Strategic Priorities Fund: Centre of Doctoral Training (CDT) in Food Systems

Call Summary

UK Research and Innovation (UKRI) in partnership with government are pleased to announce a £5 million call to support one Centre for Doctoral Training (CDT) focused on developing the next generation of interdisciplinary food systems thinkers. This CDT is part of a wider £47.5 million interdisciplinary research programme seeking to transform the UK food system and is led by the Global Food Security Programme (GFS) and supported by UKRI’s Strategic Priorities Fund (SPF). The call is administered by BBSRC, in partnership with ESRC, MRC, NERC, Defra, DHSC, PHE, Innovate UK and FSA.

This CDT will ensure a pipeline of skilled individuals who are able to apply holistic and critical interdisciplinary food systems thinking to health and sustainability challenges in academia, government, business and civil society organisations, and who will lead the way in transforming the UK food system. It will support three cohorts of doctoral candidates beginning in October 2021 and as a legacy will develop the next generation of food system thinkers.

Webinar
6th March 14:30 – 15:30
We will be holding a webinar to allow applicants to ask questions / raise queries. Please email food.systems@bbsrc.ukri.org if you are interested in joining.

Purpose & Aims

The Strategic Priorities Fund (SPF) has been established to drive an increase in high-quality multi- and interdisciplinary research and innovation; and ensure that UKRI’s investments link up effectively with Government departments’ research priorities.

The Food Systems SPF is an interdisciplinary programme of research and training that will help transform the UK food system by placing healthy people and a healthy natural environment at its centre. It will address questions around what we should eat, produce and manufacture in the UK and what we should import. In doing so it will consider the complex interactions between health, environment and behavioural factors, while taking into account wider needs for different groups in society. This will enable a joined-up approach across healthy and accessible diets and sustainable food production and supply, delivering coherent evidence to enable concerted action from government, business and civil society. The Food Systems SPF seeks to address a range of well-defined policy drivers, including reducing obesity and diet-related ill health; reducing the environmental impacts of agriculture and food production; and achieving net-zero GHG emissions by 2050 (more info in ‘policy drivers’).

Healthy people and a healthy environment are intrinsically linked through food, and it is only by taking a systemic, holistic, interdisciplinary approach, otherwise known as a ‘food systems approach’ that we can deliver the changes that are required. A system is a set of
things working together as part of an interconnected whole. The food systems approach encapsulates the actors, behaviours and outcomes involved in land use, agriculture, aquaculture, storage, processing, manufacture, retail and consumption, alongside the interdependencies, pressures and drivers (see Figure 1 for a representation of the food system).

This CDT aims to produce a cohort of researchers with the capability, awareness and openness to work collaboratively across disciplines, sectors and the food system in order to understand and address academic, economic and societal challenges. This will be supported through the undertaking of an interdisciplinary research project integrating aspects of natural and social science (see ‘scope’), placements in UK food system stakeholder organisations (see ‘placements’), centrally delivered food system training, peer-to-peer learning and cohort building activities (see ‘additional training’).

Figure 1. An indicative representation of the food system produced by City University of London. For more information on the food system depicted here, see The Centre for Food Policy Brief

**Funding details**

One CDT will be awarded worth a total of £5 million to support approximately 45 four-year studentships over three consecutive intakes, with the first starting in October 2021. £300K of this budget must be allocated to coordination activities through a Flexible Supplement Fund (for further information see ‘FSF’).
Awards will be made in the form of single profiled training grants. The normal flexibility of UKRI training grants will apply, enabling institutions to part-fund studentships from other sources. Whilst co-funding is not a requirement, UKRI would strongly encourage institutions to seek co-funding whenever possible to support collaborative elements of studentships, and to increase value for money.

Eligibility

All UK-based research organisations, or consortia, that are eligible to receive UKRI funding for research and have the infrastructure in place to deliver doctoral training will be eligible to submit a proposal. We are keen to see the training of doctoral candidates in broad-based centres of research excellence which promote and facilitate inter- and multidisciplinary working and expose doctoral candidates to a wide range of expertise.

