

Views of European Scientific Diasporas on UK-European cooperation after Brexit

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Abstract

Since the Brexit referendum in 2016, there has been much uncertainty around UK access to the EU's flagship research programmes and its opportunities to lead European projects and collaborations. Here, we present the results from a survey on Portuguese, Spanish, Polish and Dutch researchers residing in the UK on issues related to Brexit. The key finding was that most respondents from all of the European diasporas find the UK less attractive after the referendum, with major obstacles identified being the new immigration policies for EU nationals, the political and economic situation in the UK, and limited access to research funds and to public services in the UK (NHS, education, pensions, etc.). Researchers need to be reassured they can continue their world-leading science regardless of their nationality. To upkeep the future of EU-UK relationships, an alliance was recently formed by the organisations represented by the authors of this study.

Keywords: research diaspora; UK; Brexit; UK-EU relationship, perception survey

Introduction

Since the results of the 2016 referendum confirming the exit of the United Kingdom (UK) from the European Union (EU), research communities across Europe have monitored the effects of Brexit on international research collaborations, funding and mobility, being fearful of the consequences and uncertainty that a no-deal Brexit might bring. On the 24th of December 2020, the European Commission and the UK settled a Trade and Cooperation Agreement (TCA) with important implications for the European scientific community in the UK (*EUR-Lex - 22021A0430(01)*, 2021; *Report: 23 June 2016 referendum on the UK's membership of the European Union*, 2019). Whilst some of the concerns around a no-deal scenario did not materialise, such as the impossibility to associate with Horizon Europe, the EU's key funding programme for research and innovation, or the suspension of participation in joint EU research grants, other concerns did (Pinto da Costa et al., 2019; Sánchez Cañizares et al. 2022). Some of these are questions around the viability of transferring a grant from the UK to another European

country or leading European joint research projects that emerge while the process of negotiation is held up by political factors, raising uncertainty over the future UK-EU relationship. Indeed, the UK has already withdrawn from the Erasmus+ exchange programme, limiting the opportunities to attract international students - reinforced by the new immigration system.

The TCA was much celebrated by the UK research community since it allowed the UK participation in the EU's research programmes such as Horizon Europe, the EU flagship research programme running from 2021 until 2027. However, the negotiation process to implement this association was held up by political negotiations related to the Northern Ireland Protocol until the Windsor Framework was recently agreed (Else, 2022). As the EU is still in the process of formalising the UK's association to Horizon Europe, UK-based applicants can continue to apply for the funding opportunities included in Horizon Europe. However, whilst the UK is not formally associated with the programme, grants awarded by the European Research Council (ERC) cannot be signed if they have a UK host institution, meaning that successfully evaluated candidates have to move to a member or associated state to the Horizon Europe programme to receive their funding, or resign to their ERC grants otherwise (SRUK, 2023). Over the last two editions, the UK government has matched the ERC funding awarded to allow successful applicants based in the UK hold their funding and carry out their research projects in the country (*How to apply for Guarantee Funding for European Research Council*; Upton et al. 2022; Inge, 2022). Interestingly, over the last two years the UK has remained the top 3 recipient of successful European Research Council (ERC) Starting Grants (11.6% in 2021 and 17.16% in 2022). Remarkably, in 2021 only 3% of the awardees and 6% in 2022 were UK nationals, indicating that the majority of the grants obtained by the UK were awarded

to international researchers (European Research Council a and b). In case the UK will not associate with Horizon Europe, the UK is proposing an alternative scheme called Pioneer. It is however seen as inferior to Horizon, especially in relation to the facts that the sums are not guaranteed and that its main aim is to strengthen the UK position, instead of promoting collaboration (*UK scientists are right to say no to “plan B” for post-Brexit Research*, 2023).

