

January 2025

Evaluation of the Fund for International Collaboration (FIC)

Summary Report

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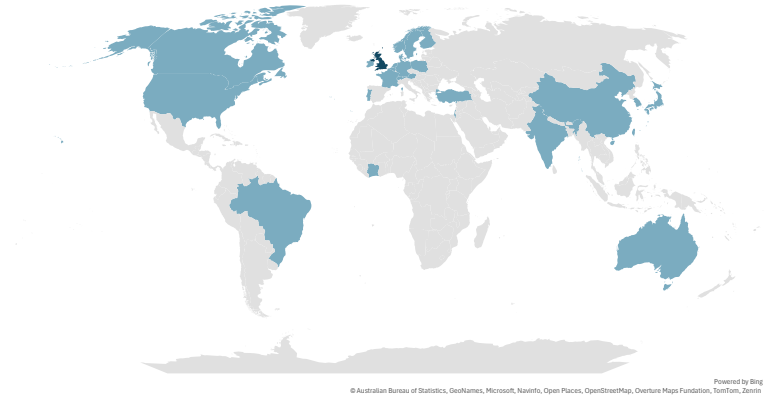
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This summary report presents high-level key findings. Readers should refer to the full final evaluation report for further analysis and information.

Acknowledgements: The study team would like to thank the UKRI evaluation team and evaluation advisory group for their contributions to the study, as well as the hundreds of other individuals that have provided inputs throughout the evaluation via surveys, interviews and workshops.

The Fund for International Collaboration

- **The Fund for International Collaboration (FIC)** was a UK Research and Innovation (UKRI) Fund to develop strategic partnerships with global research and innovation (R&I) leaders and address a key gap in the national R&I funding portfolio. Its high-level objectives were:
 1. To **enable UK researchers and innovators to collaborate with the best international partners**, to carry out world-leading R&I that delivers new knowledge and societal and economic impact.
 2. To **support wider government objectives, including science diplomacy**.
- The Fund awarded **£160m to 37 programmes** through two waves of competition (plus a Strategic Opportunities Stream, which supported ideas that did not fit with the timetables of the standard waves).
- These programmes were then implemented by UKRI councils and Innovate UK, in various combinations, and in collaboration with overseas funding agencies from **26 different countries**.
- A total of **571 grants** were awarded by these programmes, alongside other investments (e.g. in infrastructure), covering a variety of thematic areas, from Healthy ageing to Advance Crop Breeding, and from Digital Scholarship to Regenerative Medicine and Stem cell research.
- The Fund is coming to an end; 75% of programmes and 95% of projects finished by the end of 2024. FIC is now a '**legacy Fund**' following announcement that it, alongside the Global Challenges Research Fund (GCRF) and Newton Fund, would not be continued.
- The **International Science Partnerships Fund (ISPF)** could be considered a successor. It brings together Official Development Assistance (ODA) and non-ODA funding for R&I under a single structure. This new initiative is funded by the Department for Science, Innovation and Technology (DSIT) and delivered by a consortium of R&I bodies including UKRI.



