometimes the number of contracts a postdoctoral researcher has had with an institution, and if for instance teaching assignments or other duties are included as contractual obligations. Additionally, profiles of postdoctoral researchers are recorded, including details such as prior collaborations with other institutions, the location of their previous study, doctorate or postdoctoral positions, their country of birth, nationality and the ORCID identification. The living situation of postdocs, including their partners, family, number of dependents, current employers and net income, can be part of these databases. A significant advantage is their ability to capture the information of a larger number of individuals, requiring minimal participation from the postdocs themselves. They demand less ongoing effort, even though the initial investment might be higher. To ensure reliable information, it is important to have a previous understanding and definition of what a „postdoctoral researcher“ is. Register data are primarily developed and curated by HR Departments with the support of IT services.

Questionnaires offer a much deeper context of the postdoctoral experience. They include questions about the field of research and task distribution, including teaching, supervision and research duties. Additionally, they explore relationships with the PI, the presence of a mentor or other support and advice networks, and the frequency of exchanges. Career aspects such as career goals, plans, additional training needs and requirements are covered too. Other parts of the questionnaires assess the overall satisfaction, including satisfaction with the PI, general job satisfaction, identity issues, perceived personal and professional obstacles, work-life balance, and mental health. Lastly, mobility aspects such as personal networks in a host country, country of origin and degree of integration are examined.

An important consideration when using questionnaires is timing, as results may vary based on when the survey is conducted. This is particularly true in case of [career tracking](#), where the outcomes differ depending on the stage of research.

Questionnaires are also less formal and can in principle take different forms. They can include more individualised approaches such as entry and exit interviews and can even be integrated into yearly appraisal meetings. They are often developed within a support structure like a doctoral school, which maintains regular contact with this population and has established personal relations with it.

In conclusion, these two approaches are not mutually exclusive but can complement each other. For instance, in specific situations, teaching duties can be extracted from contracts or gathered via questionnaires. Likewise, the personal situation of postdoctoral researchers might be sourced from a database or through a survey. It's also crucial to build synergies with similar activities developed by other stakeholders such as funders, national statistical offices or associations for postdoctoral researchers.

Institutional structures

In the last years, universities have invested considerable resources in the integration of postdoctoral researchers with their organisational frameworks. This section illustrates the broad variety of institutional structures available for postdoctoral researchers seeking comprehensive administrative, financial or career guidance and where their specific needs can be supported by dedicated personnel.

Discussions within the TPG have highlighted graduate and doctoral schools as important structures responsible for developing and promoting support policies for postdoctoral researchers, as the needs of doctoral candidates and postdoctoral researchers might sometimes overlap. This holds true even when postdoctoral researchers typically have wider experiences and greater responsibilities compared to doctoral candidates. This situation is attributed to the presence of specialised staff and an institutional logic where doctoral schools have become the institutional memory and centres of expertise in supporting early-stage researchers. In addition, the involvement of doctoral schools in supporting postdoctoral researchers could also derive from the fact that the expertise and experience acquired with doctoral candidates can to a significant degree be translated into the postdoctoral support.

However, the selection of doctoral schools as institutional umbrellas in several universities does not imply that there are not additional efforts to provide targeted support for postdoctoral researchers. Some group members have reported the existence of dedicated structures within their institutions, such as offices for postdoctoral researchers, whose goal is to promote their professional development and enhance their working conditions.

From these discussions, it also became evident that the situation of postdoctoral researchers can vary significantly from one country to another. Significant variations exist in their institutional status across European countries as this population may hold scholarships (in the same way as doctoral candidates), receive fellowships, benefit from a work contract or enjoy a higher status than doctoral candidates. In this last case, institutional structures such as Human Resources departments, sometimes in close collaboration with other departments such as graduate schools, but also research offices, career centres or outreach programs, play an important role. This organisational arrangement suggests a role division between these departments, with HR units focusing on career development plans and roadmaps, and career centres providing training and coaching for postdoctoral researchers.

Institutional support

Postdoctoral researchers constitute one of the most [productive groups](#) of individuals in academia, and they contribute in various ways to a wide set of activities within and beyond universities.

To improve the postdoctoral experience, universities bear the responsibility to establish relevant support structures and deliver well-developed services and initiatives.

This section provides a picture about the different forms and areas of support currently available at the TPG institutions. In particular it will focus on four different types of support: career development, training, funding as well as initiatives tailored for postdoctoral researchers with childcare responsibilities.

