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**Good practice recommendations for implementation of career-tracking
survey of doctorate holders**

ICS:

CCMC will prepare and attach the official title page.

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European foreword

This CEN Workshop Agreement has been developed in accordance with the CEN-CENELEC Guide 29 “CEN Workshop Agreements – A rapid prototyping to standardization” and with the relevant provisions of CEN/CENELEC Internal Regulations - Part 2. It was approved by a Workshop of representatives of interested parties on 2022-11-15, the constitution of which was supported by CEN following the public call for participation made on 2022-09-29. However, this Workshop Agreement does not necessarily include all relevant stakeholders.

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The following organizations and individuals developed and approved this CEN Workshop Agreement:

Name organization/individual:

- The Arctic University of Norway (UiT)/Hanne Risan Johnsen, Ulrike Grote
- European Science Foundation/Julia Boman, Mihaela Rusitoru
- Riga Technical University, Latvia/Anita Straujuma, Inga Lapina, Ugis Citiskovskis
- University College Dublin, Ireland/Emer Cunningham, Janet Carton
- Technical University of Munich, Germany/Tim Klinge
- UNI Italian National Standards Body/Giacomo Riccio
- CCPIT Commercial Sub-council/ Jack Yao

Introduction

According to the Salzburg II Recommendations (EUA, 2010) [1], “The core component of doctoral training is the advancement of knowledge through original research. At the same time, it is recognised that doctoral training must increasingly meet the needs of an employment market that is wider than academia.”

Career tracking has become increasingly recognised as a necessary monitoring tool to map doctorate holders’ career paths in academia and beyond, and to evaluate doctoral programmes. Career-tracking surveys enable collecting high-quality data on doctorate holders’ employability and skills utilisation, as well as tracking the quality of doctorate education, and its impact assessment at individual, institutional and systemic levels. Career tracking studies are useful for:

- 1) Getting feedback from doctorate holders working in the variety of academic and non-academic sectors to identify any skills mismatches and adapt doctoral skills training curricula.
- 2) Enabling universities and alumni services to enlarge and exploit their professional networks, to get feedback on relevance of doctoral training curricula and to conduct better and more appropriate career counselling.
- 3) Gathering doctorate holders’ contact information and enabling local alumni networking and mentoring initiatives, and therefore improving involvement of the non-academic sector in doctoral training.
- 4) Supporting, by promoting standards for implementation, higher education institutions to adjust and improve their doctoral training based on actual career trajectories of doctorate holders and market requirements.

One of the main outputs of the DocEnhance project, the career-tracking survey of doctorate holders from nine European universities (Boman et al, 2021) [2], intended to enable gathering of information on doctorate holders’ employability and skills utilization and to facilitate a sustainable and harmonized assessment of doctoral education in Europe. Thus, the current good practice recommendations for implementation of the survey represent a practical guide for the universities wishing to implement a career-tracking survey similar to the one carried out as part of the DocEnhance project. The issues covered include survey design, planning, survey management and legal aspects.

In this regard, the guidelines with recommendations are published as a European voluntary standard to increase outreach, impact and longevity of career paths tracking beyond the DocEnhance project partners. The purpose of this document is to assist higher education institutions in running their own doctorate graduate tracking for increasing the relevance of their doctoral research and training.

1 Scope

This document gives practical recommendations for implementation of career-tracking surveys. The current guidelines are meant for universities wishing to set up an institutional career-tracking survey.

These surveys can be set up by higher education institutions, grant funding agencies or national statistics bodies, with the purpose to improve doctoral education and/or assess its quality and impact at an institutional or national level. It includes among others, surveys that trace back doctorate holders' careers over several years, cohort studies at several moments in time or longitudinal surveys (based on the definition of career tracking of researchers, European Science Foundation, 2012 [3]; definition of tracking in EUA's "Tracking Learners' and Graduates' Progression Paths" project [4]).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

career-tracking of doctorate holders

systematic approach set up to follow doctorate graduates' career pathways

3.2

doctoral programme

programme that is designed primarily to lead to an advanced research qualification (EQF Level 8), are devoted to advanced study and original research and are typically offered only by research-oriented tertiary educational institutions such as universities (International Standard Classification of Education (ISCED) 2011) [5]

3.3

doctorate graduate

doctorate holder

person who has successfully completed their doctoral degree (includes both graduates with doctorates and PhD holders)

4 Overview of career-tracking surveys

Career-tracking studies of doctorate holders can be organized at international/European, national, regional and institutional levels.

The European University Association – Council for Doctoral Education (EUA-CDE) groups existing career-tracking initiative under four types based on their purpose and methodology (EUA-CDE, 2020, p. 10-11) [6]:

- a) graduate surveys and exit pools;
- b) national graduate surveys;
- c) surveys based on registered data;
- d) digital alumni platforms.

The EUA-CDE report stresses that it is important to fully consider the purpose of the study to choose the best fitting methods to collect data on doctorate graduates. The report discusses the advantages and disadvantages of each type of survey: e.g., low response rates in case of institutional or national surveys of doctorate holders, as well as the lower reliability of data (based on respondents' perceptions or opinions) compared to e.g., register-based data on employment. On the other hand, institutional surveys allow for more fine-grained data to be collected compared to national surveys and register-based surveys, adapted to the needs of the participating institutions or programs (e.g., on satisfaction with doctoral training, or its impact on careers), and enable to reach and collect data on doctorate graduates who have moved abroad.

5 Legal aspects

5.1 General

The universities setting-up a career-tracking survey are responsible for complying with the applicable international, EU and national laws (in particular, at the EU level the GDPR [7] (see 5.2), national data protection laws and other relevant legislation) on the protection of individuals with regard to the processing of contact and personal data. When carrying out a career-tracking survey, data privacy laws and regulations should be respected while contacting doctorate graduates and collecting data.

5.2 Consent form

Before starting to fill out the questionnaire, respondents should sign an informed consent form. An example of the Informed Consent Form used for the DocEnhance project is provided in Annex B. The informed consent form should consist of two parts:

- 1) Information sheet (for sharing information about the purpose of research, type of research intervention, participant selection and voluntary participation, procedures and duration of the questionnaire, risks and benefits, confidentiality and sharing of results, right to refuse or to withdraw and contact to do it, if needed), and
- 2) Certificate of consent (for signature).

5.3 GDPR and survey protocol

There are some aspects to bear in mind:

- 1) Organizations are responsible for respecting the GDPR regulation at the European, national, and institutional level for guaranteeing the respect of personal data; contacting a university data protection officer or legal advisor is necessary to explore the possible ways to contact the doctorate alumni and handle the collected data.
- 2) Some organizations require to first obtain the consent from the graduates to contact them for a follow-up career-tracking survey after graduation. Other organizations may only have institutional emails which may have become outdated or not used.
- 3) Ideally, at the moment of collecting doctoral researchers' personal contact details, e.g., their personal email address or telephone number when enrolling, during their doctoral programme, before graduation or when for instance becoming member of university's alumni association, such consent could be sought to be able to contact graduates in the future. If country-specific laws allow for the involvement of third parties and universities wish to pass on the doctorate graduates' contact data to a third party that would carry out a career-tracking survey on their behalf, rather than contact their

doctorate graduates directly, universities must have the prior consent from the graduates while also acting within the data protection regulations of the university.

