

Position Statement on sustainability of research careers and precarity

March 2022

Research career context

The career of the researcher is relatively new. In the late 20th century, core research was relatively small, especially outside the United States. The career of the researcher was a transition position, between the doctoral and the guaranteed progression, or tenure track, to academic career. The intake of researchers matched the vacant positions in academia, guaranteeing career progression. Industry demand for researchers was small. Since 2000's, two changes have emerged:

- 1. The demand for core research has increased tremendously, all across the globe, and is used as a measure of economic progress. Research has increased in both academic institutions and industry. (Nature¹).
- 2. The intake of PhDs has increased exponentially, whereas the number of academic positions remained constant, and in some cases decreased. (Nature 2016²).

The 'postdoc' research position emerged as a new position, but not a career. The common element that united this new research career position was that almost all posts were offered <u>on short-term contract</u> <u>basis</u>. The research career was probably the first new career of the post-industrial age to be completely following the new "American" employment style of short-term contract positions. Almost no positions offered to early stage researchers were permanent, as would be offered to similar positions in industry.

The short-term contract position was quickly identified by employers as having many advantages:

- A work force that is only hired for the duration of a project, departing once project is ended. The short-term contract added huge efficiencies for employers not having to retain staff post project.
- Staff had little employment rights as a result, often with no holiday, pension, or maternity rights.
- The employment force was in general non-unionised, due to their short-term stay, and often acquiescent, if <u>not fearful</u> of their employers, further increasing employer control.

The career offered to the researcher employee on short-term contracts was summed up as follows:

- Employees might be offered a series of rolling contracts, often over 15 years or more. The number of contracts gave no extra entitlement to security and were let go, in favour of younger candidates.
- Same pay, with each new contract.
- No career advancement; No career stability; No prospect of permanent position.

In 1974, UNESCO commissioned a report on "1974 Recommendation on the Status of Scientific Researchers" (RSSR)³. This report produced a series of insight recommendation on researcher careers. These recommendations are as pertinent today as they were 40 years ago. In 2017, UNESCO issued a revised RSSR, signed by 195 countries⁴. The 2017 RSSR contained 10 key areas and contains all of the 5 EC pillars of Responsible Research and Innovation (RRI) as well as the right of researchers to a sustainable career and scientific freedom. Of note is that all of the recommendations are essentially the same as the 1973 Recommendation, but no progress on implementation.

In 1999, in order to stem the abuse of workers on short-term contracts, the EU introduced the Fixed Term Workers Act⁵. This act stated that after 4 years of consecutive employment with one employer, and at least two contracts within the 4-year period, no matter what the position within the company or institute, the employee was eligible to apply for a "contract of indefinite duration" (CID), thereby providing the employee with almost all the rights and stability of full-time employee.

In 2003, the European Commission report "Researchers in the European Research Area: One profession, multiple careers; key research efforts, excellence and performances" identified 3 primary issues as:

- 1. Number of researchers;
- 2. Researchers' mobility;
- 3. The "question" of the researcher careers.



The report identified two areas of focus relating to early stage researcher ("ESR") and senior researcher careers including:

- 1. A growing need for alternative tenure opportunities. It identified two factors which hinder long-term perspectives: the awareness of the career structure and the consciousness of the lack of long-term employment perspectives particularly for a career in academia.
- 2. Career evaluation systems. Evaluation marking for promotion and career advancement should value and account for diversified working experience.

In 2005, Europe provided guideline on the how HR should manage the career development and training from researchers, via the European Charter & Code for Researchers⁷, produced by Euraxess. In 2007, the situation of the research career was identified by Europe as needing further guidance and issued the "European Framework on Research careers". This framework detailed the career progression that researchers should be able to aspire and attain, the career development required to reach each stage. The European Framework of research careers reaffirmed the Charter and Code, stating that all researchers were professionals, and entitled to career progressions and stability, as in any other work force category.

In 2010, the Working Group on Higher Education of the European Sectoral Social Dialogue in Education⁹ ("WGHE") with the support of the European Commission was set up to tackle job insecurity for ESRs. It was recognised by both the social partners that it is desirable for more ESRs to have long-term job security so that they can develop their careers. It was also recognised, however, that the short-term nature of most research funding for ESRs creates a major challenge to achieving this. In 2012, in order to incentivise the Charter and Code and engage with HR of Research Performing Organisations ("RPO"), Euraxess created the "The Human Resources Strategy for Researchers - HRS4R", or "European HR Badge of Excellence" However, the main emphasis of the HRS4R is a set of guidelines for training and development for postdoc and researchers, with a large emphasis on providing soft transferable skills, which would enable the research to transfer outside of academia. The initiative has been successful with over 400 European institutions joining.

Europe produced two socio-economic strategy papers investigating research and its economic impact in EU.