Concerning other schemes, UK participation in the Euratom research programme for nuclear research and in the Copernicus Earth-observation satellite programme is currently in doubt amid ongoing negotiations between the EU and UK institutions (*UK space strategy and UK satellite infrastructure: Government response*, 2023). To make matters worse, the UK will no longer participate in the EU's Galileo satellite-navigation system and will not be a non-associated third country, so that only a very limited number of opportunities for participants from all around the world will remain open for UK participants (*The UK and Erasmus+*, 2023). EU researchers can still apply for the UK-based charitable foundation funding and UK national funding agencies, including Wellcome Trust, UKRI or The Royal Society without any barriers, although some limitations for international participants apply (e.g., limitation of the total international doctoral students appointed to 30%) (*Guidance International Eligibility Implementation training grant holders*, 2020), despite the only requirement for the hosting group is to be based in a UK or Irish institution. For students the situation is more complicated. EU students that have either pre-settled or settled status can still study under home fees and are eligible for the Tuition Fee Loan, however any new EU student arriving in the UK without holding the pre-settled or settled status will not only require a student visa but

will also be charged overseas fees for tuition (that can be 2-3 times higher than these for domestic students (*Number of EU Students Enrolling in UK Universities Halves Post-Brexit*, 2023)). Moreover, most international students (which now applies to EU students as well) are restricted to 20 hours of paid work per week, affecting those students who relied on remunerated student jobs for financial stability (*Working on a Student Visa in the UK*, 2022). Adding to these obstacles, in May 2023 the UK government announced that, in order to bring migration down, overseas postgraduate students on non-research courses will not be able to bring family with them anymore (Seddon, 2023).

Therefore, if we want cross-border research to thrive and the UK to remain a global leader in research and innovation, researchers of all nationalities need to be reassured that they can succeed in their job regardless of their nationality (*Keep the EU and UK Collaborating in Science #dealforscience - Online Petition, 2023, Home of Stick to Science Initiative. Stick to Science*). In this piece, we highlight the successful aspects of the transition, which should inspire similar action in areas where there are still significant hiccups, and present the opinion and needs of the diasporas of EU researchers in the UK.

Materials and methods

The diasporas of Portuguese, Spanish, Polish, Italian, Dutch, Finnish and French researchers in the UK (PARSUK, SRUK/CERU, Polonium Foundation, DANinUK, AISUK, Finnish Science Society in the UK and FERN-UK) are independent non-profit societies whose aim is to promote communication within the community of EU researchers in the UK and to facilitate international research collaborations. These associations have come together to assess their experiences after Brexit thus far by performing a survey-based study to better understand the areas of life and work that were

strongest impacted by Brexit.

The diasporas of Portuguese, Spanish, Polish and Dutch researchers in the UK, represented by PARSUK, SRUK/CERU, Polonium and DANinUK respectively, distributed regular surveys to all their members (i.e. Portuguese, Spanish, Polish and Dutch nationals that live and work in the UK), with over 410 respondents in total (PARSUK 214, SRUK/CERU 87, Polonium 74, DANinUK 35) representing all disciplines and career stages. The surveys were performed and analysed between 2017 and 2021. Most respondents were affiliated with a UK university, although their profile varied across the career stage, with PARSUK having the respondents earliest in their academic/research career, SRUK/CERU middle stage career respondents, and DANinUK and Polonium having respondents with a more senior profile (**Table 1**).

	PhD students	Postdoctoral researchers	Senior academics
Polonium	26%	33%	34%
PARSUK	36%	18%	31%
SRUK/CERU	16%	39%	25%
DANinUK	9%	14%	77%

Table 1. Career stage of the responders divided by the organisation.

Remarkably, most of our respondents have been living in the UK for more than 3 years (SRUK/CERU 73%, Polonium 77%, DANinUK 97%) and their research was funded by a UK source (SRUK/CERU 60%, Polonium 57.38%, DANinUK 65.7%). The majority of early career researchers and students have either pre-settled or settled status, while

more established professionals have settled status or British citizenship. Most of our respondents came to the UK straight from their own countries and have remained in the UK since they arrived, being the main reasons for moving the availability of employment and research opportunities, better conditions for studying and higher probability of career progression.

Results

When our members were asked about how attractive they see the UK now in comparison to their view prior to the Brexit referendum, a majority of respondents think that the UK is now less attractive than before the referendum (SRUK/CERU 83.1%, DANinUK 85.7%). The main reasons were the new immigration policies for EU nationals in the UK; the political and economic situation in the UK; access to research funds, both domestic and international/EU, and access to public services in the UK (NHS, education, pensions, etc.) (Figure 1 a).