- 4) Universities should strive to maintain a database of contact details of all doctorate graduates, including the information on their faculty and year of graduation (and possibly other characteristics), in a centralized manner at the university level or at the level of the alumni office.
- 5) It is important to regularly update the email addresses of the doctorate graduates with the help of Newsletters, engagement with alumni activities or other scientific events.
- 6) Personal data, including personal email addresses, need to be stored and used in compliance with legal and regulatory requirements.

Collecting no personal data (e.g., name, date of birth, thesis title) and minimal potential identifying data in the survey is advisable and is likely to increase response rates and to enable respondents to truthfully answer questions e.g., on satisfaction with their doctoral training programme. The disadvantage of fully anonymous surveys is that it is not possible to follow up the same respondents with follow-up surveys, if the goal is to track their career paths in the future.

If the survey is fully anonymous, it is recommendable, at the end of the survey, to ask respondents for a contact email and their agreement to be approached in view of future surveys.

6 Recommendations for career-tracking surveys

6.1 Objectives and methodological design

Each survey has its own objectives and characteristics and implicitly, it is addressed to a specific and targeted population and has an appropriate set of questions. The scope of the survey should be carefully considered, as well as the method and expected outcomes. One needs to take into consideration the available resources, including the budget and staff and expertise.

It has to be checked whether at national or regional level there exist surveys collecting similar data. Other universities and organizations also conduct similar studies, and it is important to research what is being available - there is no need to duplicate efforts collecting the same type of data or designing a new questionnaire where good examples exist elsewhere. The questionnaire provided in Annex A can be used as a template for institutional career-tracking surveys, to be adapted to the particularities of an individual institutional context and the target population.

As far as the type of survey of doctorate graduates to be conducted, universities can consider several options:

- cross-sectional retrospective studies that trace back careers over several years,
- cohort studies;
- longitudinal panel study;
- cross-sectional retrospective study composed of consecutive cohorts.

If the university already has available data/registers, it may influence the choice of the type of study and methodology.

Longitudinal surveys, where a sample of doctorate graduates is traced at several moments in time (e.g. at graduation, 1 and 3 or more years after graduation) allow dedicated questionnaires to be developed for the various stages; e.g., a questionnaire on satisfaction with doctoral training at graduation, questions on the entry into the labour market at 1 year after completing the doctorate, and questions on occupational career patterns at 3 or more years after completing the doctorate, etc.

The current template questionnaire is based on the DocEnhance survey targeting early-career doctorate graduates of up to 5 years after completion, and explores a range of topics such as first employment, current employment, type of contract, moves across sectors of employment and in and out research, added value of the doctorate, satisfaction with their doctoral training and employment, match between their degree and their job, skills match, job satisfaction, etc. Having a sample of doctorate graduates of e.g. up to 10-15 years of completion would provide richer data, including those with more career history. The choice of the timeframe in this case should be guided both by the goals and objectives of the career-tracking study and the availability of the contact database of the doctorate graduates.

The questionnaire topics can vary depending on the objectives for the survey and the target population. For instance, if your primary goal is to receive feedback on the doctoral training programme (satisfaction with training, supervision, etc.) then the survey population should mainly include early-career doctorate graduates. If such a study is conducted immediately after graduation (exit poll), it would be suitable to ask about the intentions for subsequent study or career aspiration (e.g., intended employment sector, type of job, involvement or not in research, etc.) If you are interested to study the broader impact of the doctoral degree on careers of the doctorate holders, also in later career stages, then it would be preferable to extend the target population to the doctorate graduates of up to 10-15 years after graduation, or to set-up a longitudinal study that would follow doctorate graduates for 10-15 years following graduation. In any case, it is advisable to keep the length of the questionnaire reasonable (e.g., questionnaire completion time should stay under 15-20 minutes), and topics focused on collecting data that is relevant to the study questions and objectives.

Keeping in mind that career-tracking surveys are labour- and cost-intensive, having several organizations take part in the study enables economies of scale and offers benefit in terms of exchange on e.g., the questionnaire design. Having several organizations use the same questionnaire also generates possibilities for cross-institutional benchmarking using the collected data.

Having the survey set up and carried out online rather than conducted by phone or using paper questionnaires for instance, has its advantage in terms of cost and time flexibility for the respondents.

6.2 Survey feasibility and management

To assess the feasibility of setting-up a career tracking survey, check if your university has a database of contacts of doctorate graduates, including their names, valid personal emails, year of graduation and possibly other details. Without available contact data, it would not be possible to conduct a survey. In this case, the first step would be to set up such a database, in compliance with GDPR.

Planning is key for a successful career-tracking survey : whether it is done as part of a coordinated effort with several organizations (as in the case of the DocEnhance survey) or as an institutional initiative, setting aside enough time and financial resources, and thoroughly planning for the various phases and professional project management are needed: e.g., questionnaire development and quality assurance, stakeholder relations (e.g. career services, IT, legal advisors, alumni officers, etc.), dealing with the GDPR aspects and preparing a data management plan, data cleaning and analysis, report preparation and dissemination. Having appropriate expertise (in-house or through consultancy) in survey design and statistical analysis and software as well as coordination and management are important.

In the framework of the EU-funded project, the timeline was agreed in advance and partners were informed of their involvement in each work package. From the needs assessment to the publication of the final report on the data findings, it took 18 months.

An example of the main steps of a survey is shown in Figure 1.

