



Research
England

Research England: Expression of Interest (EOI): place-focused university commercialisation ecosystems – supporting paper on background and context

Research England introduction

1. Research England's Connecting Capability Fund (CCF) programme started in 2017¹ supporting collaborations between universities and external partners to drive forward good practice and achievement in commercialization and industrial R&D collaboration. Building on experience from 2017-2023 funded projects, the current CCF programme is managed through a series of project competitions, each targeted on a specific key or priority topic in commercialization. The CCF programme is embedded within the overall management of the Council's RE Development (RED) fund. The Council is advised in the selection of priority topics and in the assessment of bids by an expert group.
2. This paper is published in context of the launch of the competition for the group's first priority topic – on university commercialization ecosystems. It includes details of the future series of priority topics that will be published as funding opportunities by Research England, subject to funding availability. The future series includes the piloting of the sharing of tech transfer functions, recommended by the Independent Review of University Spinouts².

The CCF expert group

3. We were appointed in 2023 to provide advice to Research England on how it can use its CCF programme funds most effectively to secure high performance and best practice in commercialisation of university research and knowledge, including collaborative R&D with business.
4. Our terms of reference and membership are:

Terms of reference

The expert group will advise Research England, including its RED Fund Panel, on:

- a. Having taken account of relevant evidence, including on Government/UKRI-RE priorities and on HE sector practices:
 - i. Advise on the challenge topics for specific competitive calls to allocate funds, including their priority order; and on any detailed funding criteria and

¹ <https://www.ukri.org/what-we-do/browse-our-areas-of-investment-and-support/connecting-capability-fund/>

² <https://www.gov.uk/government/publications/independent-review-of-university-spin-out-companies>

- particular terms and conditions (in addition to those of the RED Fund) that are important to that particular call (in addition to generic criteria and terms and conditions for RED fund)
- ii. Advise on whether any additional members should be added to the group either generally to ensure overall coverage, or specifically for a particular call.
 - iii. Assess bids, against criteria and in light that they are likely to produce innovative and strong/plausible solutions that can shape policy and best practice.
 - iv. And make recommendations on the ranking of bids in priority order for funding. (Final decisions on funding being made by the RE Exec Chair upon advice from the RED Fund Panel, taking into account budget availability and other portfolio considerations.)
- b. The bids should be treated in confidence, and panel members are requested to agree to a set of confidentiality obligations prior to receiving bids.
 - c. The group may be asked to provide advice to RE including the RED Fund panel if requested on bids to mainstream RED Fund (responsive/bottom-up bids from universities) in its relevant areas of expertise.
 - d. The group's work will also contribute expert insights to inform RE policy reviews and reporting to Government on: investments made; fit against main priorities and challenges; outline important themes for the future; comment on state of practice and policy.

Membership

Professor Dame Jessica Corner, Exec Chair Research England (Chair)
Dr Carol Bell, Development Bank of Wales, RE Council, RED Fund Panel Member (Deputy Chair)
Tomas Coates Ulrichsen, UCI Cambridge
Dr Carolyn Reeve, Retired-BEIS
Tony Hickson, CRUK and Cancer Research Horizons
Dr Karin Immergluck, Office of Technology Licensing, Stanford University
Paul Van Dun, KU Leuven
Neil Crabb, Frontier IP Group PLC
Dr Poonam Malik, University of Strathclyde, Scottish Enterprise, Angel Investor
Dr Amy Nommeots-Nomm, Octopus Ventures
Alice Frost, Director of Knowledge Exchange, Research England
Observers
Brigid Feeney, Department for Science, Innovation and Technology
Tony Soteriou, Director Commercialisation, UKRI

Secretariat

Chris Gibson, Research England

Louise Wall, Research England

6. We are assisted in our work by the University Commercialisation and Innovation (UCI) evidence unit at University of Cambridge and by the CCF Programme Enhancement Team (PET) being delivered by PA Consulting and IP Pragmatics. This includes drawing upon the evaluations of previously funded CCF projects carried out by IP Pragmatics.³
7. There are two main threads running throughout our advice on development of the CCF-RED programme:
 - a. Investing in university innovative models and best practices where these are needed (not already established) and rolling out/embedding these across the HE sector – including paying attention to models and practices that can be adopted across universities and with business/investor partners.
 - b. Investing in ecosystems developments (place, technology) where there is:
 - i. A need (not established models or practices)
 - ii. A clear focus exists with common purpose toward that focus across universities and private and local partners
 - iii. Investments are appropriate/commensurate with maturity and with stretching but plausible outcomes.
8. In devising and prioritizing topics, we have taken account of the following:
 - a. Policy impact: the specific policy challenges in commercialization that recur particularly in the UK, or which may materialize in 3-5 years when our priority CCF projects will mature.
 - b. What the CCF programme can do: What large scale, multi-Higher Education Provider (HEP), multi-year, time limited, institutional projects can best deliver. This includes the value specifically of universities working with each other in collaborative mode (as well as with business/private sector). We set out in paragraph 13 important development features for commercialization which cannot be addressed in CCF.
 - c. Business/industry collaboration is the bedrock: Although there are different approaches/conditions particular to commercialization (the licensing and spinning out of university intellectual property (IP)) and to R&D collaboration with businesses, there are also critical inter-sections. Notably familiarity with business language/thinking approaches and environments are a bedrock to both.
 - d. Institutional maturity: Recognising that universities are diverse in their characteristics (teaching and research, disciplines and scales) and also in their institutional maturity in commercialization and working with business, and hence

³ <https://www.ukri.org/wp-content/uploads/2021/12/RE-151221-InterimReviewCCF.pdf>
<https://www.ukri.org/wp-content/uploads/2021/12/ResearchEngland-011221-UpdateToInterimReviewConnectingCapabilityProgramme.pdf>

the need to balance focusing on strengths and widening the availability of strengths.