To be eligible proposals must have a minimum of two institutional partners (noting that larger consortia are strongly encouraged) to cover the breadth of the food system and multiple disciplines. Partnerships must include at least one degree-awarding Research Organisation. There is no limit to the number of Research Organisations that can be involved in a multi-institutional Partnership and degrees can be awarded from any eligible Research Organisation in the Partnership.

We expect the proposals to represent a consortia of academic and non-academic organisations and proposals must have at least one Full or Associate Partner from each of the following: business, civil society and UK government.

For this call only: Public Sector Research Establishments (PSREs) with 10 or more researchers with PhDs (or equivalent) are eligible to apply. Any PSREs wishing to apply but have not previously applied for UKRI funding and are not currently designated IRO status will be required to complete an eligibility form (see: UK Research and Innovation: Application for eligibility to apply to UK Research and Innovation for research funding) to ensure they have the required research capacity, systems and controls in place to manage the research and grant funding. To note all partnerships must include at least one degree-awarding Research Organisation. PSRE applicants should contact flora.hetherington@foodsecurity.ac.uk at the earliest opportunity to discuss their interests in applying.

Scope

Proposals are invited for a Centre for Doctoral Training (CDT) that will deliver a pipeline of skilled individuals who are able to apply holistic and critical interdisciplinary food systems thinking to health and sustainability challenges in academia, government, business, and civil society organisations. The CDT will bring together Research Organisations and stakeholders to develop interdisciplinary studentships that cover different parts of the food system, provide opportunities for doctoral candidates to engage with food system actors and stakeholders, and to gain a contextualised understanding of their research within the food system as a whole.

All studentship projects must be interdisciplinary in nature with aspects of natural and social science integrated within every project (how this is delivered in each project should be tailored to the individual doctoral candidate and the supervisory team. An agreement of how this will work in practice should be decided on before a project begins). In accordance with
the aims of the SPF programme healthy people and a healthy environment should be placed at the centre of the research, therefore we strongly encourage individual studentships to span food production and consumption (i.e. food production/processing/manufacturing and consumption/health). Individual projects are not expected to cover all stages of the food system, however the portfolio of studentships across the CDT must be managed to ensure the whole food system is represented across all of the projects as a whole (see Purpose & Aims for food systems definition). Individual projects and supervisory teams do not need to be specified, however the Partnerships proposal must detail how they will ensure projects fit within this scope.

The successful Partnership will demonstrate research capacity across disciplines and sectors in the food system, and strong interaction with a wide range of stakeholders. The portfolio of studentships across the CDT must also include the variety of natural (including environmental, biological, and human health) sciences and social sciences. A food systems approach might include any of the following disciplines (this is not meant to be an exhaustive list): soil science, crop and animal production, agronomy, aquaculture, biodiversity and ecosystem services, systems engineers, data science, agricultural economics, food science, food manufacturing and processing, transport, logistics, storage, waste, food markets, nutrition, biomedical and clinical science, epidemiology, economics, behavioural, social and political science, alongside the interdependencies, inequalities pressures and drivers. Proposals should also consider how the research will address UK policy and practice drivers (See ‘policy drivers’) and the track record of the Partnership in influencing policy and/or practice.

The successful CDT will be expected to work closely with the Programme Director (Prof. Guy Poppy) and UKRI SPF Food Systems team in order to maximise the impacts from the programme and move towards a shared vision beyond the specific studentship projects themselves. The CDT and associated partners will be expected to participate in wider programme network events and add impact to the overall food system SPF portfolio.

Policy drivers

There are multiple UK government policy drivers that will be addressed by the SPF Food Systems programme, including: reducing obesity, diet-related ill health and pressure on the NHS; reducing health inequalities; achieving net zero GHG emissions by 2050; reducing the impacts of agriculture and food production on soil health, air quality, water quality, and biodiversity; and building trust within the food system, ensuring that citizen’s wider interests are protected and food integrity is recognised and improved.