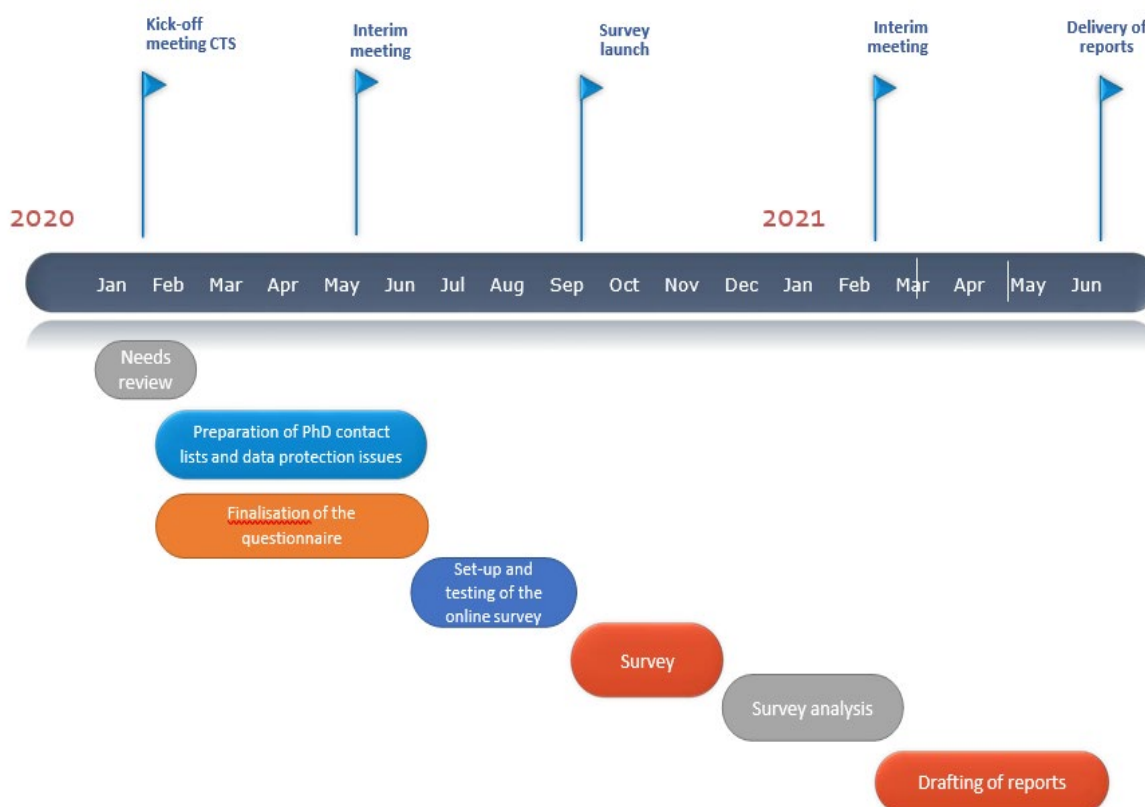


Figure 1 – Example on a career-tracking survey timeline

A career-tracking survey should include:

- 1) Study purpose definition and reviewing the needs of the participating organizations (if several organizations are involved);
- 2) Designing the questionnaire and coordination of partners', stakeholders' and experts' feedback collection;
- 3) Designing the survey protocol;
- 4) Setting up and testing the survey in an online platform;
- 5) Coordinating data collection;
- 6) Performing data cleaning and data analysis;
- 7) Preparation of the report with findings.

6.3 Sampling and response rates

The DocEnhance survey aimed to collect data from all doctorate holders in the target population and therefore used a census-like approach without any specific statistical sampling. This approach has an advantage of obtaining information from a larger number of respondents and the absence of statistical and technical issues related to sample selection.

Having a good response rate is reportedly one of the biggest issues when it comes to career-tracking surveys of doctorate graduates.

To reach a good response rate, the following recommendations can be provided:

- 1) Provide good rationale for the survey so that respondents understand the importance of the study for the university in the survey introduction message.
- 2) Have the invitation message signed by a representative of the University (e.g., Graduate School) and build on the doctorate graduate's relationship with the university.
- 3) Provide up to 2-3 reminders, one or two weeks after survey launch.
- 4) Keep the survey open for a period of up to 4 weeks, have a final reminder before the survey closes to engage respondents and provide the possibility to start and continue filling out the survey later.
- 5) Provide clear indication of the time it will take to fill out the survey (15-20 minutes maximum).
- 6) Provide clear indication on the GDPR aspects (e.g., how personal data will be handled).
- 7) Offer incentives - e.g., offering to send out survey report to respondents.

6.4 Questionnaire

The DocEnhance questionnaire was developed by the European Science Foundation (ESF), the partner organisation responsible for the DocEnhance Career-tracking Survey and built on the questionnaire used in the ESF Career-tracking study conducted in 2017. The questionnaire was further developed to adapt to various career paths of the doctorate working in and outside the academia and to explore the aspects related to the skills training. The list of skills (both research and academic skills and groups of broader transferable skills) was enlarged and clustered based on results of the DocEnhance project activities (e.g., skills prioritisation workshops, brainstorming and group work at the project kick-off meeting) as well as relevant literature, i.e., the ESF Member Organizations Forum report "Research Careers in Europe – Landscapes and Horizons" (ESF, 2009 [8]) as well as the OECD survey "Careers of Doctorate Holders" (Auriol et al., 2013 [9]).

The questionnaire is in English and includes seven sections: 1) doctorate education, 2) skills and competencies, 3) transition from doctorate to the first or next employment, 4) employment situation and related career experience, 5) intersectoral mobility, 6) geographical mobility and 7) demographics.

Several early drafts of the questionnaire were reviewed by the representatives of the DocEnhance partner organizations. In addition, several international experts and representatives of stakeholder organizations (e.g., EUA-CDE, EURODOC, etc.) provided their valuable feedback on the questionnaire.

The online questionnaire included skip logic, and the number of questions varied from 30 to 62 questions depending on the profile of the respondent (employed/unemployed, researcher/non-researcher, etc.) The questionnaire took from 10 to 20 min to complete. Only a few of the questions were obligatory, to facilitate the collection of basic characteristics of respondents/profiling variables / for subsequent analysis.

The questionnaire is provided in Annex A, including all questions and answer options. Despite the length of the questionnaire (up to 68 questions depending on the skip logic), the survey completion rate was rather high, at 80%, indicating that the survey was generally well adapted in terms of content and size.

The questionnaire includes mainly closed questions with several answer options to choose from. The survey offered "other" as one option to ensure that all respondents could answer appropriately. In most cases, the proportion of respondents selecting "other" was small (less than 10 %), indicating that the options offered were mostly well-suited to the doctorate holders responding to the survey. Upon data analysis, some improvements to the questionnaire can be considered:

- More appropriate answer options could be offered on current employment position (Q27: Which of the following best describes your current main employment status? Please note that the term 'employed' includes postdoctoral positions). Exceptionally, a relatively large proportion (20 %) of survey respondents that selected "other" as their main position of employment, rather than one of the positions offered as potential options. This was particularly true for those not engaged in research or non-academic positions, 38 % of whom responded "other" (compared to 12 % of those engaged in research). Based on the most common responses specified under "other", we suggest that future similar surveys include the following positions as options: teacher, medical practitioner, consultant,

CEO or senior management, laboratory staff, policy/health/scientific/economic advisor, IT specialist (including software engineers and data analysts), product manager, patent attorney.

