Collaboration, Competition and the Role of UK Universities in the Science Diplomacy Ecosystem

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Most global experts agree that scientists, policymakers, and other key decision-makers should work closely together to integrate science advice and research into policy decisions.[1,2] At the same time, research and higher education are becoming seen more and more as strategic and sovereign assets, with research security, talent flows and intellectual property now playing a central role in foreign policy debates.[3]

The manner in which science diplomacy is employed, whether competitively or collaboratively, is vital when navigating this complex landscape. In this environment, universities are becoming critical non-state actors, not only advancing science diplomacy but also handling the frictions that exist between scientific and foreign policy communities. For the UK, science diplomacy is not just a supportive tool, but a strategic lever to manage risk, show leadership and advance global interests.[4] The UK's ecosystem of non-state actors[5], particularly universities, helps anchor its science diplomacy efforts and spread its soft power globally.

Science Diplomacy in the UK

Greater attention is now being paid to science diplomacy as a practice in both the policy and academic spheres. The fact that recent parliamentary inquiries have been held into science diplomacy[6,7] and soft power[8] signals the UK's shift towards treating science as a strategic instrument of its foreign policy. More broadly, UK science, innovation and technology (SIT) is increasingly viewed as a source of economic strength, national security and geopolitical influence.[9] Under the new UK Government, the reorganisation of the civil service[10] further aligns SIT with trade, growth and international competitiveness, thus sharpening its contribution to national economic objectives[11] and strengthening projections of UK global leadership.

In this context, universities are part of a diverse network of science diplomacy enablers. They host international students, create long-term professional and institutional ties, and anchor global networks of researchers and research collaborations tackling global challenges.[6] Ultimately, universities draw authority from academic freedom and institutional autonomy. This underpins the qualities that can make universities useful in diplomatic settings: they can be effective conveners of science diplomacy activities through their global connections, host meetings that would otherwise be difficult to accommodate politically and have strong ambitions to tackle geopolitical issues.[8]

UK universities have an established history of putting science diplomacy into practice. With four of the top ten world-leading universities[12], including University College London (UCL), the UK has educated a significant number of current world leaders[13], which in turn has strengthened political and cultural connections to the country. Furthermore, university-led collaborations are also key to enhancing bilateral relations.

For example, UCL has more than 50 collaborations with Indian partners, including projects spanning health, engineering, environment and urbanisation.[1] In 2025, UCL's leaders visited India to strengthen partnerships with AIIMS and the Indian Institute of Technology Delhi, thereby promoting research collaborations and educational pathways on quantum computing, sensing, metrology and medical technologies. These bilateral, university-led partnerships create networks of researchers, students and policymakers, while also contributing to foreign policy objectives and improving diplomatic ties. Moreover, education and innovation are key pillars in the India-UK Vision 2035[1], which aims to deepen transnational education cooperations between UK and Indian universities. Here, scientific collaborations are enmeshed with diplomatic relations and exemplify both *science impacting diplomacy* and *diplomacy impacting science.*[14]

Broadening Participation and Perspectives into Science Diplomacy

Science diplomacy is largely dominated by Global North experiences[15,16], even though Global South approaches are becoming more influential despite facing more systemic scientific and political[17] barriers, including institutional disparities, developing SIT infrastructure, and regional complexities.[18] With unbalanced attention paid to the region's[19] science diplomacy activities, in hand with the downstream effects of global challenges being felt most acutely by the Global South – involving these perspectives is imperative.

Universities have a vital role to play in addressing this disparity. It is essential to give greater recognition (e.g. via academic research) to science diplomacy-related activities and to support the wider participation of Global South partners in international research collaborations.

Co-led by UCL and the University of Oxford, VaxHub Global[20] programme demonstrates this approach. By embedding partnerships with researchers, manufacturers and policymakers across low- and middle-income countries (LMICs), the programme helps Global South expertise shape research priorities, vaccine development and policy discussions.

