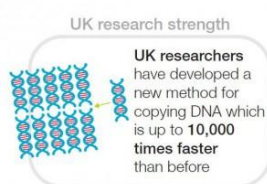


# Synthetic Biology: New Collaborations Between Global Leaders

Over the course of four years, SIN USA teams worked with the Biotechnology & Biological Sciences Research Council (BBSRC), Research Councils UK in the USA (RCUK USA), Department for International Trade (DIT), and others to bring synthetic biology (synbio) to the forefront of UK-US international collaboration resulting in new UK-US academic research collaborations, academic-industry partnerships, an industry-funded R&D evaluation programme, and business investment into the UK. SIN's strategic efforts built up a solid foundation of partnerships between two of the world's leading countries in this exciting new field. A diverse range of stakeholders was drawn into this work, including academia, industry (from established players to startup companies), and policymakers. Because of SIN's work, the UK now has access to a wider range of US stakeholders and can leverage the expertise of their American counterparts to propel the science forward.

## Why Synthetic Biology?



Graphic courtesy of HMG

In 2007, the UK set synthetic biology as a priority, and it was named one of the nation's Eight Great Technologies<sup>1</sup> in 2012 under the Coalition Government. That announcement included £50 million for support of Synthetic Biology through the Research Councils' Synthetic Biology for Growth (SBfG) Programme. Because of this, the SIN team in the USA believed this area was prime for involvement and help set the course for global synbio development in the years to follow.

## SIN Drives Collaboration

Due to HMG interest in this area, the SIN USA launched a multi-year campaign focused on building UK-US collaborations in synthetic biology, highlighting the UK's leadership in the topic and promoting nascent commercial opportunities in the field. Activities since 2013 have included: three workshops (ranging from intellectual property and technical challenges to the university research environment), one trade mission (to the SynBioBeta conference in San Francisco), two researcher missions (to the UK and the US) delivered jointly with BBSRC, three collaborative awards and a global synbio snapshot report. These activities spanned three cities in the US (Boston, San Francisco and Chicago) and London in the UK.



UK & US leaders in DNA Synthesis met in London on 15-17 Sept. 2015 as part of SIN/BBSRC activity.

Photo credit: Rhona McDonald

## Real-world Impacts and New Partnerships

As a result of the work SIN USA put in, we were able to yield seven new UK-US academic research collaborations (including one between the University of Liverpool and the Joint Genome Institute that was awarded £50,000 via the BBSRC's International Partnering Award Funding Scheme and £12,000 to Boston University and Warwick University), two new academic-industry partnerships (between Imperial-Agilent and Imperial-Syncrobes), one industry-funded R&D evaluation programme, one business investment into the UK between Novartis (US) and Isomerase Therapeutics (UK), and contributed to the international leadership implementation of the UK synthetic biology roadmap.

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<sup>1</sup> <https://www.gov.uk/government/speeches/eight-great-technologies>