- The options that were offered for this question on the current employment position could also be reduced. Based on the approximately equal split of respondents selecting the different options that were offered, this could probably be done by consolidating rather than removing options. For example, a future sample could combine associate, assistant, and future professor, as well as researcher and senior researcher. These options interrogated seniority more than the nature of the work conducted by the respondent, and this aspect was probably addressed more specifically by the question on researcher level according to the European Framework for Research Careers settled by the EU. We would also suggest improving and harmonizing the type of positions which give us the opportunity to make analysis not only by sector, but also by type of positions.
- Another example is regarding the question: "Did you have a paid job before or during your doctorate?", which could also have been misunderstood by some respondents as the doctorate itself, not like a job next to or other than, the doctorate itself. The low share of respondents (20 %) who indicated that their doctorate was funded by contracted employment with the university leads us to assume that the majority meant a job other than doctorate when replying to this question. For future surveys it would be important to specify this question more.
- The same scenario happened with the notion of "collaboration" between academic and non-academic sectors. This aspect could be improved in the future by providing a precise definition of the concept and concrete examples of the various types of collaboration.
- In addition to asking whether respondents are involved in research as part of your current job, one could consider a more nuanced question – e.g., to what extent they are involved in research (as regards a percentage share of their time).
- For future surveys, additional questions can also be considered. For instance, while the questionnaire includes the question on the minimum required education level for the current job, (Q30 – What was the minimum education or experience level requirement for your current main job?) it would be useful to add a question to explore whether having a doctorate was essential, desirable, or not useful when getting the current job.
- For respondents working in positions not requiring a doctoral degree or not involved in research, it would have been good to explore whether this was by choice or for the lack of better option, to facilitate the analysis. Moreover, it would be useful to explore further to what extent different skills were acquired (according to doctorate graduates) - during the training program, or in workplace.

7 Conclusion

As the DocEnhance survey demonstrated, over half of all respondents are employed outside universities and research organisations, demonstrating that doctoral training is relevant for a broad range of employment sectors and jobs. However, the information about the various career destinations, and in particular those outside the academia, is not readily available. Surveys such as these help Higher Education Institutions (HEIs) to collect information about their graduates' career trajectories and help to improve their doctoral programmes and skills training offer.

The DocEnhance career-tracking survey has demonstrated that collecting information from the doctorate graduates has been of great use for the participating universities enabling them to collect feedback on their doctoral programmes and learn about their PhDs' employment outcomes, skills utilization patterns, as well as the satisfaction with the various aspects of the programme. It would also be useful as evidence

base to inform their PhD candidates of the various career paths and help support PhDs' transferable skills development and enhance career advice for PhD candidates.

Since tracking represents a considerable investment in terms of resources for individual HEIs, it is important to look for economies of scale building on the existing studies as well as collaborating with other organizations in joint tracking initiatives (both nationally and internationally where it is relevant). It is also important to have a systematic approach to tracking within an organization (e.g., with surveys conducted at regular intervals, as opposed to one-off surveys), possibly as part of the internal system for evaluating the quality and impact of doctoral programmes.

Annex A (informative)

DocEnhance Questionnaire for survey of doctorate holders

AIMS OF STUDY

Thank you for responding to the DocEnhance Career-Tracking Survey of doctorate holders. This survey is conducted in the framework of the EC-funded [DocEnhance](#) project. The project aims at enhancing existing doctorate programmes by providing a more career-oriented curriculum for doctorate programmes.

This survey is carried out by the [European Science Foundation-Science Connect](#) (ESF-SC) on behalf of the eight participating European universities.

You have been invited to take part in the survey because you have graduated from one of the participating universities between 2016 and 2020.

It should take you between 15 and 25 minutes to fill out, depending on your career path. If interrupted, you can return to the survey later and pick up from where you left it.

We greatly appreciate your input to this survey, which will enable us to better understand career paths of doctorate holders, including skills utilisation and added value of the doctorate.

INFORMED CONSENT FORM

You can download the Informed Consent Form for more information [here](#).

The answers will be anonymised. Any potentially identifying personal data collected by the survey such as the year of birth, gender, or citizenship are only used for statistical analysis of aggregate trends. The data collected will be used for research and evaluation purposes. It will only be made available to institutions and other researchers anonymously.

Your participation in this research is voluntary. You do not have to take part in this research if you do not wish to do so, and you may withdraw from the survey at any time.

The final report will be made widely available to the public via the [DocEnhance website](#).

If you have any questions about the survey or the project, please write to the DocEnhance survey coordinator, **Julia Boman** at jboman@esf.org. If you have any ethical or data questions, please address them to the ESF Data Protection Officer, **Isabelle Vonesch** at database@esf.org.

Certificate of Consent

I have been invited to participate in a career-tracking survey designed for doctoral graduates from European universities. I am willing to participate in this study and have read the foregoing information. I have had the opportunity to ask questions about the study and any questions I have asked, have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

1. Do you agree with the above terms? If you select NO, you will exit this questionnaire

- ☐ Yes, I have read and give my consent to the terms mentioned in the Informed Consent Form
- ☐ No, I do not accept the terms of the Informed Consent Form

If participant select YES, go to Section 1

If participant select NO, exit survey

SECTION 1: DOCTORAL EDUCATION AND TRAINING

2. In which year did you start your doctoral training programme (formal admission)? If you have more than one doctorate, refer to the one completed within the period 2016-2020

- Dropdown menu 2000 or earlier; 2000-2020

3. In which year did you defend your doctorate?

- Dropdown menu 2010 or earlier; 2011-2020

4. In which country was your doctorate awarded?

- Dropdown menu for Country Selection

5. Please select the field that best corresponds to your doctorate.

- **Natural sciences** (Mathematics, Computer and Information Sciences, Physical Sciences, Chemical Sciences, Earth and related Environmental Sciences, Biological Sciences, other Natural Sciences)
- **Engineering and technology** (Civil Engineering, Electrical, Electronic and Information Engineering, Mechanical Engineering, Chemical Engineering, Material Engineering, Medical Engineering, Environmental Engineering, Environmental Biotechnology, Industrial Biotechnology, Nanotechnology, other engineering and technologies)
- **Medical and health sciences** (Basic Medicine, Clinical Medicine, Health Sciences, Medical biotechnology, other medical sciences)
- **Agricultural sciences** (Agriculture, forestry and fishery, Animal and dairy Science, Veterinary Science, Agricultural biotechnology, other agricultural sciences)
- **Social sciences** (Psychology, Economics and Business, Educational Sciences, Sociology, Law, Political Science, Social and Economic Geography, Media and Communications, other Social Sciences)
- **Humanities** (History and Archaeology, Language and Literature, Philosophy, Ethics and Religion, Arts, other Humanities)

6. Which of the following were your financial sources during your doctoral training period?

Please select all that apply.

- Fellowship from your university
- Contracted employment with your university
- Fellowship from government or public research fund
- Fellowship from private sector, or a private not-for-profit organization
- Fellowship from international institutions
- University position/teaching and/or research assistantship
- Job not related to the doctorate
- Non-funded
- Other (please specify)

7. In addition to the university where you obtained your doctorate, did your doctorate take place in collaboration with any other organisation (e.g. external co-supervision, industrial partner, additional training, etc.)?