In 2012, The European Research Area ("ERA") was established. A key aim for the ERA is to reduce both brain drain, notably from weaker regions, as well as the wide regional variation in research and innovation performance, aiming at excellence across the Union.

Also in 2012, Europe produced a strategy "Reinforced European Research Area Partnership for Excellence and Growth ERCR" In 2012, the Commission has examined how different countries approach this issue of research careers and recommended a 4-stage research career model presented in the "EU funding for Career Development" guide. This is based on the Finnish national model defined and described by the Ministry of Education.

In 2014, based on analysis of the strengths and weakness of ERCR report, set out five priorities, one of which is, "An open labour market for researchers - to ensure the removal of barriers to researcher mobility, training and attractive careers" 13. These European initiatives have been very clear in their focus on researcher careers and mobility as central to European policy, progress, and success.

Despite the plethora of initiatives, groups, and frameworks, in 2021, essentially the career of a researcher in all states in EU has remained the same. If anything, the career of the researchers has dis-improved.

- European recession in 2007, states drastically reduce research budgets, ending stability for careers.
- Less permanent posts were offered, short-term contracts were increased, salaries reduced, as were terms and conditions. Despite the end of the European recession, its legacy continues.
- The emergence of "zero contract hours", "precarious" or "casual" contracts is increasingly being used in contract negotiations. Project based work is not vulnerable to it yet, but it is only a matter of time.
- Some states re-designated postdoc researchers as trainees, in order to remove their eligibility to claim for CID e.g., Ireland.



A number of publications in Nature ¹⁴ ¹⁵ ¹⁶ ¹⁷ ¹⁸ in the last few years are affirming that the career of researchers is dire condition, and that:

- Human rights are being abused;
- And also, the quality of research, and output must suffer, as the right conditions for work are not implemented. Short-term economy cannot mean long-term productively.

The conclusion of this context review of researcher career policy in Europe is that almost two decades of European and national stakeholder led initiatives to improve the career of researchers has failed. The RPOs have a vested interest in not objecting to the short-term employment arrangement of researchers. This situation has become more pronounced in the last five years as reported by the MORE ¹⁹ study. Essentially, the RPOs have pushed the funding issue entirely onto the shoulders of the weakest part of the research community – the ESRs. ESRs must be protected and nurtured, not relegated and discriminated against by virtue of being the weakest part of the research community.

Research Funding

All research funding calls issued by Research Funding Organisations ("RFO") are, by their nature, short-term. This can vary from 6-12 month contracts, which are the norm, up to 3-4 years contracts²⁰ ²¹. This timespan presents clear management and timing issues for RPOs. Over time, the response of the RPOs has been to restrict the nature of ECR contracts to short-term to match the timespans of the RFO contracts.

The soft funding model is based on three key ingredients:

- 1. Soft funded, externally funded projects, awarded to principal investigators through competition process from RFOs. These projects are short-term in nature, max. 4 years.
- 2. Universities (RPOs) that host the research and researcher and process the funds from the RFO.
- 3. A research work force, kept entirely on short-term contract basis, and that is pliable.

In 2016, Science Europe has been commissioned by EU to examine research funding schemes. The committee produced the report "Postdoctoral Funding Schemes" 22.

The impacts of short-term contracts and precarity are threefold:

- 1. Low engagement by researchers (on all levels) in research career policy creation and with policy makers:
 - Early stage researchers ("ESRs") are on contracts that are too short to allow time to engage in policy.
 - Senior academics and senior researchers are too busy and reluctant to address exploitation of junior ESRs.
 - Social Sciences and Humanities have reduced career paths and advancement opportunities.
 - Researcher communities fail to effectively engage with EU/international policy to implement change.
- 2. Low researcher productivity, due to researcher disillusionment:
 - Short-term nature of employment, lack of career progression and lack of recognition for their 4th level expertise, leading to researcher disillusionment.
 - Loss of research skills as they are forced to leave academic and move to other lower skilled positions.
 - Brain drain, as researchers go to global regions which value skilled researchers like USA and Singapore.
- 3. Low project productivity:
 - Short-term nature of projects leads to low productivity in research completed and low productivity of the research worker, as they continually search for new work.
 - Research project rarely progress to next stage, due to lack of continuity of funding.
 - Loss of value to the economy as research investment rarely leads to commercialisation.



Position Statement on sustainability of research careers and precarity –

Proposal

This Position Statement proposes a funded career path that will lead Early Stage Researchers ("ESRs") up to Senior Researchers, in all disciplines, providing sustainable career paths, with clear processes for recruitment, promotion, progression and involvement in decision making, and make their career opportunities **on a par with Industry**.