FORMS OF SUPPORT

The discussions held in the framework of the TPG revealed that universities offer institutional support for postdoctoral researchers in various formats, and they are constantly seeking innovative approaches to better engage this population in these activities.

The delivery format of the institutional support is characterised by diversity, encompassing written material (checklists, welcome packages, webpages, blogs, newsletters), onsite courses and skills training programmes, the establishment of postdoctoral researcher communities, seminars, mentoring schemes, placement opportunities or onboarding events where postdoctoral researchers receive information about available support services and career prospects within and beyond universities.

TPG members noted that institutional support can also be provided in an online format to help postdoctoral researchers in managing the increasing number of tasks.

AREAS OF SUPPORT

Career development support

Postdoctoral researchers constitute an important workforce inside universities as they contribute to the development of innovative solutions and discoveries. They are at a crucial point in the career path as they have to decide if they want to deploy their expertise in an academic or non-academic position.

Within the framework of the TPG, group members reflected on the meaning of career development as a lifelong process enhancing different aspects of an individual's skills, thereby enabling progress along a chosen career path.

From the TPG discussions it also became evident that most of the universities in this working group deliver career development support to postdoctoral researchers for several reasons.

The institutional structures for such support increasingly develop measures to help postdocs identify their needs regarding career development, assist them in narrowing down the number of career paths one could finally take, encourage them to find a sense of direction in terms of their future careers

as well as to develop relevant skills and take ownership while reflecting on their chosen career path. Career development services help make postdoctoral researchers aware about the real, tangible job opportunities to build a sustainable long-term career beyond their current positions. These services aim to offer orientation, fostering reflection on a professional journey that matches the skills and interests of postdoctoral researchers.

While being on a more advanced path within academia compared to doctoral candidates, a postdoctoral position remains a versatile position that serves as a preparatory phase for diverse job opportunities inside and beyond academia, for example in the private, not-for-profit or governmental sector. In this context, universities might deliver career development support to ease postdoctoral researchers' transition from academia to other sectors, incentivise them to consider career options beyond academia, strengthen their profile for different job opportunities and raise awareness of the preparatory steps for a career beyond academia. In addition, to encourage postdoctoral researchers to become knowledge workers either in the public or private sector, universities are developing a series of services to connect the postdoctoral population with potential employers and to allow them to network with alumni who have successfully ventured into non-academic sectors.

To turn these goals into concrete steps, group members indicated that universities offer a variety of initiatives and activities designed to provide guidance to postdoctoral researchers on the next phases in their careers.

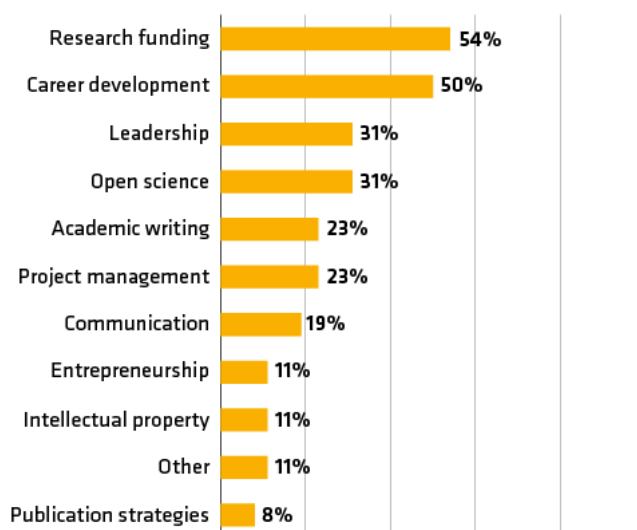
The most frequent initiatives on the topic of career development include career orientation formats (such as career development planning, career discussions with PI or non-academic mentor, transferable skills courses or trainings, career talks or information sessions with alumni who started a non-academic path, career fairs, career days, recruitment advice resources), coaching and mentoring (online resources and tools on the topic, etc.) and networking formats.

Training

Developing research and analytical skills is highly relevant for postdoctoral researchers as these competences are instrumental in enhancing their future employability and ability to handle the daily tasks of a job in a specific area.

Figure 1 Please select the most popular training offered to postdoctoral researchers at your institution (select at least 1 option and max. 3 options).

Number of respondents: 26/26



A survey conducted in Spring 2023 in the framework of this TPG showed that, according to 26 respondents, universities offer an extensive training catalogue to postdoctoral researchers. These trainings cover several topics, including research funding, academic writing, project management, leadership and communication, as illustrated in the graph below.

