Expression of interest: BBSRC-STFC facility access funding for bioscience partnerships round two

Opportunity status:

Closed

Funders:

Biotechnology and Biological Sciences Research Council (BBSRC), Science and Technology Facilities Council (STFC)

Funding type:

Grant

Total fund:

£1,100,000

Award range:

£10,000 - £100,000

Publication date:

12 September 2023

Opening date:

18 September 2023 9:00am UK time

Closing date:

31 October 2023 4:00pm UK time

Last updated: 27 September 2023 - see all updates

Apply for funding to support UK business and bioscience academic partnerships in accessing and benefitting from STFC skills, expertise, capabilities and world class facilities to find solutions to industrially relevant challenges.

The expression of interest stage requires companies to submit a 'challenge statement' describing your problem.

An academic partner is only required for the full proposal stage.

BBSRC and STFC will cover 100% of the facility costs, and 80% of the full economic cost of the academic component.

The maximum award from BBSRC and STFC for your project is £100,000, including academic costs (at 80%) and facility costs (at 100%).

Who can apply

Expression of interest stage

Who is eligible to apply

You must:

- be a UK based business registered at Companies House
- have a manufacturing base for the relevant product in the UK or provide the relevant service in the UK
- intend to exploit the results in the UK

Full proposal stage

Who is eligible to apply

To be eligible for funding at this stage, we require an academic-business partnership. We will be able to provide advice and guidance into finding an academic partner if you do not already have one.

To be eligible as the academic partner, you must be from one of the following organisations:

- UK higher education institutions
- research council institutes
- UK Research and Innovation-approved (UKRI) independent research organisations
- public sector research establishments
- NHS bodies with research capacity

Please note, STFC facility staff are not eligible as academic partners.

Before applying for funding, check the **<u>Eligibility of your organisation</u>**.

UKRI has introduced new role types for funding opportunities being run on the new UKRI Funding Service.

For full details, visit Eligibility as an individual.

Equality, diversity and inclusion

We are committed to achieving equality of opportunity for all funding applicants. We encourage applications from a diverse range of researchers.

We support people to work in a way that suits their personal circumstances. This includes:

- career breaks
- support for people with caring responsibilities
- flexible working
- alternative working patterns

Find out more about equality, diversity and inclusion at UKRI.

What we're looking for

Aim

The BBSRC-STFC facility access funding for bioscience partnerships opportunity is a joint funded programme by BBSRC and STFC. It will support UK bioscience researchers and businesses in accessing and benefitting from access to STFC skills, expertise, capabilities and world class facilities.

Scope

This funding opportunity aims to fund academic-industry collaborative research and development (R&D) partnerships undertaking industrially relevant research and innovation on bioscience and biotechnology within BBSRC's remit.

The programme is intended to foster impactful collaborations, supporting excellent, world-leading discovery research and innovation. This has clear benefit to the businesses involved, through direct access and use of STFC facilities and expertise.

The programme is setup specifically to assist academic-industry collaborative R&D partnerships in accelerating the development of new products or services which require further research and innovation at proof-of-concept stage.

These collaborations will be supported in accessing and working with STFC's large scale facilities, advanced analytical technologies, and high-performance computing or data expertise.

The programme provides support and access to advanced analytical technologies, expertise, and capabilities, located at STFC's large scale science facilities around the UK including Harwell, Daresbury, and Whitby.

Neutrons

You can:

 study structure and dynamics of materials at the atomic scale, including organic systems, the interaction of antimicrobials with pathogen membranes, or toxins from pathogens with models of mammalian and plant membranes

X-rays

You can:

- acquire high resolution data to understand the structure and function of macromolecular complexes to accelerate drug discovery, design and development
- investigate formulation microstructure and behaviour under a range of conditions, follow chemical changes in biologically relevant processes or to visualise the effect of vaccines or therapeutics within whole cells

Lasers

Extensive laser-based techniques to:

- understand everything from single-molecule transport in biological systems to environmental changes and chemical pathways in cells, tissues and biomaterials
- watch how chemical and biochemical changes in materials happen in real-time