ICoRSA proposes:

- 1. Core governmental funding for research to support viable career paths to senior level. For example:
 - Change in research funding effectively supporting a person like a fellowship.
 - Government core funding to go to universities to spend how their feel fit to allow ESRs to be retained rather than lost after their project finishes. This university core finding can run alongside the current grant scheme(s) or would ultimately replace them.
- 2. Increased funding options for intersectoral mobility (between university and industry)
- 3. All aspects of these recommendations must be permeated by considerations pertaining to equality, diversity, and inclusion, as well as research integrity and ethical considerations.



References

- ¹ Van Noorden, R., Global scientific output doubles every nine years. Nature. 2014. http://blogs.nature.com/news/2014/05/global-scientific-output-doubles-every-nine-years.html
- ² Steelman, T.A. and J.J. McDonnell, PhD programmes: Doctorate deluge. Nature, 547(843): 2017.
- ³ UNESCO, 1974 Recommendation on the Status of Scientific Researchers. 1974 and 2017. http://www.unesco.org/new/en/social-and-human-sciences/themes/bioethics/1974-recommendation/
- ⁴ ANNEX II Recommendation on Science and Scientific Researchers https://unesdoc.unesco.org/ark:/48223/pf0000260889.page=116
- ⁵ Europa.eu, Framework agreement on fixed-term work: Working Conditions Fixed-Term Work. 1999. http://ec.europa.eu/social/main.jsp?catId=706&langId=en&intPageId=199
- ⁶ European Commission, Researchers in the European Research Area: One profession, multiple careers. 2003. https://op.europa.eu/en/publication-detail/-/publication/74059fcb-7dd9-4f42-8e20-070609ba0592/language-en
- ⁷ Euraxess, The European Charter & Code for Researchers. 2005. https://www.euraxess.ie/jobs/charter
- ⁸ European Commission, European Framework for Research Careers EFRC. 2011. http://ec.europa.eu/euraxess/pdf/research_policies/Towards_a_European_Framework_for_Research_policies/Towards_a_European_Framework_for_Framework_for_Research_policies/Towards_a_Europe
- ⁹ ETUCE, Working Group on Higher Education of the European Sectoral Social Dialogue in Education. Trade Union Committee for Education. 2010. http://www.csee-etuce.org/images/Statements2014/HE employers Seminar Report.pdf
- ¹⁰ Euraxess, The Human Resources Strategy for Researchers. 2012. https://euraxess.ec.europa.eu/jobs/hrs4r
- ¹¹ European Commission, Reinforced European Research Area Partnership for Excellence and Growth. COM(2012) 392 final. 2012. https://ec.europa.eu/digital-single-market/en/news/reinforced-european-research-area-partnership-excellence-and-growth
- ¹² European Commission, EU funding for Career Development. https://www.jyu.fi/yliopistopalvelut/tutkimuspalvelut/tiedotteet/copy_of_TIP_1.0_GuideforEUFundingforCareerDevelopment.pdf
- ¹³ European Commission, An open labour market for researchers to ensure the removal of barriers to researcher mobility, training and attractive careers. 2014. http://ec.europa.eu/research/era/open-labour-market-for-researchers en.htm
- ¹⁴ Maher, B. and M. Sureda Anfres, Young scientists under pressure- what the data show. 2016. http://www.nature.com/news/young-scientists-under-pressure-what-the-data-show-1.20871
- ¹⁵ Nature Editor, The plight of young scientists. 2016. http://www.nature.com/news/the-plight-of-young-scientists-1.20870
- ¹⁶ Powell, K., The future of the postdoc. 2015. http://www.nature.com/news/the-future-of-the-postdoc-1.17253
- Powell, K., Young, talented and fed-up -scientists tell their stories. 2016. http://www.nature.com/news/young-talented-and-fed-up-scientists-tell-their-stories-1.20872?WT.mc_id=TWT_NatureNews
- ¹⁸ Heggeness, M.L., K.T.W. Gunsalus, J. Pacas, and G. McDowell, The new face of US science. Nature, 541(7635): 2017.
- ¹⁹ Commission, E., Support for continued data collection and analysis concerning mobility patterns and career paths of researchers: Deliverable 8 Final report MORE2. Austrian Institute of Economic Research (WIFO), Institute for Research Information and Quality Assurance (iFQ), Center for Higher Education Policy Studies, University of Twente (CHEPS), LaSapienza University of Rome, Danish Center for Research and Research Policy (CFA) Aarhus University, University of Wolverhampton, Loft33, CheckMarket, Interago. 2013.
- ²⁰ Cyranoski, D., N. Gilbert, H. Ledford, A. Nayar, and M. Yahia, Education: The PhD factory. 2011. p. 276-279. http://www.nature.com/news/2011/110420/full/472276a.html
- ²¹ Gould, J., How to build a better PhD. Nature, 528(7580): 2015.
- ²² Science Europe, Postdoctoral funding schemes in Europe. 2016. http://www.scienceeurope.org/wp-content/uploads/2016/10/20160922-Survey-Postdocs-Final.pdf