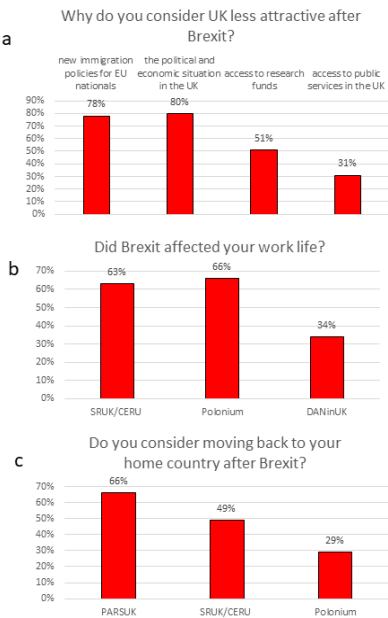


Figure 1. Answers for the selected survey questions in % total (a) and divided by the organisation (b, c).

In addition, a large number of respondents consider that Brexit has affected their work life (**Figure 1 b**). They have already experienced changes or expect imminent changes in EU research funding and collaboration due to Brexit, such as a decrease in the number of invitations to participate in EU project consortia, or even grant rejections and exclusion from funding applications. Furthermore, there has also been a significant limitation to get EU students as the UK is no longer part of the Erasmus+ program and no other mobility programme has been implemented to date that allows European students to come to the UK. Many of these students used to remain in the UK or eventually came back to continue their academic qualifications afterwards, representing an amazing resource for postgraduate programmes like MSc and PhD or for a qualified academic workforce, such as research assistants or laboratory technicians. Another obstacle arises in obtaining funding for EU PhD applicants, as under the new immigration system they are no longer given home fee status. Moreover, any international worker or student applying for a visa for more than 6 months is required to pay the Immigration Health Surcharge (*Immigration Health Surcharge (IHS)*). This surcharge is the biggest upfront immigration cost in the UK and must be fully paid before a visa will be issued, a situation which does not seem to have an equivalent within the EU countries (*Summary of visa costs analysis*, 2021). Also, these immigration policies and additional costs that are not always covered by funding agencies have now resulted in a larger number of offers for UK nationals only, which hampers the interest of EU nationals in coming to the UK and challenges the international environment of the UK scientific ecosystem.

Researchers' current concerns regarding mobility and work in post-Brexit UK include,

among others, the time, costs and uncertainty related to applying for work visas, health insurance and ensuring job qualifications. When asked about the impact of Brexit in the R&D landscape, the key points raised as concerns are the changes in the rights of residents and movement of relatives, increased bureaucracy and higher costs of living and working in the UK, all related to visa issues, such as delays or difficulties in getting the Skilled Worker Visa. In addition, the Immigration Health Surcharge as well as the access to EU research funding and opportunities to lead European projects have been highlighted, with many also being concerned about the UK economy and professional opportunities. Delays at the UK border and import regulations and costs have severe implications for the flexibility of research experiments and have already (anecdotally) led to cancellation and/or delays of experiments and international collaborations due to failure of (timely) delivery of equipment and materials (*Brexit: The Major Trade Disruption Came after the UK-EU Agreement Took Effect in 2021, 2022*).

We also asked our members whether they were considering leaving the UK in the near future. A large part of our membership considers this option (PARSUK 29%, SRUK/CERU 41%, Polonium 33.78%, DANinUK 70.59%), with most confirming that their decision was influenced by the impact of Brexit. Interestingly, in the case of Polonium, a significant majority considered leaving the UK were early-career researchers, with 76% being PhD students, postdocs or R&D scientists, while more established professionals did not consider this option. Almost two out of three PARSUK respondents are planning or thinking of moving back to Portugal and almost half SRUK/CERU respondents planning to leave the UK would move back to Spain. In the case of Polonium, as the next destination after the UK, most respondents identified another country in the EU (88.57%), followed by non-EU countries (31.43%) (**Figure 1**

c).

