

# Bioinformatics and Biological Resources Fund

Call status: Open

Application deadline: 8 May 2014, 4pm

## Summary

The Bioinformatics and Biological Resources (BBR) Fund aims to:

- support the bioscience research community with the establishment, maintenance and enhancement of infrastructures
- support high quality bioinformatics and biological resources that align with our updated **Strategic Plan: The Age of Bioscience** (see related links)
- supply long-term funding and provide a stable environment for resource development and provision

The indicative budget for the call is **£6.5M**, subject to the quality of applications received, and will incorporate capital investment in software infrastructure.

## Background

The BBR Fund was established to tackle a strategic need to provide **'proper support for resources such as databases, genetic resources and culture collections which require long term maintenance and curation'**.

The design of the BBR Fund was informed by scientific advice obtained from a community consultation, our Strategy Advisory Panels (see 'Exploiting New Ways of Working Strategy Advisory Panel' in related links) and a pilot call for proposals operated during 2006/07.

Our Strategic Plan (see related links) has a key priority to **'provide bioinformatics and biological resources required by the UK research community to stay internationally competitive'** and the Delivery Plan 2011-15 (see related links) states that we will **'drive bioinformatics underpinning research and innovation'** and **'position the UK as a leading nation in data intensive bioscience research'**.

The current call is the eighth round of BBR funding; grants awarded under previous calls can be viewed using our Portfolio Analyser (see related links).

## Scope

Bioscience researchers have a continuing and growing need for access to state-of-the-art bioinformatics and biological resources:

- For **bioinformatics resources** (e.g. databases, software suites), there is a need to enable the management, analysis and sharing of large and/or complex datasets. There is a continuing need for novel software solutions that can enable deeper analysis of datasets and facilitate greater understanding of biological systems. In the current call, we are particularly interested to see applications that will build and improve the functionality and usability of software available to the UK bioscience community
- For **biological resources**, access to materials that underpin cutting edge bioscience research is required e.g. culture and germplasm collections, mutant lines, DNA samples, clones, genetic libraries etc

Despite this need, the provision of resources for the benefit of the bioscience research community remains challenging because:

- resources may already exist but are not readily available (e.g. arising from work carried out during a project grant rather than being funded as a community resource)
- resources may have been established as a community resource for a fixed term and require more sustainable funding
- researchers may need a resource that does not currently exist
- existing resources may require development if they are to meet the needs of the UK bioscience community

Grants are available for **up to 5 years** to provide high quality, accessible, community resources that meet key UK needs.

Applications for biological resources may have a bioinformatics element included (e.g. to facilitate accessibility).

The BBR Fund has a key role to play in implementing our data sharing policy (see related links) and we anticipate continuing demand for community data sharing infrastructures, responding to the opportunity generated by next generation sequencing and other high-throughput technologies.

Resource provision has a strong international dimension and we view the BBR Fund as a contribution to the global infrastructure required to underpin modern bioscience research.

## Scientific objectives

Applicants can apply for funding for the following types of applications:

- Establishment and maintenance of a **new resource** that would be applicable to a broad BBSRC user community
- Maturation and subsequent maintenance of a project-based resource **into a community-based** one
- Development and subsequent maintenance of an existing community resource **to increase its relevance** to a broad BBSRC user group
- **Interfacing and integrating** resources to better meet user need

**It is essential to demonstrate strong demand from the UK bioscience community together with an appropriate access policy.**

Resources often thrive best when they are alongside and/or closely informed by research groups that actively use them. While the focus of this fund is on resource provision, an element of research can be included. However, this should be focused on technological development of the resource features so they continue to meet user need.

## 2014 focus: Software enhancement and maturation

Complementary to the scientific objectives described above, the 2014 BBR Fund incorporates a focus on Software Enhancement and Maturation (SEM). Research software is frequently developed by individual laboratories to solve a particular problem. For resourcing or other reasons software may not be developed with the general user in mind and may have shortcomings in a number of aspects. Addressing such issues has the potential to improve the utility of research software to the wider research community.