Similar to training for doctoral candidates, most of the training for postdoctoral researchers is delivered in the form of courses. Group discussions revealed that these courses target both scientific and technical skills. They may be either delivered as comprehensive programmes or sometimes as tailor-made offers.

On a more general level, universities provide early-stage researchers with the possibility to follow training where transferable skills (advanced courses on communication, collaboration, data analysis, writing, open science) are acquired. As researchers progress to a more senior level, the training catalogue aims at developing advanced competences relevant to this stage such as leadership, project management, strategic thinking, entrepreneurship or teaching skills.

Funding application and proposal writing support

Research is central for the economic development and the global competitiveness of Europe. Sustaining Europe's position in worldwide research necessitates the continuous investment in skilled and motivated postdoctoral researchers. Providing appropriate support at the postdoctoral level is fundamental, as this period coincides with when researchers shape their professional trajectories.

TPG members discussed initiatives supporting postdoctoral researchers in terms of funding and proposal writing, given that securing a grant or fellowship is often a central factor in enhancing the career of a postdoctoral researcher and fostering independence during this stage.

Exchanges among TPG representatives revealed that universities assist postdoctoral researchers through a broad range of activities and instruments as they prepare and apply for funding. Common practices include involving postdocs in funding applications, offering advice on funding plans, providing feedback and tips on draft applications, conducting grant writing workshops and courses, organising informational sessions as well as training on presentation and interview skills. Discussions in the framework of this group also showed that some European universities provide specific information on different funding schemes available for postdoctoral researchers both at the national or European level, along with guidance on the various search channels for funding opportunities. TPG members also mentioned that these initiatives will benefit not only those aiming at an academic career but also those preparing for careers beyond academia, where writing skills and experience in fundraising are essential.

Support for postdoctoral researchers with childcare responsibilities

In Europe, early-stage researchers hold postdoctoral positions at an age where the consideration to build a family and have children becomes more frequent. Considering that having children is part of the everyday life of many postdoctoral researchers, some universities are paying more attention to this aspect, increasingly delivering targeted support in this area.

Among the most common types of services and initiatives delivered by these universities to support postdoctoral researchers in balancing work and family life are: maternity and paternity leave, child day-care services and centres, baby sitting at home, assistance with childcare, access to childcare facilities as well as additional home working days dedicated for postdoctoral researchers with family responsibilities.

The exchanges held within the TPG revealed that the main structures responsible for delivering such support are welfare offices, family affairs offices, graduate schools, equal opportunity and diversity offices as well as research offices or HR units.

Ways to enhance institutional support

The working group proposes the following suggestions to improve the overall situation of postdoctoral researchers and enhance the institutional support for this population across the following five areas:

Organisational issues

- ◆ Universities need to approach postdoctoral researchers coherently and include the postdoctoral policy in their institutional vision and strategy.
- ◆ It is important to reflect on how the postdoctoral population can be represented within the university staff structure and support efforts to build a formal representation. Postdoctoral researchers are often not visible as a specific staff category within the institution. This leads to the risk that their specific perspective is not sufficiently taken into account.
- ◆ It is important for institutions to help postdoctoral researchers navigate through the complex area of research assessment, including their voices and supporting them to make informed decisions on how to relate to a changing academic world. The academic world is changing, especially in terms of research evaluation. Narrative CVs and broadened research assessments, which do not solely rely on publication-based indicators like JIF or H-Index, are becoming increasingly important and will influence the future of academics. These developments towards responsible research assessment are especially taking place at the institutional leadership and policymaker levels.
- ◆ Universities need to provide measures and support structures tailored to the different situations of postdoctoral researchers at different organisational levels within the university and prepare for unexpected developments that may come in the future. To provide appropriate support, it is important to acknowledge the diversity among the postdoctoral population and the impact this has on their individual situation, including mental health and career prospects. Postdoctoral researchers find themselves in very different contexts concerning nationality, immigration status, family situation, gender, or socio-economic background, which can lead to diverse vulnerabilities.
- ◆ Institutions need to address different stages within the postdoctoral phase. Support therefore needs to include the provision of onboarding and integration in the workforce for all postdoctoral researchers at the beginning of the postdoctoral position, support during the postdoctoral period and eventually keeping in contact with them as alumni after their active time in the institution.
- ◆ Postdoctoral researchers need access to specific contact points where they can turn to address their needs. This can be a specific postdoctoral office, or the contact point can be embedded into already existing structures, for instance within a doctoral school. An important role of universities is to build up and actively inform postdoctoral researchers about the availability of these spaces and the range of services they can expect to receive.