High performance computing

You can have access to computing resources, including:

- classic computing for molecular simulations (for example, structural drug representations and molecular docking)
- data analysis of complex datasets looking for significant correlations
- drug interaction and stability both in the formulation and in solution

Scientific computing

You can have access to:

- advanced computing expertise and digital research infrastructure
- expertise in developing software for processing experimental biological data, high-performance computing infrastructure, data storage systems and artificial intelligence for science

Working with the Scientific Computing department contributes to the fundamental understanding of how genes and proteins operate, and has applications in drug development, crop science and environmental monitoring.

Deep underground science facility

A rare opportunity to undertake science in an ultra-low background environment, largely free of interference from natural radiation on the Earth's surfaces.

You can use gamma spectroscopy to study and measure trace levels of radioactivity in samples with various biological tracing and authenticity applications, or study the effect of radiation in biological matter.

You are invited to submit expressions of interest aiming to address industry challenges relating to BBSRC's <u>three strategic challenges</u>:

- integrated understanding of health
- advanced manufacturing and clean growth
- sustainable agriculture and food

Through feedback gained from the pilot round of the programme, previous research and innovation carried out at the facilities has been used to develop illustrative examples. These are based on work that has been previously undertaken at a selection of the facilities which is of relevance to bioscience and biotechnology supported across the breadth of BBSRC remit.

These are examples which are only intended to inspire and inform collaborations and discussions, helping to guide the development of proposals on a wide variety of ideas that explore biology, or apply the biosciences to solve significant challenges.

An integrated understanding of health

Examples include:

- using small angle X-ray scattering to characterise the solution structure of biopharmaceuticals under close to native state conditions to contribute to the understanding of enzyme behaviour
- using advanced computer platforms to investigate genomic signatures of food borne pathogens, such as E. coli or campylobacter, to understand pathogenicity in relation to food safety
- using small-angle neutron scattering to obtain in-depth information on the structure of drug delivery systems. For example, nucleic acidbased nanomedicines with the aim of rationally designing formulations for improved and targeted delivery
- using 2D IR-spectrometry to investigate the dynamics of complex biological systems such as proteins to support drug design

Advanced manufacturing and clean growth

Examples include:

- using X-rays to investigate and understand the behaviour of biobased formulation ingredients in developing sustainable cleaning products
- using simulations and high-performance computing to understand the balance of proteins and vitamins in the skin microbiome to develop new skin hygiene products
- using a low background radiation underground laboratory environment to study the effects of radiation on biological matter

Sustainable agriculture and food

Examples include:

- using high-performance computing and machine learning to analyse large datasets about the soil microbiome to explain causal relationships that determine crop yield and soil health
- using neutron tomography to visualise plant roots and water distribution in three dimensions, to better understand interactions between plant roots and the soil around them
- using fluorescence lifetime imaging microscopy to investigate the cell wall structure between different potato breeds to determine how to reduce oil content in crisp production
- using shielded low background gamma-ray spectrometers to analyse naturally occurring radioactive isotopes to prove the authenticity of Welsh lamb

Duration

The duration of this award is up to one year.

Projects can be undertaken any time over a 12-month period (subject to scheduling of STFC facilities) starting 1 April 2024 and ending 31 March 2025.

Projects must end by 31 March 2025.

Funding available

We will cover 100% of the facility costs, and 80% of the full economic cost of the academic component.

The maximum award for your project is £100,000, including academic costs (at 80%) and facility costs (at 100%).

Companies are expected to provide a contribution (that may be in kind or direct) based on a percentage of the STFC facility cost. This is dependent on company size, as seen in the following table.