Discussion

The research community, as a group of migrants, has two particular characteristics: high mobility, typical of the dynamism and international nature of science and research, and high qualification: under the UK immigration system implemented after Brexit, researchers are considered "skilled workers". The exit of the UK from the EU has brought bureaucratic hurdles and additional costs that make it difficult for researchers to move at different stages of their careers. Additionally, we argue that some discriminatory elements appeared after Brexit, such as the Immigration Health Surcharge. As non-UK nationals, who will indeed be paying their taxes in the UK, EU-researchers will not need NHS services more than UK-nationals do. These new difficulties have affected how the British research and innovation system is perceived. Nevertheless, the UK will continue to be an attractive country to the extent it remains a destination of choice for highly talented international students and researchers. For this to continue, it is essential to: (i) Ensure an easy and affordable visa application process without the Immigration Health Surcharge; (ii) Secure the UK's participation in multilateral EU research programmes; (iii) Prioritise the investment in research, science and technology to boost the competitiveness of the UK's economy; (iv) Improve the communication strategy to show that the UK welcomes and fosters research, science and technology; (v) Develop dedicated programs to facilitate the mobility of students and researchers, and (vi) Strengthen the importance of evidence-based policies.

To upkeep the future of EU-UK relationships, an alliance called CONNECTS-UK (Connecting EU Communities Through Science in UK, see https://twitter.com/CONNECTS_UK_; *First Annual Meeting of the European Scientific Diasporas in the UK*, 2023) was recently formed by the authors of this study (SRUK/CERU, PARSUK, Polonium Foundation, DANinUK and AISUK) together with the Finnish Science Society in the UK, the Network of French Researchers in the UK and Native Scientists. The purpose of CONNECTS-UK is to guarantee the ongoing representation of the voice of EU researchers in the UK. More precisely, we aim to: (i) build a network of EU researchers in the UK, (ii) carry out research on the EU-UK scientific community and collaborations, (iii) provide policy advice and advocacy to EU and UK stakeholders, and (iv) develop scientific outreach programmes.

As of today, the concerns brought up in this piece reflect that more needs to be done by the research organisations and policymakers to mitigate the negative effects of Brexit. Researchers need to be reassured they can continue their world-leading science regardless of their nationality. To build a research community that welcomes international researchers and remains an attractive country for science and technology, the UK needs to secure participation in multilateral EU research programmes and facilitate the mobility of researchers to achieve our joint scientific goals.

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References

1. EUR-Lex - 22021A0430(01) - en - EUR-lex. Accessed May 20, 2023. [https://eur-lex.europa.eu/eli/agree_internation/2021/689\(1\)/oj](https://eur-lex.europa.eu/eli/agree_internation/2021/689(1)/oj).
2. “Report: 23 June 2016 Referendum on the UK’s Membership of the European Union.” Electoral Commission. Accessed May 24, 2023. <https://www.electoralcommission.org.uk/who-we-are-and-what-we-do/elections-and-referendums/past-elections-and-referendums/eu-referendum/report-23-june-2016-referendum-uks-membership-european-union>.
3. Pinto da Costa, M., Allegra, A., Escudero, J., & Makowska, K. (2019). Danger to science of no-deal Brexit. *Nature*, 572(7769), 312–312. <https://doi.org/10.1038/d41586-019-02433-7>
4. Sánchez Cañizares, C., van Poppel, M. P. M., Nyga, A., Martins, D., & Radaelli, P. (2022). Brexit: Delays worry diaspora researchers. *Nature*, 604(7906), 425–425. <https://doi.org/10.1038/d41586-022-01059-6>
5. Else, H. (2022). Brexit one year on: Patience ‘wearing thin’ among UK scientists. *Nature*, 602(7897), 374–375. <https://doi.org/10.1038/d41586-022-00318-w>
6. SRUK. Will the Windsor Framework finish with the uncertainty many researchers face in the UK? Accessed August 18, 2023. Retrieved from <https://sruk.org.uk/will-the-windsor-framework-finish-with-the-uncertainty-many-researchers-face-in-the-uk-2/>
7. How to apply for Guarantee Funding for European Research Council (ERC ... Accessed May 24, 2023. <https://www.ukri.org/wp-content/uploads/2022/03/UKRI-141222-HorizonEuropeGuaranteeERCStartingGrants2022Guidance.pdf>.
8. Upton, B., Williams, T., Morgan, J., Jack, P., & Ross, J. (2022). ERC grant winners quitting UK amid “backstop” uncertainty. Retrieved from

