

Innovate UK

Technology Strategy Board

Competition for funding

Finding value in complex biological
data - integrated 'omics

DEADLINE
**24 June
2015**

Collaborative R&D
and Feasibility Studies





Funding partners



Innovate UK and the Biotechnology and Biological Sciences Research Council (BBSRC) are to invest up to £2.5 million to stimulate innovative, integrated approaches to biological systems.

The aim of this competition is to build a commercial ecosystem to exploit the commercial opportunities of 'omics (eg genomics or proteomics), systems biology and complex biological data streams.

These could become key technologies for growth in the UK economy through enabling quicker identification of promising products and services and de-risking development.

We are especially seeking projects that develop sustainable business models for SMEs to service innovation requirements of key industrial sectors such as pharmaceuticals and agri-tech.

Projects must be business-led, collaborative and include at least one micro company or SME as a lead or significant collaborator.

We have allocated up to £2 million to fund collaborative R&D projects. We expect total project costs to be between £250,000 and £400,000 and projects to last up to 2 years. A further £500,000 is available for smaller-scale feasibility study projects lasting 12 to 18 months with total project costs up to £150,000.

Applicants cannot be a collaborator in more than 2 successful projects.

For both the CR&D and feasibility study projects small businesses could receive up to 70% of their eligible project costs, medium-sized businesses 60% and large businesses 50%.

The collaborative R&D and feasibility study elements of this competition open on 18 May 2015.

The deadline for registration is noon on 24 June 2015. The deadline for completed feasibility study and collaborative R&D applications is noon on 1 July 2015.

A briefing event for this competition will be held on 2 June 2015.

Background

Transformative innovations in bioscience will increasingly come from systemic approaches. Technologies built on 'omics (for example, genomics, proteomics or metabolomics) and data-rich biology could play a crucial role in unlocking challenges in the development, production and regulation of increasingly sophisticated bio-based products and services.

Mathematical modelling is also becoming increasingly important, to predict behaviour of biological systems and reduce and refine experimental work as are tools to visualise data for non-technical decision makers.

However, the ability to integrate these elements is currently under-developed and turnkey solution platforms have yet to mature. As a consequence the full potential of innovation investments in biosciences is not being exploited.

We expect SME and micro companies to play a crucial role in developing scalable and internationally competitive technology offerings that can power uptake of data driven biology across emerging and existing technology sectors as well as being major economic growth opportunities themselves.

Scope

The purpose of this competition is to develop enabling technologies, products and services that pioneer the commercial exploitation of complex biological data-streams and models.

We are looking to fund projects developing one or more of the following:

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- data analysis platforms tailored to 'omics and complex biological data streams
- analytical or diagnostic tools that look at multiple parameters within a discrete complex biological system
- predictive biological system models in silico
- evidence based models that demonstrate the impact on a biological system by introducing new candidate compounds or interventions
- data driven tools and services to speed development of bio-products

Projects should develop innovative approaches and business models that not only use existing data but also build new tools, techniques and services for the future.

The technology challenges are broad and potentially cross-cutting, and we encourage projects that yield benefits across more than one challenge. The scope of the competition includes but is not limited to:

- approaches that focus on integrating existing sub-system tools
- projects that aim to model at multiple scales within a given biological system(s)
- technologies that focus on aligning and assembling new system pathways, for example, delivering optimal bioactive performance in industrial biotechnology applications
- integrated in-line/real-time monitoring of multi-parameter 'omic data
- approaches to enable intelligent, predictive bio-modelling capabilities, including the integration and analysis of heterogeneous 'omic- data
- data driven tools and services that include environmental impact of biological systems
- projects focusing on the user experience/interface for non-ICT specialists when working with complex biological system analysis
- approaches that apply and adapt existing tools, services and models for use with complex biological systems
- approaches to predicting and evaluating 'omic determined communication between separate biological systems



- business models that enable collaborative exploration of complex biological system data by 2 or more experts simultaneously
- tools to identify exceptions, deviations or unusual occurrences in biological systems through data driven 'omic models

Projects developing new analytical devices or validating specific tests, models or biomarkers are out of scope for this competition.