£160m UKRI
funding

37
programmes

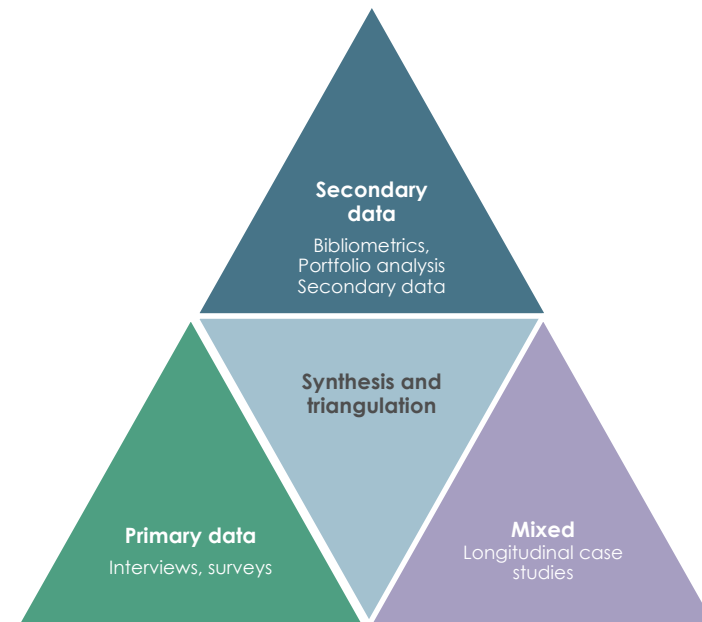
26 countries

571 grants

This Evaluation

- In 2020 UKRI commissioned Technopolis to undertake an **evaluation of FIC**. The aims were: (i) to demonstrate what the Fund has delivered, (ii) to help build the evidence base on “what works” in internationally collaborative R&I, and (iii) to inform future initiatives.
- The evaluation was asked to consider **three themes** to address these aims and to understand how effectively FIC has met its objectives.
- For each theme, and in line with our FIC Theory of Change, we covered **effects at two levels**: (1) programmes and funders (UKRI councils and equivalents overseas); and (2) projects and participants.
- The study took place in **four phases, from 2020 to 2024**. This report summarises key findings from the fourth phase, the final evaluation, but also draws on evidence from previous phases.
- The current phase employed a **mix of methods and evidence sources**:
 - Portfolio analysis
 - Bibliometrics (FIC, UK and international comparisons)
 - Secondary data (Gateway to Research (GtR), Researchfish)
 - 30 Stakeholder interviews (plus 200+ in previous phases)
 - 18 questionnaire responses (UK leads for FIC programmes)
 - 346 responses to online surveys from UK and international participants and applicants (+900 responses in previous phases)
 - 7 Longitudinal case studies, focused on international funders in selected countries, and covering 14 FIC programmes.
- Where possible, the analysis makes comparisons with a **counterfactual scenario** (via control groups and benchmarks).

| Theme 1: Enabling funding | Theme 2: Developing partnerships | Theme 3: Deepening R&I |
|---|--|---|
| Reducing barriers for accessing and applying for international collaboration R&I funding. | Enabling, strengthening, deepening and broadening relationships: within the UK and internationally; at all levels (funders, institutions, individuals); within and beyond FIC. | Supporting R&I within new and existing areas of strategic importance across the UKRI international portfolio. |



Process Evaluation

The FIC process evaluation was undertaken in an earlier phase (2021), soon after the Fund was established. It focused on the design, establishment and early implementation of the Fund and its programmes. Key findings are summarised below.

FIC provided an additional, dedicated Fund that addressed a gap.

- It recognised the importance of supporting international R&I collaboration to expand access to ideas, talent and investment.
- It offered (non-ODA) funding for collaboration with priority countries that were not explicitly covered by other UKRI Funds.
- It provided the opportunity to pursue activities that would not otherwise have been progressed.

FIC sat alongside other initiatives supporting international collaboration.

- Most countries, including the UK have a varied portfolio of initiatives to support international collaboration. But in many cases, this does not include stand-alone Funds with earmarked budgets (like FIC).
- FIC is a relatively small investment, however, in comparison with other UK initiatives to support international collaboration and its achievements should be viewed in this context.

FIC complemented the existing international activities of UKRI councils.

- It provided a dedicated Fund targeting priority countries and encouraging funder-to-funder relationships.
- It offered the opportunity to fund international collaboration that would not be possible via other means, and at a scale that is not usually feasible.
- Other than ODA programmes, there was no other UKRI Fund dedicated to developing relationships at the funder level
- FIC offered the opportunity to build deeper, more stable and longer-lasting relationships with other countries.

Advance knowledge of funding can help to establish the best portfolio of programmes to support objectives.

- Councils regularly highlighted that the timetable for wave 1 FIC programme selection was too short, with only limited opportunity to identify, discuss and prepare programme ideas.
- There was a tendency to propose programmes based on established funder relationships and initiatives, already well-developed ideas, and where spend could commence quickly.

A clearer strategic steer can help target and select opportunities.

- FIC's relatively small budget contrasted with a high level of demand and lots of potential opportunities for programmes.
- Additional guidance (on goals and priorities, the rationale for prioritising countries, and the likely scale of programme funding) would have helped steer councils towards the most appropriate ideas to develop and propose, helping the Fund achieve its aims.

The Strategic Opportunities Stream was a welcome addition to a Fund that intended to capitalise on emerging opportunities.

- There was widespread support for such an agile stream that could react quickly to opportunities, support wider government priorities or diplomatic activities, or that might help address other challenges associated with fixed spending timetables.

Project applicants reported high levels of satisfaction with FIC.

- Two FIC-specific elements highlighted were support provided to engage with potential overseas partners and the benefits of allowing single submissions for multi-council/country awards.

Impact Evaluation

Rationale and mechanism.

- There are different ways in which governments support international collaboration, and most countries have a varied portfolio of initiatives (from participation in international research infrastructures and multi-country R&I programmes, to the opening of national programmes to international participation).
- The premise is that international collaboration in R&I allows a country to tap into expertise and research capital elsewhere, expanding the frontier of what would be possible nationally.
- The internationalisation of R&I has been observed across different countries, fields and sectors, and is increasingly needed to address global or societal challenges.
- International engagement provides a vital underpinning to research excellence, and there is a wide consensus that it improves the quality and impact of research.
- It can also be important for accessing unique resources or capabilities, as well as maintaining involvement in, or accessing new networks or markets.
- Bibliometric evidence (from this study and other literature) suggests that international collaboration tends to score more highly on citation metrics (often used as a measure of impact).
- Evidence from survey analysis and case studies also suggest that FIC has facilitated access to infrastructure and skills that was critical to research undertaken, and not available nationally.

