



**Universities UK
International**

**TWO YEARS ON: THE
ONGOING IMPACT OF THE
2018/19 UUKI RUTHERFORD
FUND STRATEGIC PARTNER
GRANTS**

**ENHANCING STRATEGIC
PARTNERSHIPS THROUGH
FELLOWSHIPS FOR
INTERNATIONAL EARLY
CAREER RESEARCHERS**

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Audience

Pro-vice-chancellors international and research, directors of international and research, international and research office staff, funding bodies

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About Universities UK International

Universities UK International (UUKi) represents UK higher education institutions (HEIs) globally and helps them flourish internationally. To do this we actively promote UK HEIs abroad, provide trusted information for and about them, and create new opportunities through our unique ability to act at sector level. We draw on UK university expertise to influence policy in the UK and overseas, delivering information, advice and guidance to facilitate mutually beneficial collaboration between UK HEIs and a broad range of international partners.

Acknowledgements

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UUKi would like to thank the UUKi Rutherford Fellows and former grant-holding universities for completing surveys in 2019 and 2021 respectively, the findings of which are included in this report.

Purpose

The purpose of this report is to demonstrate the ongoing impact of the 2018/19 UUKi Rutherford Fund Strategic Partner Grants programme on the UK higher education sector.

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BACKGROUND

In 2018 [UUKi Rutherford Fund Strategic Partner Grants](#) totalling £2.34m were awarded to 24 UK universities, funding 120 Rutherford Fellowships for early career researchers (ECRs) from over 60 of the UK higher education sector's strategic partner institutions in 18 countries.

The fellowships were funded by the UK Department for Business, Energy and Industrial Strategy (BEIS) through the Rutherford Fund, with the aim of attracting global talent and strengthening the UK's research base. Through the Rutherford Fund Strategic Partner Grants scheme, delivered by Universities UK International (UUKi), block grants of up to £150,000 offered UK universities the opportunity to deliver a dynamic programme of short-term research fellowships for early career researchers from their international strategic partner institutions.

UUKi Rutherford Fellows spent between one and 12 months at one of the grant-holding UK universities between April 2018 and March 2019, with the aim of enabling them to broaden their research networks in the UK, access new resources and facilities, and support their professional development.

Furthermore, by funding individual ECR mobility within the framework of strategic partnerships, with UK higher education institutions hosting Rutherford Fellows from their key international partners, the programme was also designed to catalyse longer term collaboration between UK and international higher education institutions.

Two years on from the end of the UUKi Rutherford Fund Strategic Partner Grants, this report presents the programme's ongoing impact in terms of attributable research outputs and additional funding secured as well as further examples of strengthened institutional strategic partnerships as a result of the grants.

METHODOLOGY

The evidence presented in this report to demonstrate the impact of the UUKi Rutherford Fund Strategic Partner Grants programme has been gathered via the following:

a) April 2021 survey of the UUKi Rutherford Grant-holding universities

The purpose of this survey was to capture the details of any outputs or outcomes that can be attributed to and/or have been achieved in the two years since the end of the UUKi Rutherford Fund programme. Twenty of the 24 original UUKi Rutherford Grant-holding UK universities responded.

b) April 2019 survey of the UUKi Rutherford Fellows

The purpose of this short survey was to capture feedback directly from the international early career researchers at the end of their UUKi Rutherford Fellowships. Sixty-eight of the 120 UUKi Rutherford Fellows responded to the survey.

c) April 2019 final reports submitted by UUKi Rutherford Grant-holding universities

All 24 UUKi Rutherford Grant-holding universities were required to submit a final end of grant report, providing details of all outputs and outcomes achieved in the duration of the programme.

IMPACT OF THE UUKI RUTHERFORD FUND STRATEGIC PARTNER GRANTS

Impact on the UUKi Rutherford Fellows

In the short-term, the UUKi Rutherford Fund Strategic Partner Grants provided funding for 120 ECRs from over 60 of the UK higher education sector's strategic partner institutions in 18 countries to spend between one and 12 months conducting research at a UK higher education institution.

- **77%** of UUKi Rutherford Fellows surveyed were collaborating with researchers at their host UK university **for the first time** when they undertook their UUKi Rutherford Fellowship in 2018/19.
- **Only 10%** of Rutherford Fellows surveyed felt they would have been likely to carry out their research in the UK **without** a Rutherford Fellowship.

The UUKi Rutherford Fellowships enabled international early career researchers to:

- **Broaden their professional/research networks** (identified by **94%** of Rutherford Fellows surveyed as a highlight of their fellowship).
- **Access opportunities for professional development** (identified by **84%** of Rutherford Fellows surveyed as a highlight of their fellowship).
- **Access new resources and/or facilities** (identified by **71%** of Rutherford Fellows surveyed as a highlight of their fellowship).