Other key priorities that will be addressed include the Childhood Obesity Plan¹, Eatwell Guide², 25-year Environment Plan³, Agriculture Bill⁴, Fisheries Bill⁵ and FSA’s Food We Can Trust Strategy⁶. By taking a four-country approach, this research programme will also support national strategies from across England, Wales, Scotland and Northern Ireland. For example, the Well-being of Future Generations in Wales Act⁷, which takes a systematic approach to long-term health and well-being, and A Fitter Future for All⁸, in Northern Ireland, which provides a framework for preventing and addressing overweight and obesity.

⁴ https://services.parliament.uk/bills/2017-18/agriculture.html
⁵ https://services.parliament.uk/bills/2017-18/fisheries.html
This programme will play a major role in helping to deliver the forthcoming National Food Strategy\(^9\), providing the evidence for coherent policymaking across government. The Strategy aims to ensure that our food system delivers healthy and affordable food and is built upon a resilient, sustainable and humane agriculture sector. It will explore how the food system can restore and enhance the natural environment for the next generation and act as a thriving contributor to both rural and urban economies.

**Working in Partnership**

Proposals must have a **minimum of two institutional partners** and we expect the proposals to represent a consortia of academic and non-academic organisations - proposals must have **at least one Full or Associate Partner from each of the following: business, civil society and UK government**.

**Full Partners** will form the core decision-making unit of the CDT and will be expected to contribute resources and host studentships. **Associate Partners** will not participate in the core decision-making unit however may still contribute some resource or advice.

Where Associate Partners are named on a CDT application, the proposal must demonstrate that there is significant added value from their inclusion. This may include (although not limited to): financial commitments to underwrite or co-fund a number of studentships; commitment to cover the costs of access to facilities or training that cannot be otherwise provided by an eligible institution; strategic links to an important stakeholder or user; commitment to provide placements for students. Financial and/or in-kind support for the CDT is strongly encouraged.

Partnerships must show a clear strategy for how they will work to deliver their goals and how they will grow and mature collaborations over the funding period. Proposals must justify their management structure, making a clear case for the size of the Partnership, and the added value each Partner brings to the delivery of training and to the doctoral candidate experience. Proposals should highlight how they will work with stakeholder partners and across disciplines to ensure joined up cohesive cohort learning and training across the food system and within individual projects. **UKRI acknowledge that it may take time for a new collaborative arrangement to fully evolve and for Partnerships to be consolidated and will direct the assessment panel accordingly.**

Non-academic collaborative awards are encouraged, for example CASE studentships (formerly known as [Collaborative Awards in Science and Engineering](#)) or CDAs ([Collaborative Doctoral Awards](#)). **UKRI also welcomes applications describing innovative models of doctoral training with non-academic partners, including the co-creation of projects and training elements with non-academic organisations (e.g. in the public, private or civil society sector). Collaborations must include substantive knowledge exchange and not just one-way engagement** (for example, data collection). In these cases, students should complete a placement of three months minimum in the partner organisation(s). Co-funding is not a requirement of a collaborative award, and there is no requirement to receive co-funding for studentships or to convert a proportion of studentships to collaborative studentships; however, UKRI strongly encourages this where possible.

Partnerships can apply for an allocation of standard and collaborative studentships, fully justifying how these studentships will be utilised. **UKRI expects proposals to include plans for monitoring the success of the collaboration and ensuring a consistent, high-quality offering for all doctoral candidates.**

Developing Highly-Skilled and Employable People

UKRI expects Partnerships to provide an excellent postgraduate training environment. Partnerships are expected to describe how they will ensure doctoral candidates will:

- Undertake a significant, challenging and original research project leading to the award of a doctoral level degree in accordance with a degree-awarding institutions’ standard regulations. Doctoral candidates should also expect that doctoral projects are designed/planned in such a way that (barring exceptional circumstances) they are able to submit their thesis within their funded period.
- Receive training centrally on food systems, and translation of knowledge into policy and practice to transform the UK food system and put healthy people and a healthy planet at the centre;
- Develop interdisciplinary working skills and understand the context of their research within the wider food system;
- Receive underpinning training relevant to research integrity, ethics and reproducibility;
- Develop critical and creative thinking and problem-solving skills;
- Receive excellent supervision and career development support;
- Develop expertise in management, analysis and dissemination of research data;
- Receive training and experience in the communication and engagement of their work with different stakeholders, including government, business and civil society organisations;
- Have access to wider transferable skills development in response to personalised training needs analysis;
- Benefit from the cohort approach to training through peer-to-peer learning both within cohorts and across them. Doctoral candidates should have opportunities to benefit from such support throughout the lifetime of their doctorate, not just in the first year;
- Benefit from integration with other UKRI doctoral investments through already existing DTPs/CDT programmes, with these existing networks also benefitting from integration with this food systems CDT. Innovative models of integrating networks are encouraged.

UKRI recognises that high-quality supervision and a supportive and nurturing research team are integral parts of developing highly-skilled people and expects formal systems to be in place for the continuing professional development of supervisory skills for all staff who will be involved in support, development and supervision (formal and informal) of the doctoral candidates.

Placements

Through the CDT, all doctoral candidates are expected to undertake a minimum three-month placement, either through the Professional Internships for PhD Students (PIPS) component or through a non-academic co-funded collaborative partnership studentship (see ‘Partnerships’ for more info). Placements must be undertaken in UK stakeholder organisations (e.g. government, including devolved government, business or civil society organisations) and be relevant to the UK food system. Partnerships must set out how these will be facilitated in their applications and must set out how they will ensure all placements are relevant to the UK food system.
Placements should; provide doctoral candidates with valuable experience in communication and engagement with different food system stakeholders; increase transferable skills; expose students to the drivers of stakeholders within the food system; and increase understanding of how policy and practice could be transformed within the UK food system.

An additional £1000 per doctoral candidate will be provided within the training grant to contribute to the support of undertaking placements.

**Additional learning opportunities**

It is vital that doctoral candidates are exposed to additional learning opportunities throughout their studies to better enhance their experience. Doctoral candidates must receive food systems training delivered centrally by one or more of the CDT institutions and there must be opportunities for peer-to-peer learning to enable doctoral candidates to cascade knowledge and insight across their respective specialisms. Strategies should be in place to ensure that doctoral candidates are provided with training in their non-specialist area. It is expected that suitable networking opportunities will be fostered across the cohorts through regular events and with related studentship investments. The proposal must set out how these will be facilitated across the cohorts and throughout the lifetime of studentships, not just in the first year.

**Equality, Diversity and Inclusion**

Partnerships are asked to describe their strategy for Equality, Diversity and Inclusion (EDI) to enable the wide participation of doctoral candidates from all backgrounds, and the support systems in place to protect their physical and mental health and wellbeing. This should include the embedding of EDI principles at all levels, in all aspects of research and training practice in the CDT, and across partners, including the selection and management of doctoral candidates and cohorts, and ensuring EDI principles are embedded as appropriate within research programmes. The plan should consider current good practice to make allowances for career breaks, support for people with caring responsibilities, flexible working and alternative working patterns (please see our Equality and Diversity webpages for further information).

Partnerships must describe their strategy and actions in a dedicated EDI Action Plan, as a two-page additional document submitted as part of the proposal documentation. Please see supplementary Equality Diversity & Inclusion document for more information and questions to consider when completing this plan.

**Governance of the Partnership**

Partnerships will be expected to describe the governance arrangements that will enable effective decision-making and engagement with all relevant stakeholders to deliver the objectives, share best practice amongst the Partners and with other UKRI doctoral investments, and ensure UKRI receives value for money in the delivery of PhD training. Partnerships should describe how each of these elements will be addressed and how conflicts of interest will be managed, describing a clear route for doctoral candidates to raise grievances.
UKRI expects the successful CDT to establish a collaboration agreement, before awarding studentships, between Partners to ensure all parties have a clear understanding of the basis for the collaboration and management of the award, including ownership of any intellectual property and rights to exploitation.