Headline Findings

- In the following pages we summarise the various achievements of FIC. Based on evidence from the different phases of evaluation, these appear to be driven by two key characteristics:
 1. FIC complemented existing international collaboration activities of UKRI councils by providing a dedicated Fund targeting priority countries and encouraging **funder-to-funder relationships**. This has materialised in an ability to mobilise additional resources (from international funders), and to focus research in areas of common interest, which has subsequently provided a degree of sustainability in the relationship (through further joint activities and institutional agreements that will continue beyond FIC).
 2. FIC sat alongside other initiatives to support international collaboration and is relatively small in scale, but it provided **resources in a time of tight budgets**, and in the form of '**neutral funding**' that made it easier for cross-council collaboration.
- **As such, the Fund's main added value has been more a matter of focus than scale**, as it is aimed at enhancing funder level relationships that are more strategic.
- This offered the opportunity to build deeper, more stable and longer-lasting relationships for UK R&I communities than may have been possible through existing (bottom-up) developments. The evidence from the evaluation suggests that this has been achieved, albeit with varying success across the Fund.

The following pages present the headline findings from the FIC evaluation, structured according to the two main objectives and three themes.

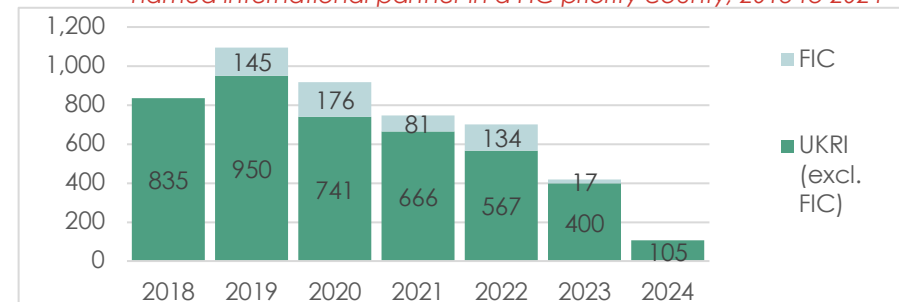


Theme 1: Enabling funding

Funders & Programmes

- **FIC increased the pool of resources made available via UKRI to conduct projects with international partners, to some extent.**
- With a budget of £160m, nearly 600 grants were awarded by FIC programmes, alongside other investments (e.g. infrastructure).
- **FIC resources were relatively small in comparison with pre-existing investments made by UKRI** in projects with participation from FIC priority countries (~3% of grant value, 2019 to 2023).
- However, it provided additional funding at a time of tight budgets to pursue opportunities that are unlikely to have moved forward.
- The Fund has meant the biggest relative increase in resources (grant value) for collaborations with partners located in South Korea and Japan, with smaller increases for other FIC priority countries.
- Two-thirds (67%) of programme leads reported that their FIC programme had been 'very significant' or 'essential' for their council's wider international strategy and ambitions.
- **FIC has enhanced the ability of respective funders to steer resources (top-down) towards areas of mutual strategic importance.**
- This has meant being able to provide more strategic steer to the R&I activities conducted with key partner countries, focusing on areas of common interest and mutual benefit (climate change & health, healthy ageing, business internationalisation, etc.)
- **FIC attracted additional resources to international R&I collaboration.**
- In addition to UKRI's £160m investment, FIC attracted £211m from programme partners (plus contributions in-kind) and leveraged £29m through individual projects (half from overseas sources).

Figure 1 Number of FIC grants and UKRI grants (excluding FIC) with a named international partner in a FIC priority county, 2018 to 2024

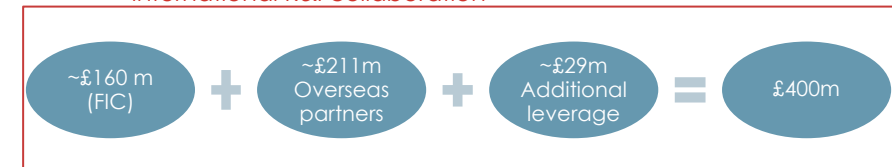


Source: GtR. Based on start year. Excludes FIC programmes with no grants.