Company size	Company size criteria	Company contribution to total pr cost (based on STFC facility o
Micro	Staff headcount less than 10 Turnover less than or equal to £2m or balance sheet total of less than or equal to £2m	
Small	Staff headcount less than 50 Turnover less than or equal to £10m or balance sheet total of less than or equal to £10m	
Medium	Staff headcount less than 250 Turnover less than or equal to £50m or balance sheet total of less than or equal to £43m	
Large	Staff headcount more than 250	

Company size	Company size criteria	Company contribution to total pr cost (based on STFC facility c
	Turnover more than £50m or balance sheet total of more than £43m	

This may be an in-kind or direct cash contribution to the project cost.

What we will not fund

We will not fund:

- market analysis
- fundamental research which is not industrially relevant
- standard testing and measurement services readily available commercially or via academic partners

Subsidy control

This competition provides funding in line with the UK's obligations and commitments to subsidy control.

Under the standard terms and conditions for this competition, you are wholly responsible for declaring and managing all potential subsidy control matters as part of the assessment process.

Further information about the UK subsidy control requirements can be found within the <u>EU-UK Trade and Cooperation agreement (PDF,</u> <u>444KB)</u> and the subsequent guidance from the department of <u>Business</u>, <u>Energy and Industrial Strategy</u>.

Please be aware that EU state aid rules now only apply in limited circumstances. Please see our <u>general guidance</u> to check if these rules apply to your organisation.

Further information

If you are unsure about your obligations under the UK subsidy control regime or the state aid rules, you should take independent legal advice. We are unable to advise on individual eligibility or legal obligations.

You must at all times make sure that the funding awarded to you is compliant with all current subsidy control legislation applicable in the UK.

This aims to regulate any advantage granted by a public sector body which threatens to, or actually distorts competition in the UK or any other country or countries.

If there are any changes to these requirements that mean we need to change the terms of this competition, we will tell you as soon as possible.

Ethical considerations

UK Research and Innovation requires research to be conducted to the highest ethical standards. Researchers must provide clear justification in their proposals for the use of animals in research.

Proposals received to this funding opportunity which make use of animals will be reviewed for adherence to <u>appropriate guidelines</u>.

How to apply

Stage one: expression of interest

The initial expression of interest stage requires companies to submit a concise (approximately 500 words) 'challenge statement' describing their problem.

The expression of interest application form can be found under 'Supporting documents'.

You will be required to outline the project you want to undertake in the form of a challenge statement, describing the nature of the opportunity or challenge and the value of solving it. You will also be required to indicate any ethical considerations to be taken into account during the full stage application process.

At this stage, you do not need an academic partner. However, you can indicate whether you have an ongoing academic partnership, or an idea of the academic you would approach for the project.

There is no requirement to provide a workplan at this stage.

Stage two: full proposal

If successful at expression of interest stage, you will work together with STFC scientists to develop a fully costed project proposal.

We can provide advice and guidance if an academic partner needs to be found.

We are running the full proposal stage of this funding opportunity on the new UK Research and Innovation (UKRI) Funding Service, by invite only to those successful at the expression of interest stage. You cannot apply on the Joint Electronic Submissions (Je-S) system.

We will publish full details on how to apply when the full stage opens.

Deadline

We must receive your application by 31 October 2023 at 4.00pm UK time.

Please email your completed application form to business.unit@bbsrc.ukri.org by the deadline.

You will not be able to apply after this time.

Make sure you are aware of and follow any internal institutional deadlines.

Personal data

Processing personal data

We, as part of UKRI, will need to collect some personal information to manage your Funding Service account and the registration of your funding applications.

We will handle personal data in line with UK data protection legislation and manage it securely. For more information, including how to exercise your rights, read our **privacy notice**.

Publication of outcomes

We will publish the outcomes of this funding opportunity at <u>STFC board</u> and panel outcomes.

If your application is successful, we will publish some personal information on the **UKRI Gateway to Research**.

How we will assess your application

Assessment process

We will assess your expression of interest application using the following process.

Panel

We will invite experts to assess the quality of your application and rank it alongside other applications.