Funding allocation and project details

We have allocated up to £2.5 million to fund collaborative R&D projects and feasibility studies in this competition.

Successful applicants can attract grant funding towards their eligible project costs. The percentage of costs we pay varies, depending on the type of research being carried out and the size and type of organisation involved.

Note: participants cannot be a lead or collaborator in more than 2 successful projects.

For both the CR&D and feasibility study projects small businesses could receive up to 70% of their eligible project costs, medium-sized businesses 60% and large businesses 50%. The total of all research partner costs in a consortium cannot exceed 30% of the overall project costs.

Projects must be led by a business, be collaborative and include an SME or a micro company as lead or significant collaborator.

Collaborative R&D projects

We expect collaborative R&D projects to range in size from total costs of £250,000 to £400,000. Projects exceeding £400,000 will require prior approval. Projects should last up to 2 years.

Feasibility studies

Up to £500,000 of the total funding will be available for smaller-scale feasibility studies. We expect feasibility studies to range in size up to total costs of £150,000. Feasibility studies are expected to last up to 18 months.

For both types of project, an independent panel of experts assesses applications on individual merit.

To find out if your business fits the EU definition of an SME, see: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm

Each partner in a project can receive funding towards their project costs – the funding is a percentage of the total eligible project costs and varies, depending on the size and type of organisation and the type of research.

For general guidance go to:
interact.innovateuk.org/funding-rules
or watch our video
[youtube.com/watch?v=cExDpxTL8JY](https://www.youtube.com/watch?v=cExDpxTL8JY)

Looking for partners to work on your project?
Go to [_connect.innovateuk.org](http://connect.innovateuk.org)

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Application process

The collaborative R&D and feasibility studies elements of this competition will open for applications on **18 May 2015**. Applicants must first register via our website.

The deadline for registration is at noon on **24 June 2015** while the deadline for applications is at noon on **1 July 2015**.

There will be a briefing in London on **2 June 2015** to highlight the main features of the competition and explain the application process. **Applicants are strongly recommended to attend.**

Note: all deadlines are at noon.

Key dates

Competition opens	18 May 2015
Competition briefing	2 June 2015
Registration deadline	24 June 2015
Deadline for receipt of applications	1 July 2015

More information

For more information and all the documents you need to read before you apply, including the *Guidance for Applicants*, go to the web page for this competition by using the search function at interact.innovateuk.org/

You can also watch our video about the application process (<https://www.youtube.com/watch?v=S-rnSplMiPc>)

Get help to understand the future market for your innovation before you apply at

<http://horizons.innovateuk.org>

To apply you must first register with us through the competition page on the website. Registration opens when the competition opens and closes a week before the deadline for applications.

Competition helpline: 0300 321 4357

Email: support@innovateuk.gov.uk

Help for SMEs to grow faster

Small businesses that combine the funding they receive from us with additional business support are more likely to grow faster. If you are an SME and receive funding through this competition, you will automatically gain access to a growth workshop, an online diagnostic and a growth expert to help you develop a growth plan. This may include coaching, mentoring, entrepreneurial skills training.

Publicity

As part of the application process all applicants are asked to submit a public description of the project. This should adequately describe the project but not disclose any information that may impact on intellectual property, is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded and the public description will be published once the decision to offer an award has been communicated to applicants by email. Information about unsuccessful project applications will remain confidential and will not be made public. E-mail pressoffice@innovateuk.gov.uk with any queries.



Innovate UK is the new name for the Technology Strategy Board – the UK's innovation agency. We know that taking a new idea to market is a challenge. We fund, support and connect innovative businesses through a unique mix of people and programmes to accelerate sustainable economic growth.

The Technology Strategy Board is an executive non-departmental public body sponsored by the Department for Business, Innovation and Skills, and is incorporated by Royal Charter in England and Wales with company number RC000818. Registered office: North Star House, North Star Avenue, Swindon SN2 1UE.

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