Career development

- ◆ Depending on the research field, institutions should promote exchanges and training in transversal skills for careers in various sectors including science management, industry, and more. Simultaneously, the prominent role of well-trained postdoctoral researchers in our knowledge-driven world necessitates clear recognition and negotiation of expectations among researchers and stakeholders in the knowledge society.
- ◆ It is advisable that universities provide postdoctoral researchers with sufficient freedom, allowing them the flexibility to reserve time for career planning and personal development activities, e.g., comprehensive coaching and targeted training in communication strategies beyond academic publishing. Postdoctoral researchers are at a crucial stage in the career trajectory and this period is essential for the sound preparation of a future career, whether inside or beyond academia.
- ◆ Universities could encourage PIs to engage in regular talks with postdoctoral researchers regarding their career goals and the importance of career planning, raising awareness when their skills do not perfectly align with the envisaged career. The establishment of an individual career plan might leverage the achievement of professional and personal goals beyond the research activity. PIs play a critical role in postdoctoral researchers' development, even when they might not always be the optimal advisors for non-academic career paths.
- ◆ To offer the most effective support for postdoctoral researchers, differences between distinct research fields and institutional culture need to be taken into account when implementing career support measures.
- ◆ Postdoctoral career opportunities can be broadened by facilitating university partnerships with industry, business, government, social and cultural sector, non-profit, and other organisations, making non-academic paths more attractive, and providing training for a variety of careers. Paths beyond academia can be made more visible and feasible in the framework of these collaborations, alleviating the sense of uncertainty frequently associated with the postdoctoral career phase. Including alumni in this process is expected to be beneficial.
- ◆ Even when postdoctoral researchers are increasingly gaining independence during their journey, PIs play a crucial role in postdoctoral careers, and defining their responsibilities while providing support and training is beneficial for all actors involved. This includes effective leadership and supervision, mentoring and support for postdoctoral researchers, which could be evaluated during the PI's periodic appraisals by universities.
- ◆ It is important to put in place initiatives and measures to develop the network (onsite and online) of postdoctoral researchers, connecting them with peers or other stakeholders working in a specific field, which will further their careers. One example of network development is the creation of regional circles where postdocs can meet their peers and other actors relevant in their area and develop activities for their professional advancement.
- ◆ Universities can make sure that postdoctoral researchers find training opportunities to enhance their leadership skills. The development of leadership is key to the postdoctoral phase. In terms of research, universities need to provide the conditions for postdoctoral researchers to strengthen the development of their own research agenda. In view of their future careers, whether in or beyond academia, postdoctoral researchers are likely to be expected to develop strategic leadership and the ability to lead a team.

Training and other areas of support

- ◆ Universities need to ensure the provision of suitable resources and advocate for the promotion of onboarding activities. These activities serve to prepare new postdoctoral researchers for their position. This can include creating a space of reflection regarding their new roles, sharing information about available support services and also fostering awareness regarding the need for career development.
- ◆ Training and support need to prepare an increasing awareness of postdoctoral researchers about the different career paths available for postdoctoral researchers, as they can decide to deploy their skills in a wide array of career paths both within and beyond academia (e.g. trainings on leadership, communication, collaboration).
- ◆ It is advisable for universities to plan support according to different stages within the postdoctoral phase, given that newly arrived postdoctoral researchers might already have had similar experiences at other institutions. In terms of training offers, the needs of postdoctoral researchers differ from those of doctoral candidates, even if some of the offers may be relevant for part of the postdoctoral community. Moreover, the needs of junior postdoctoral researchers may be quite different from those of the more senior postdoctoral researchers.
- ◆ Postdoctoral researchers are expected to benefit from tailored and personalised support, e.g., coaching or mentoring. While PIs remain an important contributor in this regard, there can also be the need to bring in another view or an alternative perspective, e.g., through a mentor from outside academia.
- ◆ In the interest of postdoctoral researchers' social responsibility, universities are invited to offer tailored training and foster conditions for a wider impact of postdoctoral work. Postdoctoral researchers, given the intense doctoral research phase they come from, have special potential to realise wider cultural, economic, and/or social impact.
- ◆ To support a community of postdoctoral researchers, universities should include this population in committees, organise appreciation initiatives, and provide long-term administrative and logistic support.

Creating such a community offers a platform for discussion, enhances their experience through a sense of belonging and facilitates personal development.