- No
- Yes, with another university (joint doctorate – cotutelle, etc.)
- Yes, with a university of applied sciences
- Yes, with a non-university research institution
- Yes, with a private sector company (e.g. industrial doctorate)
- Yes, with a third sector organization (e.g. NGO, charity, not-for-profit)
- Yes, with another organization (please specify):

8. Was your doctorate mainly achieved through structured training programme or individually supervised research?

- **Structured training programme** (graduate school/doctoral programme with specific elements such as taught courses, milestones, mobility options etc.)
- **Individually supervised research** (doctoral education is led by individual supervisors with no institutional oversight)

9. What motivated you to pursue a doctorate? Please select all that apply.

- To work as a researcher in academia
- To work as a researcher outside academia
- To work as a highly skilled expert
- To diversify career opportunities
- Personal accomplishment
- Interest in the research topic
- Social recognition
- Other (please specify)

10. How satisfied are you with the following aspects of your training while doing your doctorate

(1 = very dissatisfied; 2 = somewhat dissatisfied; 3 = neither satisfied nor dissatisfied; 4 = somewhat satisfied; 5 = very satisfied; not applicable)

- Quality of research training (e.g. methodological skills, subject knowledge, etc.)
- Quality of transferable skills training (e.g. communication, project management, research ethics and integrity, entrepreneurship, etc.)
- Services for doctoral candidates at your university (e.g. career support, library provision, IT, etc.)
- Supervision provided by the supervisor(s)
- Support to pursue an academic career (e.g. teaching experience, engagement in research grants, etc.)
- Support to pursue a non-academic career (e.g. networking with non-academic partners, etc.)

11. Looking back, if you could make the decision about doing your doctorate again, which of the following would you most likely choose?

- The same doctorate at the same institution
- A different doctorate at the same institution
- The same doctorate at another institution
- A different doctorate at another institution
- Not to do a doctorate at all.

12. Have you done any research stay(s) abroad while doing your doctorate?

- Yes
- No

SECTION 2: SKILLS AND COMPETENCIES

13. During your doctorate, did you receive training in transferable skills (e.g. communication, management, research ethics and integrity, etc.) at your university?

- Yes, trainings were mandatory
- Yes, trainings were optional
- No, trainings were optional
- No, no trainings were available

If the respondent received training in transferable skills, then go to question 14

If the respondent didn't receive training in transferable skills, then go to question 15

14. Which training(s) did you receive at your university during your doctorate?

Please select all that apply.

- ☐ **Research skills (e.g. subject knowledge, methodology)**
- ☐ **Other academic competences** (e.g. research ethics and integrity, teaching/mentoring)
- ☐ **Personal skills** (e.g. personal effectiveness)
- ☐ **Professional skills** (e.g. team working, negotiation)
- ☐ **Communication skills** (e.g. effective communication, intercultural skills)
- ☐ **Management skills** (e.g. project management, data stewardship)
- ☐ Other (please specify)

15. How would you rate your research skills and other academic competences at the time you completed your doctorate?

(1 = Very poor; 2 = Poor; 3 = Fair; 4 = Good; 5 = Very good)

SUBJECT KNOWLEDGE: demonstrating a theoretical and practical understanding of your subject area and its wider research context

METHODOLOGY: applying research methodologies, tools and techniques appropriately

INTELLECTUAL PROPERTY: understanding how to manage Intellectual Property rights, e.g. how to file a patent, how to share work via Creative Commons licensing

RESEARCH VALORISATION, ENGAGEMENT, AND INNOVATION: considering potential societal impact of research, engaging with non-academic actors and developing new ideas, processes or products, which are rooted in research

RESEARCH ETHICS AND INTEGRITY: understanding principles, rules, values and professional standards governing research for ensuring scientific rigor, honesty, trust and confidence

TEACHING/MENTORING/SUPERVISION: using appropriate tools and methods to facilitate learning and assessment, to encourage and support learners developing their potential

16. How would you rate your personal skills at the time you completed your doctorate?

(1 = Very poor; 2 = Poor; 3 = Fair; 4 = Good; 5 = Very good)

CRITICAL-ANALYTICAL THINKING: critically analysing and evaluating findings and results

PROBLEM SOLVING: formulating and applying appropriate solutions to problems and challenges

CREATIVITY: being imaginative, thinking out of the box and developing new insights

FLEXIBILITY: responding quickly to changes and adapting easily to new situations

PERSONAL EFFECTIVENESS: making use of the resources at your disposal (e.g. time, skills and talents) to achieve professional and personal goals

RESILIENCE: ability to cope with and overcome challenges and setbacks on a daily basis, including adaptation to change

17. How would you rate your professional skills at the time you completed your doctorate?

(1 = Very poor; 2 = Poor; 3 = Fair; 4 = Good; 5 = Very good)

TEAM WORKING: working constructively with colleagues, acknowledging their contribution

ENTREPRENEURSHIP: ability and willingness to develop, organise and manage a business venture along with its risks

NETWORKING: developing, maintaining and using networks or collaborations

NEGOTIATION: ability to discuss, communicate and cooperate for reaching an agreement

SELF-BRANDING: ability to properly identify your personal skills and to communicate them to different audiences

18. How would you rate your communication skills at the time you completed your doctorate?*(1 = Very poor; 2 = Poor; 3 = Fair; 4 = Good; 5 = Very good)*

EFFECTIVE COMMUNICATION: communicating information effectively and confidently to different audiences

LANGUAGES: communicating effectively in a language other than your mother tongue

INTERCULTURAL SKILLS: having acquired cultural sensitivity and openness to other cultural horizons and viewpoints

DIGITAL COMMUNICATION: using newest digital tools to undertake, manage and promote research, products or goals to the public

19. How would you rate your management skills at the time you completed your doctorate?*(1 = Very poor; 2 = Poor; 3 = Fair; 4 = Good; 5 = Very good)*

PROJECT MANAGEMENT: effectively planning, managing and delivering projects on time

CAREER MANAGEMENT: actively manage your professional development

DATA STEWARDSHIP: handling information and knowledge to facilitate their management, ensuring data meets FAIR standards

SECTION 3: TRANSITION FROM DOCTORATE TO THE FIRST OR NEXT EMPLOYMENT**20. Did you have a paid job before or during your doctorate?**

- ☐ Yes
- ☐ No

21. Did you have a paid job at any time after completing your doctorate (including postdoctoral positions)?

- ☐ Yes
- ☐ No

*If the respondent had a job at any time after completing their doctorate, then go to the question 22**If the respondent didn't have a job at any time after completing their doctorate, then go to Section 4.***22. Approximately how many months passed between the time you completed your doctorate and your first or next paid job? If you were already employed when you graduated, select "0"**

Dropdown menu – 0 to 60 months

*If the respondent had a job at any time after completing their doctorate, then go to the question 22**If the respondent didn't have a job at any time after completing their doctorate, then go to Section 4.***23. How important were the following resources when looking for your first or next job after finishing your doctorate?***(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)*

- ☐ Academic Advisor/Supervisor
- ☐ University Career Centre
- ☐ Job advertisements in Department/University
- ☐ Peers (e.g. colleagues, alumni, labour unions, associations)
- ☐ Personal contacts
- ☐ Web search/online job portal
- ☐ Job/career fairs
- ☐ Previous job, work placement or internship
- ☐ Social and professional networks
- ☐ Please list any other important resources:

24. Did you take one or more postdoctoral positions at a university or a research performing organisation after obtaining your doctorate?