UKRI expects a dedicated project manager to be in place for the duration of the 6-year CDT programme, resourced by the lead Research Organisation. This post will oversee portfolio management of the CDT projects, work closely with the doctoral candidates and supervisory teams to manage any issues that arise from interdisciplinary working, oversee the organisation of placements and act as a main point of contact for the doctoral students. This post will also coordinate training aspects, organise cohort building activities and facilitate integration across project partners. The post-holder will work closely with the PI and the SPF Programme team and Director to ensure the CDT is delivering against the aims of the programme and creating a legacy from the investment.

**Monitoring Progress and Capturing Impact**

The monitoring of progress towards goals and the evidencing of impact are important components of the CDT and will be conducted in a number of different ways including:

- Annual Reports to UKRI
- Provision of accurate and timely information on doctoral candidates’ projects to UKRI via Je-S Student Details;
- Hosting an annual Partnership visit by UKRI staff and its nominees;
- Capturing outputs, outcomes and impacts through our nominated online system (currently Researchfish) and survey reporting by doctoral candidates.

Partnerships will be expected to describe what evidence they will capture to measure progress against the programme’s purpose and aims and how they will capture this data and emerging impacts. Projects should consider how these emerging impacts might contribute to the long-term legacy of the CDT. UKRI-funded doctoral candidates are required to use our nominated online system (currently Researchfish) to provide an annual update of information relating to the outputs, outcomes and impacts arising from their UKRI funded research and training. These updates must be provided during the life of the studentship and for at least three years after the funding has finished.

Further information on reporting requirements can be found on the UKRI website. UKRI will describe what key information it will require in Annual Reports. This will include diversity statistics for doctoral candidate recruitment, financial leveraging, training and development activities offered and examples of doctoral candidate achievements.

The application will form the basis of the Partnership ‘contract’ with the CDT and UKRI for the provision of excellent research training and is also used for on-going dialogue and monitoring. We will use the information supplied in the Case for Support as part of the assessment process for the CDT and in the ongoing monitoring and evaluation of SPF activities. The SPF Food systems team and Programme Director will work closely with the successful CDT to develop appropriate monitoring and evaluation framework, during and beyond the lifetime of the CDT.
Costs

UKRI will contribute funds towards the doctoral candidate’s tuition fees, stipend and research training support in line with UKRI policy. £5,000 p.a. research training support costs (RTSG) and Fieldwork costs £230 p.a. per student.

Partnerships are expected to provide an appropriate level of Full Time Equivalent (FTE) support to lead and manage the CDT activities for the number of studentships they are allocated and a dedicated project manager is expected to be in place for the duration of the 6 year CDT programme, resourced by the lead Research Organisation. Proposals must describe their strategy to manage this and no additional costs should be claimed for. Match funding studentships is not a requirement of this CDT.

An award of £1,000 per doctoral candidate will be provided within the training grant to support the placements.

Flexible Supplement Fund

The CDT programme must include a £50,000 p.a. Flexible Supplement Fund (FSF) – over the 6-year lifetime of the programme (3 cohorts of 4 years) equating to £300,000. This fund can be used flexibly to support, for example:

- Exceptional training and development opportunities;
- Supplementary funds for placements;
- Opportunities to provide training with business or at the interdisciplinary interface;
- Widening participation activities to address identified discrepancies in the take-up of doctoral opportunities between different social groups, particularly those under-represented in doctoral programmes;
- Cross CDT network building activities, including with related studentship investments;
- Student travel for CDT-related events and training.

Award

The award will be made in the form of a profiled Training Grant to the lead Research Organisation in the proposal. Successful Partnerships will be supported for three cohorts. The cash limit of the grant will be specified and information will be given on the number of studentships this could support. However, the indicative number of studentships given is for guidance only. The flexibility of Training Grant Terms and Conditions means that Research Organisations can seek part-funding from other sources to increase the number of studentships being supported provided they are within the remit of the CDT call.

Proposals will need to meet the Statement of Expectations for Postgraduate Training which sets out common principles for the support of all UKRI funded doctoral candidates. Awarded proposals will be subject to UKRI Terms and Conditions. Applicants are advised to refer to the UKRI Training Grant Guide.

Contact

For any questions relating to your application please email the following address food.systems@bbsrc.ukri.org