“Funding through FIC has enabled a level of contribution to an international project that was otherwise not possible from within the council's baseline budget without withdrawing from other high priority activities”. (STFC Programme lead)

“We do not have regular core funding to support international bilateral programmes and so FIC funding allowed us to develop programmes and enhance partnerships in strategic areas that we would not have been able to otherwise.” (MRC Programme lead)

Figure 2 Additional resources delivered and leveraged by FIC for international R&I collaboration



Source: FIC tracker December 2023 and final survey of UK participants (2024)

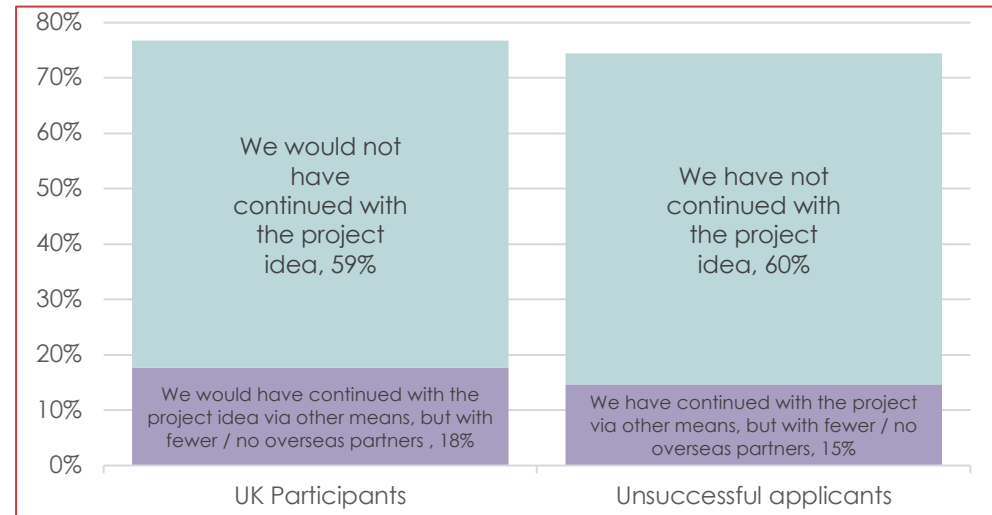


Theme 1: Enabling funding

Project & Participants

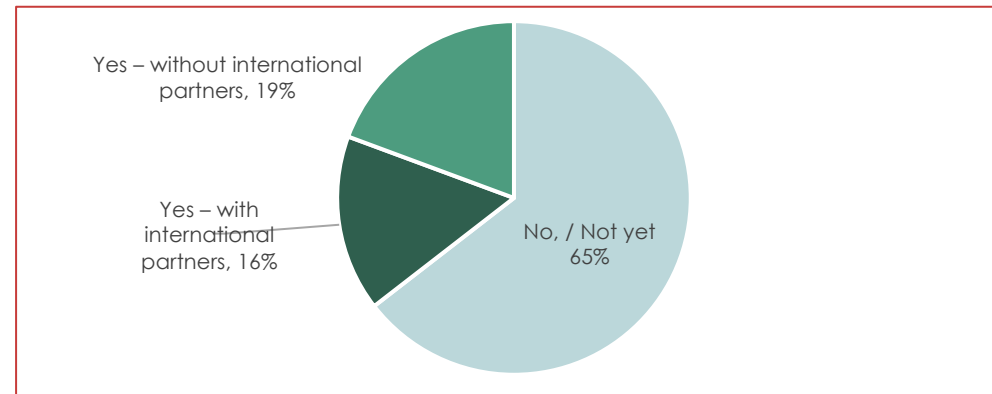
- **At project level, FIC also unlocked access to resources that may not have been available otherwise.**
- The majority of FIC participants (59%) stated via survey that projects supported by FIC would not have gone ahead without the Fund or would have gone ahead but with fewer or no international partners (18%).
- To explore the counterfactual, we collected similar information from unsuccessful applicants. A year after being unsuccessful, 60% had not continued with the project idea proposed to FIC, while 15% had carried on, but with fewer or no international partners.
- These results show the importance of FIC funding to pursue the ideas put forward, and that suitable alternative sources of funding were often not identified.
- **FIC projects have also enabled further resources to collaborate internationally, beyond the life of the Fund.**
- One-third (35%) of UK participants reported via survey that they had already secured additional funding or investment to develop their project further (beyond FIC)
- With £468k in additional funding each on average.
- Of the additional funding secured, 19% came from overseas funding sources.

Figure 3 What would have happened / did happen without FIC funding



Source: Survey of UK participants (N=249) and unsuccessful applicants (N=164)

Figure 4 Whether further funding or investment has been secured after FIC



Source: Survey of UK participants, 2024. N=124

Theme 2: Developing partnerships Fundors & Programmes

- **FIC has strengthened partnerships between UK and overseas funders, both within FIC programmes and beyond.**
- This includes:
 - The continuation of partnerships via follow-on funding into new or existing areas of collaboration
 - A first opportunity to have a concrete (funded) opportunity to collaborate
 - Bringing together organisations that had not collaborated before
- It has also further demonstrated that successful international collaboration is built over time.
- Evidence from case studies indicates that **FIC’s additionality has been highest among partnerships that were relatively new (e.g. with particular funders in Japan, Singapore and Canada)** and where FIC has provided a substantial (funded) opportunity to collaborate.
- **Elsewhere FIC has made important contributions to maintaining and further strengthening more established relationships** with funders in other countries.
- Most UK programme leads report significant improvements in mutual understanding and alignment with their overseas FIC partners, as well in their ability to identify strategic opportunities for future collaboration.

