

Science and Brexit

Last week's dramatic vote by the United Kingdom (UK) to leave the European Union (EU) was the culmination of a heated referendum campaign that questioned the value of partnerships between the UK and the EU. Now, with many bridges burned—or at least charred—where do political leaders go next? Politicians in the UK and EU are going to need every available foundation on which to rebuild trust and mutual interests. They will need to discover once again how to work in partnership. It will be a long and difficult process; one in which science should play a crucial role.

The referendum provoked rousing exchanges, but there were also many calm analyses, notably from the House of Lords Science and Technology Committee and the Royal Society. The overwhelming majority of UK scientists supported membership in the EU at every stage of the debate, while opinion in the wider population was clearly divided. University leaders (who seldom reach consensus on anything) called with one voice for the UK to remain in the EU. A community of nations with a common framework for funding research, establishing priorities, sharing facilities, and moving people and ideas across borders brings advantages to its scientific community. Compromises, challenges, and regulatory burdens come as part of the package but, on balance, British scientists found the EU an enormously attractive feature of our continent. Those attractions remain.

Now, there is scope for science as one of the starting points for the critical process of building a new relationship between the EU and the UK. Existing commitments alone mean that UK science will have a major role in Europe for years to come. For example, the EU's Joint European Torus, located near Oxford, provides vital expertise to the much larger ITER nuclear fusion facility under construction in France. Also, EU-funded infrastructures for social science, biological data, and radio astronomy are based in the UK, and countless ro-

bust EU research programs depend on UK leadership and collaborations. Right now, over 18% of funding returned to the UK from EU resources is for R&D, making this one of the larger parts of the EU's relationship with the UK. Thus, many thousands of relationships between students, academics, and administrators bind together scientists in the UK and other European countries. All of this gives science enormous potential as a foundation for building a new relationship between the EU and the UK. But foundations are no use if they are undermined by political wrangling. There will need to be investment of time, political capital, and money to bolster the science UK-EU bridge.

British scientists must now work hard to urge policy-makers to promote continued scientific collaborations and advise on how to move ahead. Maybe the UK's next prime minister should offer to host new international research facilities along with the EU, or increase the support the UK gives to UK businesses and universities considering EU collaborations. Perhaps further research fellowships

for talented scientists wishing to collaborate or move across the EU could be launched. These are not hollow gestures: They would bring benefits in their own right as well as rebuild trust. The scientific community could brainstorm such possibilities and work closely with the government on next steps. Indeed, wise policy-makers understand that R&D develops people for the wider labor market, creates new products and businesses, and makes huge contributions to health care, defense, the natural environment, and public services. These benefits are built on strong collaborative science.

One of the great strengths of UK science is its international culture and the recognition that the best minds, wherever they are from, can together tackle shared challenges. Leaving the EU does not mean an end of this quality, but it requires profound changes in the practicalities behind it.

— Graeme Reid



Graeme Reid is Chair of Science and Research Policy at University College London, UK. Email: graeme.reid@ucl.ac.uk



“...science [has] enormous potential as a foundation for ...a new relationship between the EU and the UK.”

Science and Brexit

Graeme Reid

Science **353** (6294), 7.

DOI: 10.1126/science.aah4245

ARTICLE TOOLS

<http://science.sciencemag.org/content/353/6294/7>

RELATED CONTENT

<http://science.sciencemag.org/content/sci/353/6294/12.full>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.