- e. Ecosystem maturity and importance of focus: Similarly, we recognize differences of ecosystem maturity, this includes maturity of geographical ecosystems around the country and also of technology/industry sectors (for example, life sciences/biotech sector is one sector with significant maturity).
 - f. Sustainability: the challenges of sustainability of projects, including the availability of follow-on funding.
9. A competition for short term projects to form a platform for the larger developments we are proposing for funding was held in summer 2023. A list of successful projects have been published at <https://www.ukri.org/wp-content/uploads/2023/10/RE-04102023-Successful-CCF-RED-short-call-projects.pdf>
10. We have also taken account of the outcomes of the Independent Review of Spinouts and the Government response to the Review both of which were published over the course of our development of our advice on priority topics.

Priority topics

11. Our two highest priority topics are:
- a. Development of tech transfer office capacity. We are providing further advice to Research England on piloting the recommendation of the spinouts review on sharing tech transfer functions, with further details of this competition to be published in spring 2024.
 - b. Development of place-focused ecosystems: the subject of RE's funding opportunity now being launched.
12. We agreed that the following two topics should be the subject of the next funding opportunities published by Research England, following further advice from us and subject to availability of funds and Government spending review outcomes:
- a. Development of distinctive tech/industry sector commercialization practices. While there are generic practices of commercialization, there can also be significant differences between industry/tech sectors in approaches⁴. In developing this topic further for funding including prioritizing sectors for focus, we will take account of: the stock of projects already funded from the CCF programme to check coverage across sectors and any gaps; insights from projects funded to date on where generic practices v sector specific practices are important; and examination of which specific sectors would benefit most from development and dissemination of very targeted/specific practices and are of priority.

⁴ [Invention to Impact 2023-11-21 \(praxisauril.org.uk\)](https://www.praxisauril.org.uk/)

- b. Industry/business R&D collaboration (including scaling up). This topic is important as a pathway to impact significant in its own right, and because it provides important preparation for commercialisation and entrepreneurship generally. Evidence from evaluation of past CCF projects and advice from the CCF-PET suggests though that we need to consider further how projects on this topic can be more targeted, with more demand/market evidence, to achieve significant outcomes.
13. We have agreed that the following topics could be the subjects of future calls but are not the priority at this time:
- a. Diversifying investment sources. This topic was addressed in a number of projects in the 2018 CCF programme and hence we have placed at lower priority. If affordable in future, the following might be key areas to target further in future:
- i. Raising and running a university seed fund for a wider range of universities/ecosystems than present.
 - ii. Experiments in diverse/alternative investment sources particularly as venture markets tighten (includes angel investors, corporate venturing and other - charity investment funds, family office, philanthropy, crowd funding).
 - iii. Experiments with novel models of investment structures.
 - iv. Sector specific models (such as life sciences which have particular need for patient capital given pace of regulatory processes and tech development).
- b. People – training and development of academics/researchers etc: This is a vitally important topic, including the basics - familiarity with business and industry that aids entrepreneurship and mobility, as well as critical equality diversity and inclusion (EDI) issues. However, there is significant scale and diversity of activity in this area already across the HE sector. There are many funders and other agencies already involved and CCF is a less good fit to advance this topic. We expect that this may be an important feature in projects in our other priority topics, but with focus on specific skills needed to deliver that topic/ project.
- c. International: Sharing of good practices globally, benchmarking and broader networking are all important but lower priority at this point. We anticipate that international working may anyway be a feature in projects on our priority topics.
- d. Capital developments: This includes support for build or revenue support for incubators, adaption and access to equipment and facilities for entrepreneurs and businesses, and networks and linkages between incubators and grow on spaces as part of a wider ecosystem. Again, capital developments may feature in projects in other priority topics, but are of lower importance to us as a specific topic in their own right at this time. Further evidence on existing provision and support, such as from implementation of recommendations of the spinouts review, may help us consider specific capital needs or opportunities for the future.

14. As noted above, training and development should be the highest priority for individual HEPs, their partners and funders/policy-makers. There is a significant level of activity that already happens in universities and also a significant body of support provided by UKRI and other funders. There may be gaps to fill, but we suggest that a higher priority may be getting better measurement across the HE (R&D) sector of what already exists, what works, best practice, transferability etc.

15. Finally, we recommend that Research England should continue to pay attention to opportunities to disseminate learnings and best practices from the programme and evaluate it. Evaluation of the programme should measure results but should also identify both expected and unintended consequences. The work of UCI to increase the evidence base on commercialisation is also very valuable.