“ It feels to me like we’ve reached a point in the road where hopefully this way of joint working will become normalised. It’s a huge change. To give you an idea, I spent probably a decade talking with NSF staff about partnering in principle - and in the last five years, suddenly we are just doing it. And now we’re doing it again.” (NERC programme lead for the Changing North Atlantic Ocean and its Impact on Climate programme)

“ We realised that there are no major differences between Japan and the UK; rather, they have many points in common. For this reason, I would like to continue to explore the possibility of further joint calls with the UK.” (Programme lead from JST-RISTEX, Japan.)

| Case Study | Maturity | Joint strategies | Level of Additionality |
|--|----------------|------------------|------------------------|
| Enterprise Singapore | Relatively new | No | High |
| Japan Science and Technology (JST) Agency | Relatively new | No | Medium/High |
| Canadian Institutes for Health Research (CIHR) | Relatively new | Yes | Medium/High |
| United States National Science Foundation – Geosciences (NSF GEO) | Mature | Yes | Medium/Low |
| Ministry of Science and Technology – Department for Biotechnology India (MOST DBT) | Mature | No | Medium/Low |
| Swiss National Science Foundation (SNSF) | Mature | Yes | Medium/Low |
| National Natural Science Foundation of China (NSFC) | Mature | Yes | Low |

Maturity: Maturity of partnership (prior to FIC) | Joint strategies: National joint strategies prior to FIC | Additionality: Intensity of FIC additionality

Theme 2: Developing partnerships

Funders & Programmes

- **At the interim evaluation stage (2021), sustainability was unclear**, with uncertainty around dedicated UKRI funding, and opportunities that could not be taken forward.
- **At the final evaluation stage, the picture is more positive.**
- There are many examples of UK funders having now taken concrete actions to carry forward collaborations with their FIC partners (beyond FIC), with new agreements in place and joint programmes under development or underway.
- In many of these cases (7 of the 8 examples collected), the follow-up programmes underway are supported through the new ISPF, which includes most FIC priority countries within its scope. This Fund is being led by DSIT, but delivered by a consortium of R&I bodies (including UKRI).
- **Along with other cross-UKRI Funds, FIC has helped to embed and develop cross-council working**, as well as contributing to improved cross-council understanding.
- More than half of FIC programmes (21 of 37) involved more than one UKRI council.
- Feedback from programme leads and wider stakeholders suggests that this has supported a more collaborative approach to idea development and commonly led to improvements in cross-council understanding of priorities, agendas, cultures, and ways of working.

| Programme | Follow-up ISPF funding |
|---|--|
| FIC 16: UK-Korea Health Sciences Collaboration (MRC) | UK-South Korea Digital Health CRD (ISPF) |
| FIC 2-14: UK-India Extreme Photonics Innovation Centre (EPIC) (STFC-Central Laser Facility) | UK-India Extreme Photonics Innovation Centre (EPIC) expansion (ISPF) |
| FIC STR 01: MRC-AMED Regenerative Medicine and Stem Cell Research Initiative (MRC) | Japan UK research collaboration in neuroscience, neurodegenerative diseases and dementia (ISPF) & UK Japan Engineering Biology for Novel Therapies and Diagnostics Research Collaboration (ISPF) |
| FIC2-02: Changing North Atlantic Ocean and its Impact on Climate | Climate Consequences of Rapid Ocean Changes. (ISPF) |
| Multiple programmes (Canada) | International research on climate change adaptation and mitigation (ISPF) |
| FIC2-21: China Healthy Ageing Flagship Challenge programme | China UK One Health research for epidemic preparedness and AMR (ISPF) |
| FIC2-10: Global Incubator Programme | UK-Singapore Collaborative R&D Calls 2023 and 2024 (IUK core budget) |

“ We worked with ESRC and gained an understanding of their research interests in this research area, as well as agreed an approach to working together” (MRC)

“ It has helped to understand the processes and mechanisms of other councils and their interests is soil systems” (NERC)



Theme 2: Developing partnerships

Projects & Participants

Skills and capabilities

- Through FIC projects, UK participants have seen a substantial increase in their ability to access knowledge, facilities and sources of funding overseas, while also improving the skills and capabilities needed to work internationally.
- These were all areas identified at the baseline as being strong motivators for applying for FIC funding.
- To explore the counterfactual, we asked a similar question to unsuccessful applicants. Their responses suggest some improvement over time across three of the areas explored, but the difference is much smaller across all categories.
- In the other two areas, their position had remained the same, or even fallen slightly.