Long-term impact on the UK higher education sector

Ongoing research collaboration

In April 2021, **100%** of former Rutherford Grant-holding universities responding to our survey confirmed they have **continued to collaborate** with their Rutherford Fellows and/or colleagues at their Rutherford strategic partner institution(s) in the two years since the programme ended. **100%** of respondents also confirmed their intention to continue doing so.

Strengthened international institutional links

In April 2021, **100%** of survey respondents agreed or strongly agreed that receiving a UUKi Rutherford Grant to fund fellowships for international early career researchers in 2018/19:

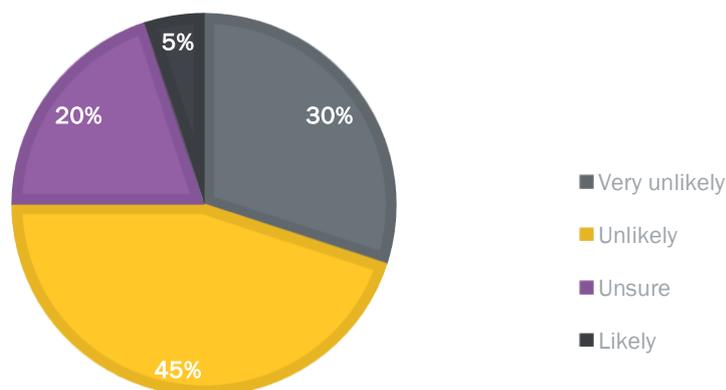
- Enhanced research links between their UK higher education institutions and international strategic partner institution(s);
- Led to the development of new, and the improvement of, existing research networks and links between future international research leaders and the UK research community;
- Resulted in new opportunities for collaboration and joint working, and greater impact for existing collaborations.

For example:

- Researchers from **at least 62%** of all former Rutherford Grant-holding universities have **co-authored publications** with Rutherford Fellows during and/or in the two years since their fellowships.
- **54%** of all former Rutherford Grant-holding universities have reported **securing additional funding** to support ongoing collaboration with their Rutherford strategic partner institutions, including with their former Rutherford Fellows, since being awarded their Rutherford Grant.

In April 2021, **75%** of survey respondents reported that they would have been either very unlikely (30%) or unlikely (45%) to achieve such outputs and outcomes had they **not** been awarded a UUKi Rutherford Grant in 2018.

Had you not been awarded a UUKi Rutherford Grant to host fellows from your strategic partner institution(s) in 2018/19, how likely would you have been to achieve these outputs/outcomes?



Joint publications

To date, at least **41 joint papers co-authored** by Rutherford Fellows and researchers from at least 15 of the 24 former UUKi Rutherford Grant-holding institutions have been published. These papers can be attributed to the collaboration facilitated by the UUKi Rutherford Grants:

- 11 joint papers were published during the Rutherford Fellowships and before the end of the programme in March 2019.
- 30 joint papers have been published in the two years since the end of the programme, with at least a further 12 currently in progress.

Additional funding

To date, the UUKi Rutherford Grants have contributed to at least 13 of the 24 former award-holding universities securing **over £13m of additional funding** to support continued collaboration with Rutherford Fellows and/or colleagues from their strategic partners.

Additional funding secured by UK higher education institutions	<i>During the programme (April 2018-March 2019)</i>	<i>Since the programme (April 2019-April 2021)</i>
Supporting further research collaboration with former UUKi Rutherford Fellow(s) Including funding from successful joint research grant applications and internal institutional sources such as quality-related/institutional block grants from the Global Challenges Research Fund (GCRF QR)	£430k	£850k
	Total £1.28m	
Supporting wider collaboration or activities that can be attributed to the UUKi Rutherford Grants (including with UUKi Rutherford strategic partners/Rutherford Fellows' home institutions) Including funding for joint PhD studentships and further fellowships for early career researchers	£210k	£11.87m*
	Total £12.08m	
	TOTAL £13.36m	

**including €12.6m (approx. £10.85m) awarded to the EUTOPIA Alliance, which includes the University of Warwick and their European Rutherford partners. See case study for details.*

Partnerships developed through the UUKi Rutherford Grants have also benefited from other investment. For example, the University of Hull integrated their Rutherford partner, the Geological Survey of Japan, as a project partner in the £5.5million Centre for Doctoral Training in offshore wind energy and the environment, funded by the Engineering and Physical Sciences Research Council (EPSRC) and the Natural Environment Research Council (NERC). See case study for further details.