Acknowledging the role of teaching

- ◆ When teaching is part of the daily tasks of a postdoctoral researcher, universities need to ensure a feasible teaching workload with proper recognition of teaching activities. Teaching is widely considered a valuable part of the postdoctoral phase as it encourages leadership and self-leadership qualities, capacities in presentation and communication, and capabilities in synthesising, evaluation and feedback.
- ◆ Funders need to be advised to allow teaching to be part of postdoctoral researchers' regular activities and avoid any obstacle in this regard. Contractual obligations with funders sometimes forbid or strictly limit non-research related activities like teaching or career development, even though these activities play an important role for the career of the postdoctoral researcher and the social mission of universities.
- ◆ Universities need to ensure that invisible forms of teaching (e.g., in the name of the PI) or other forms of additional work are properly recognised and noticed. This requires transparency of institutional policies and practices.

- ◆ A specific training program that prepares postdoctoral researchers for teaching responsibilities increases the quality of teaching. Such training is also a transversal competency that feeds into leadership in many professional contexts.

Funding support

- ◆ Universities have the opportunity to make the most of funding schemes that include aspects such as the professional advancement and career development of postdoctoral researchers as part of their requirements. These conditions can encourage postdoctoral researchers to reflect on their future career trajectories as they prepare these funding applications.
- ◆ The diversity of career possibilities needs to be recognised also by the funding schemes. Within academia, the professorship is only one possible career path of postdoctoral researchers, as many academic research institutions offer other job positions for highly qualified experts with a postdoctoral profile (e.g., in the areas of research infrastructure or in science management).
- ◆ Universities could encourage research funders to consider including in their schemes aspects such as professional development of postdoctoral researchers, as well as institutional support of such development. However, as a significant number of postdoctoral researchers are employed through specific projects, it is important to involve PIs and to put institutional policies in place. Funders can play a role in steering the right direction through their fellowship schemes.
- ◆ Universities need to collaborate with all actors involved in career tracking exercises for postdoctoral researchers, including research funders, in order to better understand the outcome of funding schemes and their impact in view of the set objectives. Sharing this information with all stakeholders is beneficial.
- ◆ Opening up possibilities for intersectoral mobility is important, even from the academic point of view. Mobility schemes for postdoctoral researchers often still focus on/are limited to mobility within academia.
- ◆ Funding opportunities sometimes collide with legal restrictions on the level of employment laws. Such situations can cause harm to the tenure ambitions of postdoctoral researchers and should be openly addressed by funders, legislators and beneficiaries.

Good practices

TOPIC	INSTITUTION	GOOD PRACTICE DESCRIPTION
Career development & planning	University College Cork	The Odyssey programme is designed to enable researchers and final year doctoral candidates to adapt, integrate and expand on their existing expertise to prepare for the many diverse career choices ahead of them. It highlights the significant differences between and/or advantages of the many workplace cultures beyond academia. In a time of increasing career complexity, researchers must pursue professional opportunities not only in academia but also in industry, government and non-profits.
	University of Ghent	PhD Career Hub is the online portal designed to support doctoral candidates and postdoc researchers in their career development journey. The portal brings together all career-related information and services for this group. It is structured as a step-by-step guide in the career development process: 1) explore yourself (self-assessment tools); 2) explore careers (academic careers, careers beyond academia, entrepreneurship); 3) focus (workshops, webinars, networking, career development plan); and 4) take action (CV writing & job interview).
	Technical University of Dresden	The aim of the Postdoc Starter Kit Funding program is to support postdocs in developing their scientific profile and to qualify them for further scientific career paths. Participating in a professional career coaching analysing their academic profile is a prerequisite for application. Postdocs can apply for funding for a variety of measures that help them sharpen their profile (e.g. consumables, invitation of guest speakers, organisation of scientific events etc.).
	University of Manchester	Prosper , a collaboration between the Universities of Manchester, Liverpool and Lancaster, aims to redefine the UK's approach to postdoc career development, opening up the huge talent pool within the community to the benefit of researchers, PIs, employers and the wider economy. Participants gain access to development activities, co-created with a range of employers and dedicated career coaches, to explore their skills and aspirations and how these align with roles in various sectors.
	KU Leuven	The Postdoc Charter aims to facilitate optimal cooperation between postdocs and tenured staff and to ensure that the postdoc's further career development (after or inside academia) remains high on the agenda throughout. All postdocs and their senior hosts must come to an arrangement on the implementation of the charter at the start of employment, and a copy signed by both parties must be formally submitted. Regular review of the arrangement, supported by HR experts, is strongly recommended.