In the current call, we welcome applications that aim to address one or more of the following SEM topics:

- Improving code efficiency
- Improving code portability (e.g. between different operating systems or even between different installations of the same operating system)
- Improving code robustness and error handling
- Improving usability (e.g. by providing an easy-to-use graphical interface)
- Improving software security

## Renewals

Renewals for awards previously supported under the BBR Fund are permitted under the current call. These applications should continue to maintain and develop the resource and will be assessed in competition with all other proposals submitted to the call.

## Exclusions

- Continued maintenance of resources that already have suitable provision (e.g. funded from BBSRC institute core support, other Research Councils, Government Departments, and/or European funding streams)
- Resources where the principal beneficiaries will **not** be the UK bioscience community
- Establishment or continued maintenance of resources where the principal users are outside the biosciences (i.e. medicine, chemistry)
- Applications that will only archive resources (the focus for the BBR fund is **active** usage by the bioscience community)
- Collections of preserved, non-recoverable specimens (e.g. herbaria, formalin-fixed material)

## Awarded grants

For grant information that includes further details of each resource funded through previous calls of the BBR Fund see '**Search awarded grants**' in related links.

## Eligibility

This call for proposals is open to all institutions normally eligible for BBSRC managed-mode calls, which includes:

- HEIs
- Research Council Institutes
- Independent Research Organisations (IROs) approved by BBSRC

For the categories of eligible organisations see our Grants Guide, section 2 (see related links) and for a list of IROs see the RCUK eligibility guidance (see external links).

Applicants must be eligible for BBSRC funding. Details of the eligibility criteria can be found in our Grants Guide, section 3 (see related links).

## How to apply

The BBR Fund aims to support **community resources and not research project grants**. Thus, the information required in applications, the application process and the assessment criteria (see below) are distinctly different from those normally employed in responsive mode.

In 2014, the BBR Fund will operate through a **single-stage assessment**. There will be no outline phase. Applications will be sent to external peer reviewers prior to assessment by an expert Panel. **Full applications must be submitted using Je-S by 8 May, 4pm.**

We advise applicants to read our grants guide before completing their application (see related links).

Applicants creating bioinformatics resources and software should read the guidance on 'Big Data' capital and complete the **capital appraisal form**.

For all applications please note:

- Standard font (size: 11 point – we recommend the use of Arial, Helvetica or Verdana typeface) and margin sizes (not less than 2 cm) **must** be used for all forms and CVs (excluding text on diagrams and the use of mathematical symbols). A minimum of single line spacing and standard character spacing must be used. Applications that do not adhere to these guidelines may be withdrawn from consideration
- We recommend that where a document contains any non standard fonts (scientific notation, diagrams, etc) the document is converted to PDF prior to attaching it to the proposal
- The New Investigator and Industrial Partnership Award schemes do not apply to this call for proposals. New Investigators should note that being PI on any grant which gives them supervision of a PDRA or equivalent will exclude them from being a New Investigator subsequently
- Students should not be included on applications to the BBR Fund call
- Standard guidelines for research grant applications apply, as described in our grants guide (see related links)

## Assessment process

Applications will be subject to external review and applicants will have the opportunity to respond to reviewers' comments. Overall assessment will be conducted by a panel of experts covering both the technical and user perspectives of resource provision and drawing on, where appropriate, our research committees' core and pool membership.

The criteria used for the assessment of applications are:

- Scientific quality and quality of the resource provision
- Strategic relevance to BBSRC (including current Council-wide strategic priorities)
- UK scientific community need/demand and potential benefit
- Uniqueness and availability
- Management (including management arrangements, advisory structure, connectivity to users, user access arrangements)
- Value for Money
- Economic and Social Impact
- Timeliness and promise

The Panel will also take into account the scope of the BBR Fund.

## Observers

Funding agencies and research charities invited to observe the 2014 BBR fund call include:

- Medical Research Council
- Natural Environment Research Council
- The Wellcome Trust

## Contact

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