Case studies

Examples of ongoing research collaboration with Rutherford Fellows and wider collaboration with UUKi Rutherford strategic partners

University of Warwick

The **University of Warwick's** UUKi Rutherford Grant funded 12 Rutherford Fellowships for early career researchers from strategic partner institutions in China, Brazil, Belgium and France.

The University of Warwick credits their UUKi Rutherford Grant with boosting their strategic partnerships with their European partners in particular, which in turn helped them to launch the EUTOPIA alliance and **secure funding in excess of €12.6m** from Erasmus+ and Horizon 2020. This includes €5.6m to create 76 two-year early career fellowships across the alliance, offering early career researchers an opportunity to develop their independent research profile and undertake training to help establish an academic career.

According to Warwick, the Rutherford Grant was an important tool in facilitating academic links between Warwick and European partners and creating support for EUTOPIA within departments and faculties. The Rutherford fellowships were highlighted as an example of academic cooperation between EUTOPIA partners in the European Universities application documents.

Furthermore, the Rutherford Grant also inspired the Fernandes Fellowships at Warwick. Funded by a Warwick alumnus (£250,000) and following the Rutherford model in terms of implementation, the Fernandes Fellowships aim to develop lasting research collaborations between Warwick and Europe. Early career researchers from Warwick's Rutherford partners have spent time at Warwick as Fernandes Fellows.

London School of Hygiene and Tropical Medicine

London School of Hygiene and Tropical Medicine (LSHTM) was awarded a UUKi Rutherford Grant to fund fellowships for five early career researchers from their strategic partner Nagasaki University in Japan.

LSHTM and their Rutherford partner institution in Japan, Nagasaki University, secured investment from the Japanese government for their joint PhD programme in September 2018, to create a doctoral programme for World-leading Innovative and Smart Education (WISE). As a result, two PhD studentships have since been leveraged with Rutherford Fellows and their UK hosts part of the joint supervisory team. This has helped to ensure that the relationships established during the grant continue and, with new joint PhD projects advertised for the 2021 intake, will support the development of a global talent pipeline to address current and future challenges to public health.

Northumbria University

Northumbria University awarded UUKi Rutherford Fellowships to three early career researchers from their strategic partner An-Najah University in the Occupied Palestinian Territories.

Northumbria University secured a British Academy GCRF Sustainable Development Award (£262,000) on Youth Agency for Sustainable Development in partnership with their Rutherford Fund strategic partner An-Najah University and with one of their Rutherford Fellows a co-investigator for the grant, which runs until September 2021.

Lancaster University

Lancaster University awarded UUKi Rutherford Fellowships to six early career researchers from their strategic partners in Argentina.

In the two years since the fellowships ended, Lancaster University has secured over £100,000 in grants to support ongoing collaboration with their former Rutherford Fellows. This includes support from the Argentinian Embassy to produce a white paper on Argentina-UK Agri-Tech: new opportunities to contribute to local and global sustainability. Four joint papers involving former Rutherford Fellows have also been published in this period, with a further three in progress.

University of Hull

The **University of Hull** was awarded a UUKi Rutherford Grant to fund Rutherford Fellowships for three early career researchers from their strategic partners in Japan.

As a result of the partnership developed via their Rutherford Grant, the University of Hull integrated their Rutherford partner, the Geological Survey of Japan, as a project partner in their existing £5.5million EPSRC and NERC Centre for Doctoral Training in offshore wind energy and the environment. This will ensure continued collaboration between the two institutions as the programme trains over 75 PhD students at the interface between engineering and earth sciences.

FEEDBACK FROM FORMER GRANT-HOLDING UNIVERSITIES

'Sustained communication for the duration of the long visits by the three Rutherford Fellows from Unicamp (Brazil) led to the conversations... that resulted in papers, grant applications and supervisory activities. This would probably not have happened with multiple short visits, in comparison. The Rutherford Grant is only now fulfilling its potential, due to the long cycle of grant applications and publications.'

Professor Tom Blenkinsop, Cardiff University

'The UUKi Rutherford Grant allowed Lancaster University to establish a long-term collaboration with partners from Argentina's National Scientific and Technical Research Council (CONICET), who are not often eligible for sizeable funding from UK funders. The Rutherford Fund targeted early career researchers who could dedicate time to conduct research and therefore this collaboration is still leading to tangible research outputs.'

Professor Mariana Rufino, Lancaster University

'We found the UUKi Rutherford scheme to be a great way to host excellent early career scholars in the UK to encourage partnership building with UK academics. The scheme offered flexibility in the areas of scholarship supported, and provided sufficient funding to enable meaningful collaborations to develop. The time that the Rutherford Fellows spent in Leicester was crucial for building equitable and sustainable partnerships and projects. Although you can of course work remotely across geographic boundaries, all of our fellows commented on how valuable their time in Leicester was, and how it built stronger relationships with their collaborators in the UK. There is a lack of similar funding opportunities for this kind of programme, so we found the Rutherford scheme to be highly valuable to achieving our objectives.'