EUA-CDE THEMATIC PEER GROUP REPORT

Postdoctoral researchers at European universities: profiles, roles and institutional support structures

TOPIC	INSTITUTION	GOOD PRACTICE DESCRIPTION
Career development & planning	Polytechnic University of Turin	The Permanent Observatory on Academic Careers and the Focus Group of Researchers for the implementation of the European Charter for Researchers are complementary bodies that work synergically within the respective mandates to: ensure the monitoring of the distribution of fixed-term contracts to foster a linear and transparent career path from PhD to tenured-track position; co-design with researchers (R1-R4) initiatives for the career development of researchers within and beyond academia and promote a supportive research environment.
	University of Limerick	The HR Talent Development's Navigate programme is a programme for research staff who want to consider a career beyond academia. Throughout this programme, research staff have the opportunity to reflect on their career to date and consider the direction they would like to take it in. The programme includes a mix of career development workshops, practical CV and interview support and 1-1s.
	Gheorghe Asachi Technical University of Iasi	CMT-TUIASI is the Career Management Center developed to raise awareness of doctoral studies. CMT-TUIASI was launched in 2023 and is dedicated to doctoral candidates and postdoctoral researchers and also involves alumni and industry representatives.
Skills development	University of Helsinki	The academic leadership and career planning course helps researchers develop leadership skills, strategic research planning, team building, and research resource utilisation. It covers career trajectories, project management, social impact, publications, data management and ethics. Guest speakers relate these topics to broader themes in social sciences and humanities. The course aims to align content with researchers' personal interests.
	Leuphana University of Lüneburg	The portal „GradSkills“ provides doctoral and postdoctoral researchers with a variety of career-related workshops. What makes it special is the fact that all facilities at Leuphana offering workshops for these target groups post their offers in this central portal, i.e. researchers do not need to consult various websites, but have an at-a-glance portal subdivided in five thematic categories at their disposal. Feedback suggests that it is a great improvement and very widely used.
	TH Köln – University of Applied Sciences	TH Köln – University of Applied Sciences participates in the annual Postdoc Appreciation Week in Germany. Postdocs and their work are presented on the homepage (videos, interviews). There is also a meeting with the Presidential Board where postdocs can present their topics and make their voices heard. Various workshops for the target group are organised throughout the year.
	University of Chemistry and Technology Prague	The workshop was designed as an informal network event for early-career researchers with invited guests to address and discuss new trends and key topics such as open science, science communication, career development and mental health issues for researchers.
	Catholic University of Portugal	The Postdoc scheme on Integral Human Development (IHD) is a unique scholarship programme that offers training courses on Innovation and Entrepreneurship, Leadership, Ethics, Science Communication and Media Coaching. For two years, the fellows meet once a week as a cohort for transdisciplinary work and are further supported by institutional mentors. They develop academic research on IHD and simultaneously address and promote social change in Portuguese society working with non-academic partners.

EUA-CDE THEMATIC PEER GROUP REPORT

Postdoctoral researchers at European universities: profiles, roles and institutional support structures

TOPIC	INSTITUTION	GOOD PRACTICE DESCRIPTION
Skills development	University of Liège	Early-career researchers are encouraged to participate in the Professional Skills for Leadership Programme to gain knowledge and training in the key aspects of academic career leadership including grantsmanship, team management and communication.
Collaboration with non-university partners	University of Turku	Post Docs in Companies is a joint initiative of Finnish universities, industry and foundations. The programme is aimed at recently graduated doctoral candidates or those who will soon graduate. There is no limitation regarding the branch of science or industry. The duration is 1-2 years and it consists of two phases: research period and a targeted research period in a company. The programme is funded by PoDoCo foundation pool and companies participating in the programme.
	Flemish universities	In June 2021, the five Flemish universities launched the PhD Talent Pool Flanders , a recruitment platform designed to better and faster align the supply of and demand for doctoral talent. This career board is a major step towards the universities' objective to smoothen the transition of skilled doctoral degree holders to the labour market, and support employers in their search for the best employees.
	Warsaw School of Economics	The Club of Corporate Partners is a platform of companies cooperating with the Warsaw School of Economics (SGH) on many levels. Partners enrich the curriculum and lecture together with the faculty members. The constant presence of the companies at SGH results in easier recognition of future employers and provides the staff with attractive projects and job offers.
Entrepreneurship	University of Graz	The Startup-Uni is the funding programme for all founders and those interested in starting a business in the environment of the University of Graz. The incubation programme supports startup projects from the initial idea to three years after the company is founded.
	University of Lausanne	The Graduate Campus and the Hub Entrepreneurship and Innovation together offer a workshop that guides doctoral candidates and postdoc researchers through the career development process and includes entrepreneurship as one clear option among several. The Hub's focus on social entrepreneurship addresses many researchers' concerns to contribute to society, and the inclusion of one start-up among the panel of invited alumni speakers demystifies the process.
	University Rovira i Virgili	This programme offers mentoring, training, resources and services to assist in the realisation of the business plan and verify the viability of projects derived from researchers' work. The final aim is to increase the based-on knowledge of new products/processes and promote business creation.