New partnerships

- UK participants reported that ~60% of FIC project partners were from overseas, with the majority of collaborations being new (77%) based on Gateway to Research data.
- Nearly all of those surveyed reported that this international collaboration had led to a better understanding of their partners' capabilities. Most also reported improved understanding of agendas, priorities and ways of working.

Continuation of partnerships

- Where FIC projects have ended, the majority (73%) of UK participants have been able to pursue their relationship with overseas partners through grants or other means (nearly double the rate seen amongst unsuccessful FIC applicants).

Table 1 Change in skills and capabilities to work in international teams

| | At the point of application | At the end of the project | Current position |
|--|-----------------------------|---------------------------|------------------|
| Ability to access new or better knowledge from overseas | 3.1 | 4.1 ++ | 4.1 ++ |
| Ability to access new or better facilities, tools and techniques from overseas | 2.6 | 3.5 + | 3.5 + |
| Ability to navigate different working and research cultures | 3.2 | 4.1 + | 4.1 + |
| Ability to identify sources of funding internationally | 2.5 | 3.2 + | 3.3 + |
| Overall ability to work collaboratively in international teams | 3.4 | 4.3 + | 4.3 + |

Source: Final survey of UK participants. Finished projects only. n=125. ++ indicates an increase of 1 point or more, + indicates a lower increase, = indicates no change (vs baseline).

Table 2 New and existing partners

| Your partner organisations/university departments | UK-based partner | Overseas partner |
|---|---|---|
| Existing partner (i.e. those that your organisation/university department had collaborated in an R&I project with before this application) | 22% of partners 1.0 partners per project average | 17% of partners 0.8 partners per project average |
| New partner (i.e. those that your organisation/university department had not collaborated in an R&I project with before this application) | 17% of partners 0.8 partners per project average | 43% of partners 1.9 partners per project average |

Source: Baseline surveys of UK participants cohort 1 (n=150) and cohort 2 (n=102).



Theme 3: Deepening R&I

Projects & Participants

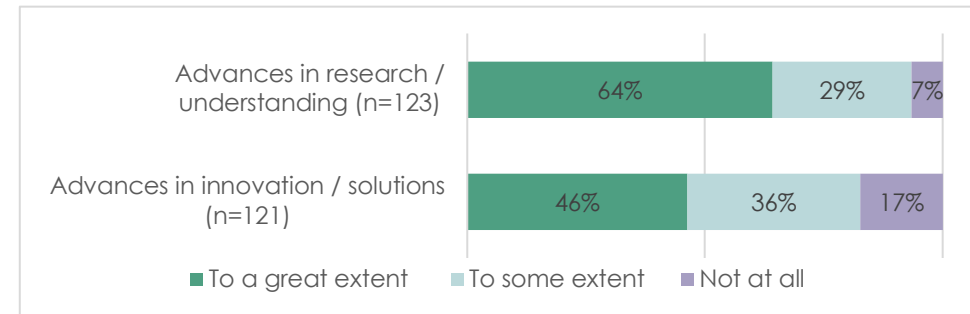
Progress

- **The majority of FIC projects have achieved (or are on track to achieve) their objectives, albeit often with some delays.**
- Nearly all UK participants in finished projects stated that collaboration had led to advances in research and innovation that would not have been possible without overseas partners.

Publications and uptake

- **At least 990 publications in peer-reviewed journals have emerged from FIC projects so far.**
- **While most UK participants co-published internationally before FIC, bibliometrics indicates that the Fund has had a positive influence on the degree of international co-authorship** (while not replacing pre-existing activity).
- For instance, prior to FIC (2014 to 2018), 38.7% of UKRI papers from (what would become) FIC researchers included at least one author from a FIC priority country. This degree of co-authorship has increased to 43.5% in the period 2019 to 2023, and is even higher with FIC funding (57.0%).
- It is still early to observe the research impact of FIC publications, but bibliometric data for UK and UKRI papers published 2014 to 2018 suggests that **international collaboration will contribute positively to the research and deliver higher research impact.**
- Initial indications from early FIC papers (published 2019 to 2021) suggest that this will be the case here too, **although it is not possible to conclude with certainty at this point.**

Figure 5 To what extent has FIC led to advances that would not have been possible without the overseas partners



Source: Final survey of UK participants (finished projects only).