Expressions of interest will be assessed by the panel on the following three questions:

- can STFC potentially offer a solution for the work that is required?
- do you have an ongoing relationship with an academic research partner and if so, what is the nature or structure of that partnership and how does it relate to the proposed challenge? If there is no preexisting partnership, how will you identify and build a relationship, in the time available, in a way which will enable effective collaboration for the challenge you have outlined?
- does the proposed idea have a clear benefit or potential for impact?

The expert panel will provide expertise regarding relevant facilities or equipment that can be utilised as a potential solution to the challenge.

Your 'expression of interest challenge statement' will be assessed as to whether it is within BBSRC's remit. Please check the **guidance** for more information or email the BBSRC contact.

We reserve the right to portfolio manage during the assessment process.

Timescale

We aim to complete the expression of interest assessment process within one month of receiving your application.

Principles of assessment

We support the <u>San Francisco declaration on research assessment</u> and recognise the relationship between research assessment and research integrity.

Find out about the <u>UK Research and Innovation (UKRI) principles of</u> assessment and decision making.

Collaboration agreement

Any collaborative project funded through this initiative must have a signed collaboration agreement between the partners before the start of any grant.

UKRI attach great importance to the dissemination of research findings and the publishing of information about the research they support in the public domain. However, all dissemination and publication must be carried out in the manner agreed in the project's collaboration agreement.

Assessment areas

At the expression of interest stage, the assessment areas we will use are:

- suitability of STFC to solve the problem
- academic partnership
- benefit and potential for impact
- relevance to UK bioscience and technology

Please note that information regarding full stage assessment will be provided to those applicants successful at the expression of interest stage.

Contact details

Get help with your application

For help on costings and writing your application, contact your research office. Allow enough time for your organisation's submission process.

Ask about this funding opportunity

Mary Jenkinson-Finch, Business Interaction Unit, BBSRC

Email: business.unit@bbsrc.ukri.org

Include 'BBSRC/STFC facility fund' in the subject line.

Dymphie Webb, Business Development department, STFC

Email: dymphie.webb@stfc.ac.uk

Include 'BBSRC/STFC facility fund' in the subject line.

We aim to respond within 10 working days.

Sensitive information

If you or a core team member need to tell us something you wish to remain confidential, email the UK Research and Innovation (UKRI) Funding Service helpdesk on support@funding-service.ukri.org

Include in the subject line: [the funding opportunity title; sensitive information; your UKRI Funding Service application number].

Typical examples of confidential information include:

- individual is unavailable until a certain date (for example due to parental leave)
- declaration of interest
- additional information about eligibility to apply that would not be appropriately shared in the 'Applicant and team capability' section
- conflict of interest for UKRI to consider in reviewer or panel participant selection
- the application is an invited resubmission

For information about how UKRI handles personal data, read UKRI's privacy notice.

Additional info

Background

The following facilities will be available through the programme:

- <u>Central Laser Facility</u>
- Hartree Centre (High Performance Computing)
- Diamond Light Source
- ISIS Neutron and Muon Source
- <u>Scientific Computing</u>
- Boulby Underground Laboratory

Research disruption due to COVID-19

We recognise that the COVID-19 pandemic has caused major interruptions and disruptions across our communities. We are committed to ensuring that individual applicants and their wider team, including partners and networks, are not penalised for any disruption to their career, such as:

- breaks and delays
- disruptive working patterns and conditions

- the loss of ongoing work
- role changes that may have been caused by the pandemic

Reviewers and panel members will be advised to consider the unequal impacts that COVID-19 related disruption might have had on the capability to deliver and career development of those individuals included in the application. They will be asked to consider the capability of the applicant and their wider team to deliver the research they are proposing.

Where disruptions have occurred, you can highlight this within your application if you wish, but there is no requirement to detail the specific circumstances that caused the disruption.

Webinar and in-person event

Register for the webinar (28 September).

Register for the in-person informational event at Daresbury Laboratory (9 October).

Register for the in-person informational event at Rutherford Appleton Laboratory (16 October).

Supporting documents

Expression of interest form (DOCX, 43KB)

Updates

 27 September 2023
 Registration links for the webinar and in-person events added under 'Additional info' section.