EUA-CDE THEMATIC PEER GROUP REPORT

Postdoctoral researchers at European universities: profiles, roles and institutional support structures

TOPIC	INSTITUTION	GOOD PRACTICE DESCRIPTION
Funding	Johann Wolfgang Goethe-University Frankfurt	The Early-Career Researchers in Focus programme aims at highly qualified R2 researchers who are preparing their own independent grant proposal up to six years after their doctorate. The aim is to increase chances of successful external funding if future independence in academia is foreseeable and to strengthen visibility in the research community. Participants attend a professional proposal workshop, receive flexible funding of up to €10,000 and support from a scientific mentor during the proposal phase.
	University of Vienna	University of Vienna offers tailor-made training for individual postdoc-specific funding programmes such as MSCA, ERC or national programmes. The aim is both to draw attention to the special features of the individual funding programmes and to support peer learning. Special attention is always paid to non-subject-specific areas such as career development etc.
	Vilnius Gediminas Technical University (Vilnius Tech)	Annually, the Lithuanian Research Council offers grants for doctoral candidates pursuing postdoctoral studies, providing them with a full scholarship for a year. Vilnius Tech University is dedicated to nurturing young researchers and fostering a new generation of postdocs by offering them a five-year contract for an Associate Professor position, supporting their research-academic careers.
Alumni	Vitae	The What do research staff do next? series showcases career stories of research staff who moved from research posts at European institutions to other occupations and employment sectors. Developed as part of a collaborative project between Vitae and NatureJobs in 2016, the stories provide insights into how researchers transition, what careers they have and their reflections on the transition process and current career paths.
	University of Zurich	With the career events called „ Postdoc Jobworld “ the Graduate Campus at the University of Zurich is inviting former doctoral candidates or postdocs back to campus to talk about their own personal career outside academia. These talks serve as exemplary career paths for postdocs, help them get new connections and find out about options outside academia. The Graduate Campus started this series of events to give an easy, low-threshold insight to careers outside academia.
Community building	Wageningen University	The Postdoc Day is organised by postdocs for postdocs. The goal of this event is to discuss as a community the problems of being a postdoctoral researcher, setup a network and elaborate on a career in and beyond academia.
	University of Antwerp	The Postdoc Day focuses on topics of special relevance for postdoctoral researchers, including careers beyond academia, well-being, citizen science and the community of postdocs in Antwerp. The Postdoc Day is part of a wider university strategy and action plan to attract excellent postdoctoral researchers, both academically oriented postdocs and postdocs who seek to strengthen and widen their skillset in view of further career steps beyond academia.

EUA-CDE THEMATIC PEER GROUP “PROFILES AND INSTITUTIONAL SUPPORT FOR POSTDOCTORAL RESEARCHERS”

The [EUA Council for Doctoral Education](#) (EUA-CDE) established the Thematic Peer Group on “Profiles and institutional support for postdoctoral researchers” in 2023 with the aim of providing participating members an opportunity for mutual learning on the selected topic and inviting them to share their experience and good practices. This is one of several Thematic Peer Groups at EUA that meet a couple of times and consist of representatives of member universities, who bring expertise in a certain thematic area.

EUA-CDE launched a [call for participation](#) in July 2022 to select this working group.

The third EUA-CDE Thematic Peer Group consisted of 28 representatives from 16 countries. The group met three times, from February to October 2023, and facilitated discussion among group members through peer-learning exercises and exchange of experiences regarding the most pressing issues and challenges faced by postdoctoral researchers.

The meetings were hosted by two institutions, namely the University of Vienna (Austria) and the Lappeenranta–Lahti University of Technology (Finland). The third meeting took place online. To collect input on key issues related to the topic, the TPG members were asked to participate in two short surveys, which served as preparation for the following activities.

During their meetings, the group members reflected on the current profiles and situation of the postdoctoral community at European universities, identified the support already provided by their institutions to postdoctoral researchers, shared existing or potential good practices and provided suggestions for improvement regarding postdoctoral services and support that could serve as inspiration for their peers.