Table 3 Share of publications with international co-authors (FIC researchers only)

| | Share of international co-publications (SIP) with FIC priority countries | | | SIP with all countries | | |
|-----------------------|--|---------|--------|------------------------|---------|--------|
| | 2014-18 | 2019-23 | Change | 2014-18 | 2019-23 | Change |
| UK papers | 39.1% | 45.1% | 6.0 pp | 55.6% | 62.1% | 6.5 pp |
| Papers funded by UKRI | 38.7% | 43.5% | 4.8 pp | 54.6% | 59.5% | 4.9 pp |
| Papers funded by FIC | | 57.0% | N/C | | 69.8% | N/C |

Source: Technopolis and Science Metrix [Table XXII], based on data from GtR, Researchfish, and Scopus (2024). pp=percentage point. D=difference.



Theme 3: Deepening R&I

Projects & Participants

Other R&I outputs

- **Projects have also made progress in developing other R&I outputs.**
- To assess the counterfactual, we compare outputs from FIC grants (per £ million invested) with outputs from other UKRI grants in the same period that include participation from international partners.
- The analysis shows:
 - That FIC is producing more outputs per £ million invested than other UKRI grants that include participation from a FIC priority country, in terms of new research databases and models, new research tools and methods, software and spin outs.
 - FIC is also producing more outputs per £ million invested than other UKRI grants with any other country in all areas except new products. However, the average size of FIC grants is much larger.
- Comparison with the unsuccessful applicants that have been able to continue their FIC project idea via other means, also shows that FIC participants have a higher rate of outputs on 4 of the 7 categories.

Progress towards commercialisation

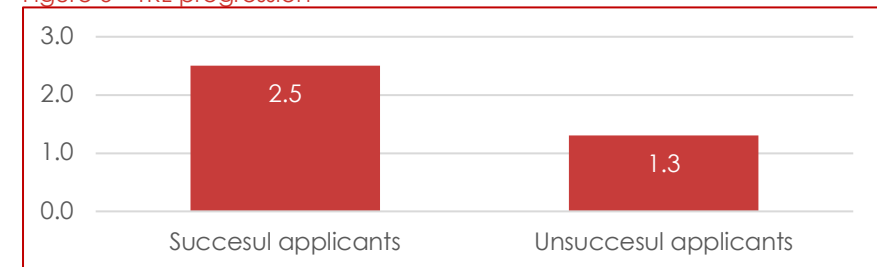
- Results related to innovation and commercialisation are less conclusive, in part because only a small part of the Fund was supporting companies (~13% of FIC participants).
- **Among the few projects developing technologies, there has been good progress along Technology Readiness Levels (TRLs).**
- Finished projects advanced 2.5 TRLs on average since the time of application (compared with 1.3 TRLs for unsuccessful applicants that continued via other means). However, this is based on a small number of projects (<30 in each case), and so should be treated with caution.

Table 4 Other R&I outputs, per £m invested

| Number of... (per £m) | UKRI grants International (excl. FIC) | UKRI grants priority countries (excl. FIC) | All FIC grants |
|--|---------------------------------------|--|----------------|
| Research databases and models | 0.60 | 0.85 | 0.88 |
| Research materials | 0.35 | 0.38 | 0.57 |
| Software & Technical Products | 0.21 | 0.30 | 0.31 |
| Spinouts | 0.02 | 0.02 | 0.04 |
| Intellectual property | 0.04 | 0.05 | 0.03 |
| Products | 0.03 | 0.04 | 0.02 |
| Average grant value (of grants in GtR) | £106k | £785k | £205k |

Source: Technopolis (2024). Based on Researchfish (Grants starting 2019-23.)

Figure 6 TRL progression



Source: Final survey of UK Participants. Finished projects only (n=26) | Final survey of unsuccessful applicants (n=16)



Supporting Wider Government Objectives

- FIC is supporting wider UK government objectives, mostly by helping to identify areas of common interest and adding value to science diplomacy efforts.
- Evidence from funder level case studies (at baseline, interim and final stages) showcased that FIC is delivering on this objective by **five main mechanisms**:

| | |
|---|---|
| 1 | Acting as a platform to systematically identify joint opportunities and capabilities, as well as strategic areas of collaboration (Singapore, Japan, US, Switzerland) |
| 2 | Providing an opportunity to increase (or sustain) awareness of the UK as a potential partner (Canada, India, US) |
| 3 | Providing funding to fulfil or follow on from common aspirations and political commitments (Canada, China) |
| 4 | Supporting wider diplomatic efforts (Singapore, Japan, US) |
| 5 | Leveraging and adding value to other initiatives to support R&I collaboration (US, Canada) |

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Press release

Dual agreements cement UK-Canada science and innovation ties

A new agreement on AI compute, one of the fundamental building blocks which sits at the heart of how AI is used and developed.