- ☐ Yes
- ☐ No

If the respondent took one or more postdoctoral positions, then go to the question 26

If the respondent didn't take a postdoctoral position, then skip to the question 28

25. How many postdoctoral positions did you take?

- ☐ 1
- ☐ 2
- ☐ 3 or more

26. To what extent do you agree or disagree with the following statements?

(Strongly agree, Agree, Neither agree, nor disagree, Disagree, Strongly disagree)

- ☐ My doctorate properly prepared me for my first job
- ☐ My doctorate enabled me to progress towards my desired career
- ☐ It was clear to me what career opportunities I could aspire to after my doctorate
- ☐ The transition to my first job after doctorate was difficult
- ☐ Having a doctorate made no difference to my career path

SECTION 4: EMPLOYMENT AND CAREER RELATED EXPERIENCE

27. Which of the following best describes your current main employment status? Please note that the term 'employed' includes postdoctoral positions.

- ☐ Permanent Full-time Employed (30 hours per week or more)
- ☐ Permanent Part-time Employed (less than 30 hours per week)
- ☐ Temporary Full-time Employed (30 hours per week or more)
- ☐ Temporary Part-time Employed (less than 30 hours per week)
- ☐ Self Employed
- ☐ Retired
- ☐ Unemployed
- ☐ Full-time study
- ☐ Internship
- ☐ Career break (including childcare, elderly people care)
- ☐ Other, (please specify)

If the respondent is currently employed full-time or self-employed, then go to the question 28

If the respondent is in career break, then go to the question 46

If the respondent is not in employment (i.e. retired, unemployed, full-time study, internship), then skip to Section 6

28. Please indicate the sector which best describes your current main employment

- ☐ University
- ☐ Research organizations (e.g. research institutes)
- ☐ Business sector: industry
- ☐ Business sector: services and other
- ☐ Government or another public sector
- ☐ Healthcare sector (e.g. hospital, clinical centre)
- ☐ Non-higher education (e.g. secondary education)
- ☐ Private not-for-profit sector
- ☐ Other (please specify)

29. Please indicate your main position.

- ☐ Postdoctoral position/early career researcher
- ☐ Research Fellow/Researcher
- ☐ Lecturer
- ☐ Senior Researcher
- ☐ Assistant Professor/Junior Professor
- ☐ Associate Professor/Reader
- ☐ Full Professor
- ☐ Director, Head of Unit
- ☐ Analyst, Specialist
- ☐ Technician
- ☐ Engineer
- ☐ Project Manager
- ☐ Coordinator
- ☐ Other (please specify)

30. What was the minimum education or experience level requirement for your current main job?

- ☐ Bachelor or lower
- ☐ Master
- ☐ Doctorate
- ☐ Postdoctoral level
- ☐ Other (please specify)

31. To what extent is the content of your work in your current main job related to the thematic field of your doctorate degree?

- ☐ Closely related
- ☐ Partly related
- ☐ Not related

32. In your current main job are you engaged in research?

The Frascati Manual defines researchers as professionals 'engaged in creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications'.

- ☐ Yes
- ☐ No

If the respondent is not engaged in research in the main current job, then go to the question 33

If the respondent is engaged in research in the main current job, then go to the question 34

33. Please rate the importance of the following reasons for not working as a researcher

(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)

- ☐ Availability of job positions/offers not focused on research
- ☐ Interest in a non-research career
- ☐ Unavailability of a suitable research post or position
- ☐ Difficulty securing a tenured/permanent research post or position
- ☐ Bigger variety of career paths
- ☐ Better income
- ☐ Personal/family reasons
- ☐ Other important reason(s):

Redirect to question 37

34. At which level do you work (as per European Framework for Research Careers)?

- R2 Recognized Researcher (Doctorate holders or equivalent who are not yet fully independent)
- R3 Established Researcher (researchers who have developed a level of independence, e.g. publishing papers as lead author or leading collaborative research projects)
- R4 Leading Researcher (researchers leading their research area or field)

35. Which of the following activities do you perform as part of your main job? Please select all that apply.

- Research performing activities (including publications)
- Teaching/mentoring/supervision activities
- Administrative activities
- Staff management responsibilities
- Budget management responsibilities
- International partnerships
- Entrepreneurship, start-up activities
- Communication or scientific journalism
- Artistic creation
- Other (please specify)

36. To what extent are the following research skills and other academic competences important in your current main job?

(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)

SUBJECT KNOWLEDGE: demonstrating a theoretical and practical understanding of your subject area and its wider research context

METHODOLOGY: applying research methodologies, tools and techniques appropriately

INTELLECTUAL PROPERTY: understanding how to manage Intellectual Property rights, e.g. how to file a patent, how to share work via Creative Commons licensing

RESEARCH VALORISATION, ENGAGEMENT, AND INNOVATION: considering potential societal impact of research, engaging with non-academic actors and developing new ideas, processes or products, which are rooted in research

RESEARCH ETHICS AND INTEGRITY: understanding principles, rules, values and professional standards governing research for ensuring scientific rigor, honesty, trust and confidence

TEACHING/MENTORING/SUPERVISION: using appropriate tools and methods to facilitate learning and assessment, to encourage and support learners developing their potential

37. To what extent are the following personal skills important in your current main job?

(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)

CRITICAL-ANALYTICAL THINKING: critically analysing and evaluating findings and results

PROBLEM SOLVING: formulating and applying appropriate solutions to problems and challenges

CREATIVITY: being imaginative, thinking out of the box and developing new insights

FLEXIBILITY: responding quickly to changes and adapting easily to new situations

PERSONAL EFFECTIVENESS: making use of the resources at your disposal (e.g. time, skills and talents) to achieve professional and personal goals

RESILIENCE: ability to cope with and overcome challenges and setbacks on a daily basis, including adaptation to change

38. To what extent are the following professional skills important in your current main job?

(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)

TEAM WORKING: working constructively with colleagues, acknowledging their contribution

ENTREPRENEURSHIP: ability and willingness to develop, organise and manage a business venture along with its risks

NETWORKING: developing, maintaining and using networks or collaborations

NEGOTIATION: ability to discuss, communicate and cooperate for reaching an agreement