This group was chaired by one participating member and was coordinated by the EUA-CDE Secretariat. This Thematic Peer Group was additionally supported by Peter Hanenberg, member of the EUA-CDE Steering Committee.

Composition of the Thematic Peer Group “Profiles and institutional support for postdoctoral researchers”¹:

- ◆ Tim Engels, Head of Research, Innovation & Valorisation Department, University of Antwerp, Belgium (Chair)
- ◆ Chiara Biglia, Head of Career Center Division, Polytechnic University of Turin, Italy
- ◆ Ortwin de Graef, Director of Doctoral School for Humanities and Social Sciences, KU Leuven, Belgium
- ◆ Verity Elston, Co-Director of the Graduate Campus, University of Lausanne, Switzerland
- ◆ Nel Grillaert, Head of Postdoc Talent Management, Ghent University, Belgium

¹ Job positions as of 20 November 2023.

EUA-CDE THEMATIC PEER GROUP REPORT

Postdoctoral researchers at European universities: profiles, roles and institutional support structures

- ◆ Peter Hanenberg, Vice-Rector for Research and Innovation, Universidade Católica Portuguesa, Portugal; EUA-CDE Steering Committee member
- ◆ Stefan Herzig, President, TH Köln – University of Applied Sciences, Germany
- ◆ Eva Hnatkova, Open Science Coordinator, University of Chemistry and Technology in Prague, Czech Republic
- ◆ Maria Angel Lanuza, Director of Doctoral School, Rovira i Virgili University, Spain
- ◆ Claudine Leysinger, Head of Graduate Campus, University of Zurich, Switzerland
- ◆ Lence Miloseva, Head of the Doctoral Programme in Neurosciences, Goce Delčev University of Štip, North Macedonia
- ◆ Alina Adriana Minea, Director of the Council for Doctoral Studies, Gheorghe Asachi Technical University of Iasi, Romania
- ◆ Laura Mohr-Valldorf, Deputy Managing Director of Goethe Research Academy for Early Career Researchers, Johann Wolfgang Goethe University Frankfurt, Germany
- ◆ Skirmante Mozuriunaite, Director of Doctoral School, Vilnius Gediminas Technical University, Lithuania
- ◆ Pirjo Nuutila, Director of the Graduate School, University of Turku, Finland
- ◆ Alison O'Regan, Head of Staff Talent Development, University of Limerick, Ireland
- ◆ MaryKate O'Regan, HR Business Manager – Research, University College Cork, Ireland
- ◆ Yolana Pringle, Head of Policy and Advocacy, Vitae, UK
- ◆ Marilou Ramos-Pamplona, Senior Research Officer, University of Liège, Belgium
- ◆ Erkki Raulo, Head of Services for Doctoral Education, University of Helsinki, Finland
- ◆ Angela Rösen-Wolff, Vice-Rector for Research, Technical University Dresden, Germany
- ◆ Anja Soltau, Head of Graduate School, Leuphana University of Lüneburg, Germany
- ◆ Johanna Stadlbauer, Head of the Postdoc Office, University of Graz, Austria
- ◆ Tomasz Szapiro, Presidium Member, Conference of Rectors of Academic Schools in Poland, Poland
- ◆ Juliane Teapal, Education Coordinator and Postdoc Advisor at Graduate School for Experimental Plant Sciences, Wageningen University, Netherlands
- ◆ António Vicente, Director of the Doctoral College, University of Minho, Portugal
- ◆ Melissa Westwood, Associate Vice President for Research, University of Manchester, UK
- ◆ Lucas Zinner, Head of Research Services and Career Development, University of Vienna, Austria.

Group coordinators:

- ◆ Alexander Hasgall, Head of EUA-CDE
- ◆ Ana-Maria Peneoasu, Policy & Project Officer, EUA-CDE

The EUA Council for Doctoral Education (EUA-CDE) was launched in 2008 at the initiative of the European University Association, responding to a growing interest in doctoral education and research training in Europe. An integral part of the European University Association, it is now the largest European network in this field, covering more than 270 universities and institutions working on issues related to doctoral education and research training in 39 countries.

Since its creation, EUA-CDE has been leading the transformation and strengthening of doctoral education in Europe. Building on the outcomes of EUA's work on doctoral programmes and research careers, EUA-CDE has been the driving force behind the implementation of the Salzburg Principles and Recommendations and the promotion of doctoral education as the main intersection between the European higher education and research.