From: [Department for Science, Innovation and Technology](#) and [The Rt Hon Michelle Donelan](#)

Published 31 January 2024



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Longitudinal Case Studies

The final evaluation saw the further development of 7 longitudinal case studies that focus on the UK's evolving relationships with international funders across different countries that have partnered in FIC programmes, covering 7 countries and 14 FIC programmes.

Partnerships with the US National Science Foundation – Geosciences Directorate (NSF GEO)

NSF GEO was a partner in 3 FIC programmes that were led by NERC with participation from other councils:

The Delivering Healthy Soils: Signals in the Soil programme
(FIC-26)

The Changing North Atlantic Ocean and its Impact on Climate programme
(FIC2-02)

The Climate, Environment and Health programme
(FIC-23)

Enabling Funding
FIC enabled the upkeep of the OSNAP observing system for a decade (rather than 4 years), which would not have been possible without collaborating internationally.
It has formed the basis for a second joint programme, Climate consequences of rapid ocean changes (CCROC), funded equally through ISPF and the NSF under a lead agency agreement.

Deepening R&I
The programme enabled the collection of a decade of ocean current data through an array of sensors stretching from Scotland to Greenland and Labrador.
It supported projects integrating OSNAP data with other sources to maximise research insights.
The research contributed to evidence demonstrating the key role of the North Atlantic Ocean in climate variability.

Developing Partnerships
This was the first example of a programme co-designed by NERC and the Physical Oceanography Directorate of NSF.
The close working relationship and strategic discussions had through FIC ensured that NERC and NSF were ready to submit a proposal when ISPF funding was announced.
The follow-on programme extended the partnership to include a second NSF GEO Directorate that NERC had not previously partnered with.

“FIC has led to a blossoming of our relationship with NSF... We now have the Physical Oceanography and Chemical Oceanography Directorates as partners. I find it hard to think of how the outcome could have been better.”

(NERC Programme Lead)

| | |
|--|---|
| | United States National Science Foundation – Geosciences (NSF GEO) |
| | Canadian Institutes for Health Research (CIHR) |
| | Ministry of Science and Technology - Department for Biotechnology (MOST DBT), India |
| | Swiss National Science Foundation (SNSF) |
| | National Natural Science Foundation of China (NSFC) |
| | Japan Science and Technology Agency - , Research Institute of Science and Technology for Society (JST-RISTEX) |
| | Enterprise Singapore |

For further details on this and other case studies, see the full final report

Learnings



Future initiatives

Funding

- Co-funding international research leads to more equitable partnerships, and stronger programmes with larger budgets.
- Flexibility to spend funds in partner countries is also perceived as a positive feature of an international R&I fund.

Timing

- If there is a desire to develop newer or more ambitious opportunities, there is also the need to give more lead time to the development of partnerships and programme ideas.
- Different funding agencies also work on different timescales to the UK, and this needs to be taken into account (including via advance warning of funding, but also a degree of flexibility and responsiveness in Fund design and implementation).

Continuity of funding is important

- Long-term funding is important to enable partnerships to be built upon and strengthened, not lost.
- In that vein, ISPF has been positively received among FIC programme leads as it is expected to help to sustain and maintain many FIC relationships.
- There is also the expectation that DSIT involvement in this new Fund will offer opportunities for country / government-level relationship benefits, while still maintaining the flexibility needed to engage with international partners and to design programmes and activities that reflect the needs and opportunities that UKRI councils and other partners identify.



Evaluation

- **The development of the FIC evaluation over time, alongside the implementation of the Fund** (Evaluation Framework in 2020, Baseline and early findings in 2021, Interim evaluation in 2023 and a Final evaluation in 2024) has allowed it to:
 - Collect timely evidence on key indicators (including baselines)
 - Incorporate learnings from early stages of the evaluation (in relation to findings and the methodological approach)
 - Provide early evidence to inform investment decisions.
- The experience of conducting this evaluation also shows that there is **a trade-off in multi-stage evaluations**: as more time passes it is possible to capture more (and more robust) evidence on outputs and outcomes, but it becomes increasingly difficult to capture comprehensive primary data (especially at institutional level), as people change positions or move onto different activities and priorities once programmes close. This may call for:
 - The implementation of a dynamic approach to capturing primary data as the end of a Fund and its programmes approaches (rather than at a single point, at the final evaluation stage)
 - Focusing later stages of evaluation on mobilising secondary data sources, and limiting primary data collection
 - Resourcing evaluation studies such that the majority of efforts are dedicated to earlier stages (early findings and interim evaluation)
- The above may also support evidence needs, as decisions around new iterations of a Fund, programme or related investments are likely to align with interim (rather than final) stages of an evaluation.

Maps (Noun project): Japan and Canada: Leonardo Henrique Martini | India: Marcus Clarke | Switzerland: Ted Grajeda. | China: Support Desings | USA: Redifussion | Singapore: Drusilla



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