SELF-BRANDING: ability to properly identify your personal skills and to communicate them to different audiences

39. To what extent are the following communication skills important in your current main job?

(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)

EFFECTIVE COMMUNICATION: communicating information effectively and confidently to different audiences

LANGUAGES: communicating effectively in a language other than your mother tongue

INTERCULTURAL SKILLS: having acquired cultural sensitivity and openness to other cultural horizons and viewpoints

DIGITAL COMMUNICATION: using newest digital tools to undertake, manage and promote research, products or goals to the public

40. To what extent are the following management skills important in your current main job?

(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)

PROJECT MANAGEMENT: effectively planning, managing and delivering projects on time

CAREER MANAGEMENT: actively manage your professional development

DATA STEWARDSHIP: handling information and knowledge to facilitate their management, ensuring data meets FAIR standards

41. How satisfied are you with the following aspects of your main current working environment?

(1 = very dissatisfied; 2 = somewhat dissatisfied; 3 = neither satisfied, nor dissatisfied; 4 = somewhat satisfied; 5 = very satisfied; not applicable)

- Skills development
- Career growth opportunities
- Intellectual challenge
- Autonomy and responsibility
- Reputation of organisation
- Organisational culture
- Job security/stability
- Salary
- Mentoring and training
- Work/life balance
- Other important aspect(s)

42. What is your annual gross income (before deductions)?

- Under €5,000
- €5,001-€10,000
- €10,000-€15,000
- €15,001-€20,000
- €20,001-€25,000

- ☐ €25,001-€30,000
- ☐ €30,001-€40,000
- ☐ €40,001-€60,000
- ☐ €60,001-€85,000
- ☐ €85,001-€100,000
- ☐ €100,001-€150,000
- ☐ €150,001-€200,000
- ☐ Over €200,000
- ☐ Prefer not to say

43. How important were the following reasons for taking your current main position? Please rate their importance to you when making the decision

(1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = extremely important)

- ☐ To take the next step in my desirable career path
- ☐ To improve/gain new skills
- ☐ To work with a specific person, organisation or company
- ☐ It was the only acceptable employment I could find at the time
- ☐ Intellectual challenge
- ☐ Autonomy and responsibility
- ☐ Salary
- ☐ Job security/stability
- ☐ Work/life balance
- ☐ Reputation of organisation
- ☐ Family/personal reasons
- ☐ Other important reason(s):

44. To what extent would you say that your doctorate contributed to the following in your working life?

(1 = not at all; 2 = a little; 3 = a moderate amount; 4 = a lot; 5 = a great deal; not applicable)

- ☐ Improved my skills and competencies
- ☐ A higher salary
- ☐ More interesting job assignments
- ☐ More demanding job assignments
- ☐ Better status at my place of work
- ☐ A job with a new employer
- ☐ A better position on the labour market
- ☐ Starting my own business

45. Did you take a career break (e.g. maternity/paternity leave, sickness) or have any time without a job (e.g. unemployment) since the completion of your doctorate? Please consider both intentional and unintentional career breaks.

- ☐ Yes
- ☐ No

If the respondent took a career break, then go to the question 46

If the respondent didn't take a career break, then skip to Section 5

46. What was the total duration of your longest career break after completing your doctorate?

- ☐ Less than 3 months
- ☐ Between 3 and less than 6 months
- ☐ Between 6 and less than 12 months
- ☐ 12 months or more

47. What was your main reason for taking a career break? If you had more than one break after completing your doctorate, please refer to your longest one.

- ☐ Maternity/paternity leave and childcare commitments
- ☐ Other family reasons (e.g. related to partner or elderly parents)
- ☐ Sickness (personal health problems)
- ☐ Travelling
- ☐ Unemployment
- ☐ COVID-19 pandemic
- ☐ Other (please specify)

SECTION 5: INTERSECTORAL MOBILITY

48. Are you considering changing the sector of your current employment?

- ☐ Yes, I work in the academic sector (e.g. university or research organisation), and I want to move to the non-academic sector
- ☐ Yes, I work in the non-academic sector, and I want to move to the academic sector
- ☐ Yes, I work in the non-academic sector, and I want to move to another non-academic sector (e.g. business, governmental/not-for-profit, healthcare sector)
- ☐ Yes, I want to mix the work in the academic and non-academic sectors at the same time
- ☐ No, I am not considering changing the sector of my current employment

49. How many other employers did you have before your current employment and after obtaining your doctorate (including postdoctoral positions with other employers)?

- ☐ 0 (Did not have other employers after doctorate)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4 or more

If the respondent did not have any other employers after the completion of the doctorate (Answer "0"), then skip to question 54.

50. Before your current employment and after obtaining your doctorate, were you engaged in research?

- ☐ Yes
- ☐ No

51. Before your current employment and after obtaining your doctorate, did you work in (a) different sector(s) from that of your current employment?

- ☐ Yes
- ☐ No

If the respondent worked in different sectors, then go to question 52.

If the respondent did not work in different sectors, then go to question 54.

52. Before your current employment and after obtaining your doctorate, in which sector(s) have you worked? Please select all that apply.

- ☐ Academic sector (e.g. university, research performing organisation)
- ☐ Business sector: industry
- ☐ Business sector: services and other
- ☐ Government or another public sector

- ☐ Healthcare sector (e.g. hospital, clinical centre)
- ☐ Non-higher education (e.g. secondary school)
- ☐ Private not-for-profit sector
- ☐ Other (please specify)

53. Which were the reasons to change sectors? Select all that apply.

- ☐ To gain new skills and experience
- ☐ It was the only way to enter the labour market
- ☐ Personal reasons
- ☐ Other (please specify)

54. After obtaining your doctorate, have you ever had more than one employer (including your current employment), e.g. several part-time jobs?

- ☐ Yes
- ☐ No

If the respondent has been employed in only one organisation, then skip to Section 6

55. In which organizations have you ever combined positions at the same time? Please select all that apply.

- ☐ Positions in more than one organisation from academic sector
- ☐ Positions in organizations from both academic and business sector
- ☐ Positions in organizations from both academic and governmental/not-for-profit sector
- ☐ Positions in organizations from both academic and health care sector (hospital, clinical center)
- ☐ Positions in more than one organisation from non-academic sector

56. Which were the reasons to combine positions in different sectors at the same time? Select all that apply.

- ☐ To gain new skills and experience
- ☐ No full-time job available
- ☐ Personal reasons
- ☐ Other (please specify)

SECTION 6: GEOGRAPHICAL MOBILITY

57. Have you lived and worked outside your country of citizenship, after completing your doctorate?

- ☐ Yes
- ☐ No

If the respondent lived or worked abroad, then go to the question 58

If the respondent didn't live or work abroad, then skip to Section 7

58. After completing your doctorate, what was the duration of your longest stay outside your country of citizenship?

- ☐ Less than 3 months
- ☐ Between 3 and less than 6 months
- ☐ Between 6 and less than 12 months
- ☐ 12 months or more

If the respondent was abroad less than 3 months, then skip to Section 7

59. What were the reason(s) for living abroad for three months or more after completing your doctorate? Please select all that apply.