Professor Lisa Smith, University of Leicester

'The UUKi Rutherford Fellowships were a great success, both at an individual and institutional level. By bringing academics to Warwick at a relatively early stage in their career they allowed us to lay the foundations of research collaborations which will last for decades. ... For a relatively small investment the UUKi Rutherford Fund Strategic Partner Grants have yielded an exceptional return, both at a research level and in their ability to support institutional collaborations.'

Professor Peter Scott, University of Warwick

ADVANTAGES OF THE UUKI RUTHERFORD GRANTS MODEL AS A FUNDING MECHANISM

Key aspects of the UUKi Rutherford Fund Strategic Partner Grants programme that distinguished it from other opportunities and made it a valuable addition to the funding landscape:

a) Flexibility

Funding was available for programmes of work across all disciplines and involving strategic partners from any country. This flexibility allowed universities to design programmes of work that were in line with their internationalisation strategies and research priorities, and enable them to either build on existing partnerships or develop new ones.

b) Length of fellowships

According to former grant-holders, hosting fellows for up to 12 months allowed for the development of stronger working relationships and trust between UK based researchers and the Rutherford Fellows than would be possible on shorter visits. Former grant-holding universities also commented that having significant time to work together in person on joint funding applications led to more refined and developed research ideas with a higher chance of success.

c) Funding for fellowships routed through universities, and within a wider programme of work with international strategic partners

Unlike other fellowship schemes, the process of identifying and recruiting fellows was managed directly by the UK universities awarded Rutherford Grants (in collaboration with their international strategic partners). As well as providing development opportunities to the fellows involved, the grants therefore also enabled institutions to offer their strategic partners a clear mechanism for building a portfolio of collaborative activity that could help strengthen ties and catalyse further activity.

ANNEX A: OVERVIEW OF ALL 24 UUKI RUTHERFORD GRANTS

Institution	Academic Lead	Fellows	Partner Countries	Research Area
Aberystwyth University	Professor Christopher Thomas	5	South Africa, Australia, Namibia	Environmental science
Brunel University London	Professor Maria Kolokotroni	7	Australia	Resource efficient future cities, environment and health
Cardiff University	Professor Nora de Leeuw	8	Australia, Brazil	Biomedicine, earth sciences
Cranfield University	Professor Tom Stephenson	5	South Africa, Brazil	Sanitation, circular economy
Durham University	Dr Paul McGonigal	4	India, Malaysia, Mexico	Organic energy materials
Edinburgh Napier University	Dr Nick Wheelhouse	2	Brazil	Sustainable farming
Imperial College London	Professor Simon Schultz	3	Australia	Neurotechnology
Lancaster University	Professor Mariana C. Rufino	5	Argentina	Food security
Newcastle University	Professor Derek Mann	4	Malaysia, Australia	Medical sciences
Northumbria University	Professor Matt Baillie Smith	3	Occupied Palestinian Territories	Volunteering and citizenship in Palestine
Swansea University	Dr Charles Dunnill	2	São Tomé and Príncipe, South Africa	Hydrogen energy
LSHTM	Professor John Edmunds	5	Japan	Infectious diseases
University of Aberdeen	Dr Angel Cuesta	4	Australia, Mexico	Energy storage and conversion from renewables
University of Bath	Dr Janet L. Scott	7	Brazil, Mexico, South Africa	Sustainable chemical technologies and statistical applied mathematics
University of Birmingham	Professor Robin Mason	9	Brazil	Interdisciplinary
University of Bristol	Professor Caroline Relton	5	Brazil	Digital health and data science
University of Dundee	Professor Claire Halpin	8	Australia	Cereal and barley research

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University of Hull	Professor Dan Parsons	3	Japan	Offshore wind energy
University of Leicester	Professor Lisa Smith	3	Kenya, Bangladesh, Colombia	Interdisciplinary - efficient cities
University of Manchester	Dr Neil Dixon	6	Brazil, Argentina, Colombia	Bioeconomy, sustainability and inclusiveness in Latin America
University of Oxford	Professor Simon Benjamin	3	Canada, Australia	Quantum physics
University of South Wales	Professor Alan Guwy	1	Australia	Water treatment and resource recovery
University of Sussex	Professor Sriram Subramanian	6	Japan	Informatics
University of Warwick	Professor Peter Scott	12	Brazil, China, France, Belgium	Interdisciplinary