

This is a repository copy of *UK science*, *post-Brexit*.

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/114107/

Version: Accepted Version

Article:

Wilsdon, J.R. orcid.org/0000-0002-5395-5949 (2017) UK science, post-Brexit. Science AAAS, 355 (6331). p. 1243. ISSN 0036-8075

https://doi.org/10.1126/science.aan2673

Reuse

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



UK science, post-Brexit

James Wilsdon

Editorial in Science Vol 355, Issue 6331, p.1243, 24 March 2017 (author's final edit)

Nine months since the British vote to exit the European Union ("Brexit"), the UK science community's initial dismay has given way to hard-boiled determination to limit the damage it will do to universities and research. On 29 March, Prime Minister Theresa May is expected to give formal notification of the UK's intention to withdraw under Article 50 of the Lisbon Treaty, the constitutional basis of the EU. This will set in motion a two-year period of intense negotiation on the terms of the UK's divorce, and any future agreements with the EU – with research just one line item on a long list of issues to be resolved.

The timeframe is extremely tight. Serious talks are unlikely to get underway until after the French elections in May, and they need to wrap up by autumn 2018, to allow time for any deal to be ratified by the European Council and Parliament.

The UK has made maintaining research links with the EU one of its twelve negotiating priorities, but discussions of how to achieve this may not start until early 2018. Many specific concerns of the research community, such as the free movement of highly skilled people, are bound up with larger, more hotlycontested questions.

When science does get its moment in the negotiating spotlight, five priorities stand out. There must be reassurance for EU citizens employed in UK universities and institutes (around 15% of all academic staff) that they will retain the right to live and work in the UK. A flexible visa regime must be in place after Brexit, to support the continued flow of international talent in and out of the UK, across the whole research base, and not just restricted to certain high priority fields. Given the importance of EU collaboration – and the UK's success in securing over 7 billion euro of EU research funding between 2007 and 2013 – the UK must maintain some kind involvement in EU joint research after 2020, under its Ninth Framework Programme even if on an associated basis, like other non-EU countries, such as Israel.

The UK government must replace any research funding lost as a result of Brexit. Aspects of this may be hard to quantify but the recent announcement of a £4.7 billion (GBP) uplift in the overall UK budget between 2017 and 2020 gives some cause for optimism. And the UK must maintain access to important EU research facilities and technical and advisory networks. For example, it emerged in late January that UK withdrawal from the European Atomic Energy Community (Euratom) would be an unexpected by-product of Brexit, to the consternation of the energy research community. A solution needs to be found that allows continued access to sources of expertise or regulatory oversight (such as Euratom and the European Medicines Agency), which can't easily be recreated at a national level.

Outside of the Article 50 process, UK universities and research funders are now exploring opportunities to scale up international collaboration. This could include new bilateral agreements with the United States, and Commonwealth countries such as Australia, Canada, India, Singapore and New Zealand.

The imminent restructuring of the UK research system under a consolidated funding agency – UK Research and Innovation – and new funding schemes - such as the £700 million (GBP) Newton Fund focused on emerging economies, and the £1.5 billion Global Challenges Research Fund – could become the foundations of a more strategic and ambitious approach to international collaboration. Large philanthropic funders, such as the Wellcome Trust, may also want to play a role.

However the Article 50 negotiations play out, the message should be unwavering: the UK remains a fantastic place to do research, and will continue to play its part in the collaborative networks that are so vital to $21^{\rm st}$ century science.

James Wilsdon is professor of research policy at the University of Sheffield (j.wilsdon@sheffield.ac.uk)