VaxHub Global is focused on improving how vaccines are developed, manufactured and distributed to support global health needs with LMICs - supporting science diplomacy by:



Integrating diverse scientific perspectives into diplomacy by fostering partnerships across countries, enabling LMIC researchers/ institutions to shape global health priorities and collaborations.



Demonstrating how UK Official Development Assistance investment supports research, capacity building and collaboration in LMICs – delivering development outcomes and diplomatic dividends through long-term scientific partnerships.



Vaccine research and collaboration, being a mechanism of soft power, enhances the UK's international reputation as a leader in SIT and a trusted partner in science.



Demonstrating that science is a durable foundation for engagement, building resilient health infrastructure, strengthening trust and creating networks that endure beyond short-term political cycles.

Universities at the Centre of Collaboration and Competition

Yet, science diplomacy, and by extension, universities, are no exception to experiencing friction. The example of research security illustrates the tension within the science diplomacy ecosystem: even though openness and collaboration are essential to scientific progress, the fact that the same emerging technologies with dual-use capabilities and competition can exacerbate vulnerabilities and heighten insecurity between countries.

Universities are entrusted with institutional autonomy and are responsible for their own international research and innovation collaborations.[21] However, institutions increasingly find themselves managing these frictions and the practical realities (and scrutiny) of navigating research collaborations with global partners with national foreign policy decisions.

The UK adopts a model of secure openness, by means of initiatives like the Trusted Research Campaign and the Research Collaboration Advice Team, and has committed to delivering the UK's first Research Security Strategy. These measures help universities manage risks associated with international research partnerships, intellectual property theft, and foreign interference and further the two-way dialogue between policymakers and academics. These policies can strengthen the UK's reliability as a global research partner, reinforcing science diplomacy as a tool of soft power and international diplomacy.

For universities, it is necessary to strike a careful balance when dealing with the tensions between openness and security. Conducting due diligence, leveraging science diplomacy networks, opening dialogue with security/foreign policy officials, and strengthening academic awareness of geopolitical issues can guide open, yet secure scientific collaborations.

Can Science Stay Geopolitically Neutral?

Intensifying geopolitical competition can stymie science and research[22], for example, through scientific sanctions. Even though the number of sanctions has increased in recent times, science has simultaneously become more international. This paradox[23] creates challenges for both science and diplomacy, making it difficult for science (and universities) to stay geopolitically neutral.

Universities face compounding pressures when deciding whether or not to engage. This is affecting not only research but also funding, student recruitment, talent attraction and retention, and wider international partnerships. In the UK, the tightening of immigration policies and rise of anti-immigration rhetoric have had negative effects[24] on student visas and global scientific talent flow across borders.

Science diplomacy, when deployed collaboratively, can serve as a mechanism to both navigate and, where appropriate, work within the boundaries of these political constraints.[25] Currently, one-fifth of UK universities publicly embrace political neutrality[26] and many continue international scientific collaborations under intense geopolitical tensions, including working under scientific sanctions in North Korea.[27] The convening power and relative independence of universities are an asset in using science to pursue international relationships and continuing progress on global SIT issues where diplomatic channels are hindered by political pressures.

Universities and The Future of Science Diplomacy

As science becomes increasingly intertwined with economic competitiveness, national security, and geopolitical influence, universities are taking on ever more influential roles.

In an era of geopolitical disruption, protecting science also means supporting the institutions, partnerships and people who make international scientific collaborations possible. The role of UK universities is likely to evolve alongside global power dynamics. This will require greater awareness at both the individual and institutional levels of geopolitical issues, research security, and the impacts of the internationalisation of higher education. It is also necessary to protect the foundations that make science diplomacy effective: academic freedom, institutional autonomy, and the international exchange of people, ideas and knowledge.

Policymakers and universities should develop a better appreciation of the strengths of academic institutions as dynamic agents for science diplomacy activities, integral linchpins of global scientific networks and places that facilitate progress toward scientific solutions amid growing geopolitical turbulence. Indubitably, as Hammond and Mauduit note:

"Science diplomacy is needed more now than at any time in history, given the scale of challenges the world faces... The first step towards protecting science diplomacy must be to protect science itself."[28]

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