- ☐ End of postdoctoral position or job contract

- Previous job/study experience in the destination country
- Returning to my home country
- Economic/financial opportunities
- Career development opportunities
- Partner's career development opportunities
- Culture and language
- Other reasons (please specify)

SECTION 7: DEMOGRAPHICAL DETAILS

60. In which country do you currently live?

Dropdown menu for Country Selection

61. Please select your country(ies) of citizenship (s)

First Citizenship Country (drop-down menu for country selection)

Second Citizenship Country (drop-down menu for country selection)

Third Citizenship Country (drop-down menu for country selection)

62. What is your year of birth?

Dropdown menu 1940-2000

63. What is your gender?

- Male
- Female
- Other
- Prefer not to respond

64. How many children do you have? Please enter a number in each section. If you have no children, please enter '0' (zero).

- 0
- 1
- 2
- 3
- 4 or more

SECTION 8: QUESTIONNAIRE EVALUATION AND FOLLOW UP

65. Please rate the questionnaire you have just completed under the following categories:

(1 = Very poor; 2 = Poor; 3 = Fair; 4 = Good; 5 = Very good)

- Clarity of questions
- Relevance of questions to your career experience
- Questionnaire length
- Effort needed to complete the questionnaire

66. Would you agree to be contacted by your university or European Science Foundation in the future to complete a similar questionnaire?

- Yes, I agree to be contacted again
- No, I do not wish to be contacted again

If the respondent agrees to be contacted again, then go to the question 67

If the respondent does not agree, then skip to question 68.

67. Please enter a steady email address that can be used to contact you. You are also welcome to provide an additional, possibly private email address.

- Email address (where it is easiest to contact you):
- Possibly further email address:

68. If you like, please let us know your comments and suggestions to improve this questionnaire.

Annex B **(informative)**

Example - Informed consent - Form

Part I: Information Sheet

Introduction

European Science Foundation-Science Connect (ESF) is involved in the European Union-funded project DocEnhance and as part of this project, we would like to give you information and invite you to be part of the research we are going to carry out on careers of doctorate holders. If you are not sure whether you would like to participate in the research or not or if there are words that you do not understand, you can talk to anyone you feel comfortable with about the research or contact us directly (see Section Contact), and then decide.

Purpose of the research

We want to study occupational patterns of doctorate graduates and understand if they have pursued research careers in academia or industry thanks to transferable skills acquired, or whether they have moved on to other occupations. We would like to explore whether doctoral training has enabled them to progress towards their desired career goals and how satisfied they are with their jobs. This questionnaire will offer valuable feedback to the participating universities on how to improve their doctoral training.

Type of research intervention

This research will involve filling out an online questionnaire.

Participant selection

You are being invited to fill out this questionnaire because you have pursued and completed a doctoral degree at one of the DocEnhance partner universities in the relevant time period (2016-2020).

Voluntary participation

Your participation in this research is voluntary. It is your choice whether to participate or not.

You may change your mind later and stop participating, even if you have agreed to do so previously.

Procedures

A) This research study consists of an online questionnaire. If you choose to participate, you will help us to learn more about the career paths of doctorate holders. In this way, you will contribute to improve and enhance doctoral training in Europe and beyond.

B) You are invited to fill out the questionnaire sent by your university. The questionnaire is to be filled out online. If you do not wish to answer any of the questions included in the survey, you may skip them and move on to the next question. The types of questions will concern, for instance, your doctorate completion time, competences gained, transition to the first position, employment status and sector of employment, relationship between work and doctorate, engagement or not in research, as well as motivation for and satisfaction with the current job.

Duration

The DocEnhance career tracking survey task takes place over 24 months and involves several stages: preparation of the questionnaire, design and set-up of the survey, survey launch, analysis of collected

data and preparation of the report(s) outlining the main results. The survey will be open for a period of approximately four weeks (launching in March 2021).

Risks

The questionnaire is not asking for any sensitive information (e.g. political opinions or community beliefs) and the confidentiality arrangements in place will guarantee that any potentially identifying data collected (e.g. year of birth, gender or citizenship) will be used for the purposes of statistical analysis only and anonymized before analysis. There is a risk that in open-ended questions you may share some personal or confidential information by chance or that you may feel uncomfortable answering some of the questions. You do not have to answer any question if you feel the question is too personal or if answering it makes you uncomfortable.

The answers will be anonymised. Any potentially identifying personal data collected by the survey such as the year of birth, gender, or citizenship are only used for statistical analysis of aggregate trends. The data collected will be used for research and evaluation purposes. It will be made available to institutions and other researchers anonymously only. At the end of the questionnaire, you will be asked if you would agree to be contacted again for any follow up survey in several years' time. In case you agree, you will be asked to provide a contact email. Your contact data will always be processed and stored separately from the survey data.

Benefits

There will be no direct benefit to you, but your participation is likely to help us find out more about how to adjust doctoral training programme so that it leads to fulfill careers for the doctorate holders. You may also be interested in finding out which career paths the graduates from your university have followed.

Reimbursements

This is an online survey without direct costs to you. You will therefore not receive any monetary reimbursement for your participation.

Confidentiality

The questionnaire does not seek any personally identifiable information except for your year of birth, gender and citizenship, which are only used for the purposes of the statistical analysis of aggregated trends. At the end of the questionnaire, you will be asked if you would agree to be contacted again for any follow up survey in several years' time. In case you agree, you will be asked to provide a contact email. Your contact data will always be processed and stored separately from the survey data. You can revoke your acceptance of the storage of your contact data in written form at any time (via email at database@esf.org) without giving reasons. It will then be immediately deleted.

Sharing the Results

The knowledge that we gain from this research will be shared and made widely available to the public via the [DocEnhance](#) project website and [European Science Foundation-Science Connect](#) website.

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so, and you may stop participating in the survey at any time.

Contact

If you have any questions about this survey, please contact ____.

If you have any ethical or data questions regarding General Data Protection Regulation (GDPR), you can contact the designated Data Protection Officer, _____. The Data Protection Officer will ensure that personal data collection and processing in the frame of this survey will be carried out according to EU and national legislation.

Part II: Certificate of Consent

I have been invited to participate in a career-tracking survey designed for doctoral graduates from European universities. I am willing to participate in this study in order to enable a better understanding of doctoral graduates' career paths and their transferable skills. I have read the foregoing information.

I have read the foregoing information. I have had the opportunity to ask questions about it and any questions I have been asked, have been answered to my satisfaction. I consent voluntarily to be a participant in this study. I reserve the right to withdraw from the study at any point, without giving any reason or explanation.

Print name of participant, Date and Signature – via online system

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