- <https://www.timeshighereducation.com/news/erc-grant-winners-quitting-uk-amid-backstop-uncertainty>
9. Inge, S. (2022). Over 140 researchers in UK told ERC grants will be terminated. Retrieved from <https://www.researchprofessionalnews.com/rr-news-uk-politics-2022-6-143-uk-based-erc-winners-told-their-grants-will-be-terminated/>
 10. European Research Council a. Accessed May 20, 2023. https://erc.europa.eu/sites/default/files/document/file/erc_2021_stg_statistcs.pdf.
 11. European Research Council b. Accessed May 20, 2023. https://erc.europa.eu/sites/default/files/document/file/erc_2022_stg_statistcs.pdf
 12. UK scientists are right to say no to “plan B” for post-Brexit Research. (2023). Retrieved from <https://www.nature.com/articles/d41586-023-01471-6>
 13. UK space strategy and UK satellite infrastructure: Government response ... Accessed May 20, 2023. <https://publications.parliament.uk/pa/cm5803/cmselect/cmsctech/1258/report.html>.
 14. The UK and Erasmus+. Erasmus+. Accessed May 20, 2023. <https://erasmus-plus.ec.europa.eu/the-uk-and-erasmus>.
 15. Guidance International Eligibility Implementation training grant holders. Accessed August 18, 2023. Retrieved from <https://www.ukri.org/wp-content/uploads/2021/02/UKRI-030221-Guidance-International-Eligibility-Implementation-training-grant-holders-V2.pdf>
 16. Number of EU Students Enrolling in UK Universities Halves Post-Brexit. The Guardian, January 27, 2023.

- <https://www.theguardian.com/education/2023/jan/27/number-eu-students-enrolling-uk-universities-down-half-since-brex-it>.
17. Working on a Student Visa in the UK. Student, August 26, 2022. <https://www.timeshighereducation.com/student/advice/working-student-visa-uk>.
 18. Seddon, P. (2023). Many foreign students to lose right to bring family to UK. Retrieved from <https://www.bbc.com/news/uk-politics-65683046>
 19. Keep the EU and UK Collaborating in Science #dealforscience - Online Petition. openPetition. Accessed May 20, 2023. <https://www.openpetition.eu/petition/online/keep-the-eu-and-uk-collaborating-in-science-dealforscience>.
 20. Home of Stick to Science Initiative. Stick to Science. Accessed May 20, 2023. <https://stick-to-science.eu/>.
 21. Immigration Health Surcharge (IHS). Immigration Health Surcharge (IHS) - Advice and Counselling Service. Accessed May 20, 2023. <https://www.qmul.ac.uk/welfare/visas-international-advice/student-visas/ready-student-visa/ihs/>.
 22. Summary of visa costs analysis (2021) - The Royal Society. Accessed May 24, 2023. <https://royalsociety.org/-/media/policy/Publications/2022/visa-costs-comparison-update.pdf?la=en-GB&hash=ED8B6947CD6803D819D6DE7498EE8538>.
 23. Brexit: The Major Trade Disruption Came after the UK-EU Agreement Took Effect in 2021. LSE Business Review, April 25, 2022. <https://blogs.lse.ac.uk/businessreview/2022/04/26/brexit-the-major-trade-disruption-came-after-the-uk-eu-agreement-took-effect-in-2021/>.
 24. Twitter. Accessed May 20, 2023. https://twitter.com/CONNECTS_UK_.
 25. First Annual Meeting of the European Scientific Diasporas in the UK (Report Available). France in the UK. Accessed May 20, 2023. <https://uk.ambafrance.org/First-Annual-Meeting-of-the-European-Scientific-Diasporas-in-the-UK>.